

Norfolk Vanguard Offshore Wind Farm

Statement of Common Ground

Norfolk County Council

Applicant: Norfolk Vanguard Limited

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Photo: Kentish Flats Offshore Wind Farm



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Glossary

ADBA	Archaeological Desk Based Assessment
AMP	Access Management Plan
CIA	Cumulative Impact Assessment
CoCP	Code of Construction Practice
CWS	County Wildlife Sites
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ES	Environmental Statement
EMP	Ecological Management Plan
HDD	Horizontal Directional Drilling
HIA	Health Impact Assessment
IDB	Internal Drainage Board
LIDAR	Light Detection and Ranging
LVIA	Landscape and Visual Impact Assessment
MMP	Materials Management Plan
MSA	Mineral Safeguard Area
OCoCP	Outline Code of Construction Practice
OLEMS	Outline Landscape and Environmental Management Strategy
OWF	Offshore Wind Farm
PEIR	Preliminary Environmental Information Report
RWCS	Realistic worst case scenario
SoCG	Statement of Common Ground
SPE	Set Piece Excavation
SPZ	Source Protection Zone
TMP	Traffic Management Plan
TP	Travel Plan
WSI	Written Scheme of Investigation

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. 100m 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 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 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 (e.g. HDD)	Temporary areas required for trenchless crossing works.

1 INTRODUCTION

1. This Statement of Common Ground (SoCG) has been prepared between Norfolk County Council 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 Norfolk County Council on the Norfolk Vanguard DCO application (hereafter ‘the Application’). Topic specific matters agreed, not agreed and actions to resolve between Norfolk County Council 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 Norfolk County Council

7. This section briefly summarises the consultation that the Applicant has had with Norfolk County Council. 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 Norfolk County Council 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, Norfolk County Council provided comments on the Preliminary Environmental Information Report (PEIR) by way of a letter dated 29th November 2017.
10. Further to the statutory Section 42 consultation, several meetings were held with Norfolk County Council 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. The Applicant met with Norfolk County Council on 26 September 2018 to discuss the content of this SoCG following the receipt of Relevant Representations.
12. Norfolk County Council confirmed that the SoCG should be limited in focus to the topics presented with their Relevant Representation. Other topics such as landscape and visual impact, noise and vibration, contaminated land and air quality are the responsibility of the relevant District Councils. Therefore, this SoCG focuses on traffic and transport, ecology, historic environment, flood risk, tourism and recreation and socio economics only.

2 STATEMENT OF COMMON GROUND

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

2.1 Project-wide considerations

14. Table 1 provides areas of agreement and disagreement for project-wide considerations.

Table 1 Project-wide considerations

Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Electricity supply		
<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 Norfolk County Councils PEIR response in November 2017.</p>	Agreed	It is agreed that both parties support offshore wind in principle and the project accords with national targets and objectives for renewable energy.
<p>The onshore connection point was determined through a statutorily mandated process involving both the Applicant and National Grid, to identify a direct connection to the 400kV national transmission system.</p> <p>There are no planning or regulatory mechanisms through which the Applicant could identify direct 'infeeds' into the regional distribution network in Norfolk.</p>	Agreed	The County Council accepts that Vattenfall are unable to influence National Grid and UK Power Networks regarding options to potentially feed electricity into the local transmission networks.
Site selection		
<p>The methodology adopted for selecting and assessing the onshore project substation location options, including the final option, is considered robust and appropriate.</p>	<p>The intention is to extend the Necton substation with vehicular access provided from the A47(T). Traffic assessments for the A47(T) are issues for Highways England to comment upon and not NCC. Nevertheless NCC has expressed concern with regard to the proposed access arrangements.</p>	NCC remains concerned in relation to safety but will leave this for Highways England to assess.
<p>The methodology adopted for selecting and assessing the landfall location options, including</p>	Agreed	It is agreed by both parties that the approach to selecting and assessing

Norfolk Vanguard Limited position	Norfolk County Council position	Final position
the final option, is considered robust and appropriate.		landfall location was appropriately undertaken.
<p>The proposed transition pit has been suitably set back from the cliff edge to ensure natural coastal erosion will not affect the drilled cable or transition pits within the conceivable lifetime of the project (approx. 30 years).</p> <p>In addition, the Applicant has committed to a long HDD to avoid any interaction with intertidal areas.</p> <p>Requirement 17 of the draft DCO (Landfall Method Statement) commits the Applicant to producing a method statement for the landfall works including the long HDD and any associated mitigation measures. This will be approved by the relevant planning authority. With this in place, measures to mitigate any impacts associated with the landfall are adequately secured.</p>	Agreed	The County Council ask that sufficient safeguards and mitigation measures are put in place where the offshore cable route makes landfall to the south of Happisburgh (as a planning requirement), in order to ensure the onshore infrastructure does not exacerbate existing coastal erosion in the area.
Committing to a High Voltage Direct Current (HVDC) solution removes the need for additional onshore infrastructure (cable relay station) in North Norfolk and reduces the potential environmental impact associated with the cable route by narrowing the cable corridor from 100m to 45 m.	Agreed	<p>The County Council welcomes the revised/amended design of the proposal and mitigation measures set out in the Applicant's Environmental Statement (ES).</p> <p>The County Council welcomes the decision by Vattenfall to pursue a HVDC solution, particularly in terms of minimising the impacts of this development on the landscape in North Norfolk.</p>
Health Impact Assessment (HIA)		
Detailed matters relating to, for example construction noise; local environmental health; and any other potential contamination issue, will be addressed by the relevant District Councils and/or other statutory body such the Environment Agency.	Agreed	The County Council would expect detailed matters relating to, for example construction noise; local environmental health; and any other potential contamination issue, to be addressed by the relevant District Councils and/or other statutory body such the Environment Agency.

Norfolk Vanguard Limited position	Norfolk County Council position	Final position
		<p>Providing the District Councils are satisfied with the proposal in relation to the above matters, the County Council would not wish to raise any public health concerns at this time.</p>
Minerals and waste		
<p>The provision of a Materials Management Plan (MMP) is considered suitable to mitigate any potential impacts to the Mineral Safeguarding Areas (MSA).</p> <p>This was discussed and agreed during the Expert Topic Group meeting in September 2017.</p> <p>The MMP will form part of the final CoCP and is secured through Requirement 20(2)(f) of the draft DCO.).</p>	<p>Agreed</p>	<p>Norfolk County Council in its capacity as the Minerals and Waste Planning Authority does not object to the Proposed Vanguard Wind Power Project. Requirement 20(2)(f) adequately secures the request that the applicant continues to work with Norfolk County Council regarding the mitigation of impacts on the Mineral Safeguarding Areas.</p>

2.2 Water Resources and Flood Risk

15. The project has the potential to impact upon water resources and flood risk. Chapter 20 of the ES, (document reference 6.1.20 of the Application), provides an assessment of the significance of these impacts.
16. Table 2 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding water resources and flood risk.
17. Table 3 provides areas of agreement and disagreement regarding water resources and flood risk.
18. Further details on the Evidence Plan for water resources and flood risk can be found in Appendix 9.20 and Appendix 25.2 of the Consultation Report (document reference 5.1 of the Application).

Table 2 Summary of Consultation with Norfolk County Council regarding water resources and flood risk

Date	Contact Type	Topic
Pre-Application		
25 th January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
8 th September 2017	Meeting	Initial results from the assessment, project updates.
29 th November 2017	Email from Norfolk County Council	PEIR feedback
23 rd January 2018	Meeting	PEIR feedback, project updates, mitigation measures.
15 th March 2018	Email correspondence	Approach to CIA including the list of projects to be considered.
Post-Application		
26 th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 2 Water resources and flood risk

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Existing Environment	Sufficient survey data has been collected to inform the assessment. This was discussed and agreed during the Expert Topic Group meetings in January and September 2017.	Agreed	It is agreed by both parties that sufficient survey data have been collected to undertake the assessment.
Assessment methodology	The impact assessment methodologies used for the EIA provide an appropriate approach to assessing potential impacts of the project. This was discussed in the Expert Topic Group meeting in January 2017, where concerns were raised over the methodology by the Environment Agency. This led to a revision of the methodology. The updated methodology was discussed and agreed during the Expert Topic Group meeting in September 2017.	Agreed	It is agreed by both parties that the impact assessment methodologies used in the EIA are appropriate.
	The worst case scenario presented in the assessment is appropriate. This was discussed and agreed during the Expert Topic Group meeting in January 2018 and through PEIR feedback.	Agreed	It is agreed by both parties that the worst-case scenario presented in the ES is appropriate for this project.
Assessment findings	The ES adequately characterises the baseline environment in terms of water resources and flood risk. This was discussed and agreed during the Expert Topic Group meeting in September 2017.	Agreed	It is agreed by both parties that the ES adequately characterises the baseline environment.
	The assessment of impacts for construction, operation and decommissioning presented are consistent with the agreed assessment methodologies.	Agreed	It is agreed by both parties that the assessment is consistent with the agreed methodologies.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The assessment of cumulative impacts is consistent with the agreed methodologies.	Agreed	It is agreed by both parties that the assessment of cumulative impact is consistent with the agreed methodologies
Approach to mitigation	<p>The proposed locations for trenchless crossing techniques are appropriate and will be explored further and details agreed at each location at detailed design stage.</p> <p>This was discussed and agreed during the Expert Topic Group meeting in September 2017.</p>	Agreed	It is agreed by both parties that the proposed trenchless crossing techniques are appropriate, subject to detailed design.
	<p>The onshore project substation surface water drainage plan will have sufficient storage / attenuation volume to ensure that during the 1 in 100 year rainfall event, plus an allowance for climate change, there will be no increase in surface water runoff from the site.</p> <p>Whilst the outline drainage design assumptions included an allowance of 40% for climate change, this was included as contingency to demonstrate proof of concept. As the operational life of the project is approximately 30 years, the relevant flood risk epoch is 2040 to 2069 using the Environment Agency's Climate Change Allowance Guidance. This identifies an allowance of 20% for climate change.</p> <p>Based on the operational life of the substation (30 years) the detailed design of the surface water drainage plan will therefore allow for the 1 in 100 year critical rainfall plus 20% for climate change as a minimum (as identified within the submitted Flood Risk Assessment). This is appropriate and in accordance with the Environment Agency's Climate Change Allowance guidance.</p> <p>40% climate change allowance is the worst-case allowance identified for developments that have a design life extending beyond 2070. The onshore project substation has a 30-year design life running from approximately</p>	Not agreed	Norfolk County Council as Lead Local Flood Authority request that detailed designs at the project substation and National Grid substation extension include modelling calculations and plans of the of the drainage conveyance network in the 1 in 100 year critical rainfall plus 40% climate change event to show, if any, the depth, volume and storage location of any above ground flooding from the drainage network ensuring that flooding does not occur in any part of a building or any utility plant susceptible to water (e.g. electricity equipment) within the development.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>2025-2055. Whilst the Applicant is committed to adopting best practice design standards for all infrastructure, adopting elevated standards that aren't appropriate for the proposal may lead to unnecessary over-engineering within the design and potentially affect the functionality of the drainage system that is installed. These systems are designed to receive a certain volume of water to self-clean. If they are over designed and receive less water than expected there is a risk they will silt up which could lead to impacts to the sensitive chalk river catchment.</p>		
	<p>The onshore project substation surface water drainage plan is secured through DCO Requirement 20(2)(i) and will be developed in accordance with the submitted Flood Risk Assessment. This adequately secures the mitigation to manage potential flood risk impacts associated with the operation of the onshore project substation.</p>	<p>Yet to be discussed</p>	
	<p>The mitigation proposed for managing flood risk is appropriate and adequate.</p>	<p>Yet to be discussed</p>	
	<p>Part 4 of the DCO (Supplemental Powers) Article 15 (Discharge of water and works to watercourses) sets out that the Applicant must not undertake any works to any ordinary watercourse without the consent of the relevant internal Drainage Board or Norfolk County Council.</p>	<p>Agreed</p>	<p>The County Council confirms that for ordinary watercourses that are to be crossed by open cut trenching or where any other temporary works proposed as part of this project are likely to affect flows in an ordinary watercourse, then the Applicant would need the approval of Norfolk County Council</p>
Draft Development Consent Order (DCO)			
<p>Wording of Requirement(s)</p>	<p>The wording of Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to water resources and flood risk are considered appropriate and adequate.</p>	<p>Yet to be discussed</p>	

2.3 Onshore Ecology and Ornithology

19. The project has the potential to impact upon onshore ecology and ornithology. Chapter 22 and 23 of the ES, (document reference 6.1.22 and 6.1.23 of the Application), provides an assessment of the significance of these impacts.
20. Table 4 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding onshore ecology and ornithology.
21. Table 5 provides areas of agreement and disagreement regarding onshore ecology and ornithology.
22. Further details on the Evidence Plan for onshore ecology and ornithology can be found in Appendix 9.19 and Appendix 25.1 of the Consultation Report (document reference 5.1 of the Application).

Table 3 Summary of Consultation with Norfolk County Council regarding onshore ecology and ornithology

Date	Contact Type	Topic
Pre-Application		
24 th January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
18 th July 2017	Meeting	Initial results from the assessment, project updates, interim survey results.
29 th November 2017	Email from Norfolk County Council	PEIR feedback.
22 nd January 2018	Meeting	Project updates, PEIR responses, Habitats Regulations Assessment (HRA), mitigation measures, survey data and results.
Post-Application		
26 th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 4 Onshore ecology and onshore ornithology

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Survey methodology	Survey methodologies for Phase 1 Habitat Surveys are appropriate and sufficient and were agreed during the Expert Topic Group meeting held in January 2017.	Agreed	It is agreed by both parties that sufficient survey data have been collected to undertake the assessment.
	Survey methodologies for Phase 2 Surveys are appropriate and sufficient and were agreed during the Expert Topic Group meeting held in January 2017.	Agreed	Phase 2 scopes were submitted for comment post-January 2017 Expert Topic Group. Norfolk County Council provided recommendations on the survey scope for bat activity survey in July 2017. An updated survey methodology note was submitted, with the recommendations taken forward and implemented. Both parties agree that Phase 2 survey scopes are appropriate.
Existing Environment	Survey data collected for Norfolk Vanguard for the characterisation of onshore ecology and ornithology are suitable for the assessment. Due to access constraints only 50% of the onshore project area and only 40% of the ponds within the onshore study area were subject to ecological field surveys. The use of the Norfolk Living Map to 'fill-in' data gaps at this stage, is appropriate to inform the assessment. The Applicant has committed to undertake field surveys of all un-surveyed areas post consent, which will inform site specific mitigation.	Agreed	The County Council recognises field surveys of the currently un-surveyed locations will be necessary post-consent, and these surveys may lead to further mitigation at specific locations.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	County Wildlife Sites (CWS) in proximity to the cable corridor have been sufficiently surveyed to inform the assessment of potential impacts. At an early stage, the County Council advised that surveying of CWS close to the cable corridor was necessary (ETG meeting Jan 2017). This was accepted by the Applicant and the surveys were completed.	Agreed	It is agreed by both parties that the survey effort at CWS in proximity to the works is sufficient to inform the assessment.
	The ES adequately characterises the baseline environment in terms of onshore ecology and ornithology.	Agreed	It is agreed by both parties that the ES adequately characterises the baseline environment.
Assessment methodology	Appropriate legislation, planning policy and guidance relevant to ecology and ornithology has been considered for the project (listed in section 22.2 and 23.2 in Chapter 22 Onshore Ecology and Chapter 23 Onshore Ornithology respectively).	Agreed	It is agreed by both parties that the appropriate legislation, planning policy and guidance has been taken into account with regard to onshore ecology and ornithology.
	The list of potential impacts on onshore ecology and ornithology assessed is appropriate	Agreed	It is agreed by both parties that the list of potential impacts considered is appropriate.
	The impact assessment methodologies used for the EIA provide an appropriate approach to assessing potential impacts of the project. This was discussed and agreed during the Expert Topic Group meetings in January and September 2017.	Agreed	It is agreed by both parties that the impact assessment methodologies used in the EIA are appropriate.
	The worst case scenario presented in the ES, is appropriate for the project.	Agreed	It is agreed by both parties that the worst case scenario presented is appropriate.
Assessment findings	The assessment of impacts for construction, operation and decommissioning presented are consistent with the agreed assessment methodologies.	Agreed	It is agreed by both parties that the assessment is consistent with the agreed assessment methodologies.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	The assessment findings for potential cumulative impacts are consistent with the agreed methodologies.	Agreed	It is agreed by both parties that the assessment is consistent with the agreed assessment methodologies.
Mitigation and Management			
Approach to mitigation	The provision of an Ecological Management Plan (EMP) (based on the Outline Landscape and Ecological Management Strategy (OLEMS) submitted with the DCO application, document reference 8.7) is considered suitable to ensure potential impacts identified in the EclA are reduced to a non-significant level. The OLEMs sets out that all hedgerows will be reinstated along the cable route and sets out additional hedgerow planting that is proposed in proximity to the onshore project substation.	Agreed	The County Council welcome the approach and agrees the content of the outline CoCP and the OLEMS.
	The use of trenchless crossing techniques at CWS is acceptable subject to detailed design. This was discussed and agreed (in principle) during the Expert Topic Group meeting in January 2018.	Agreed	It is agreed by both parties that the use of trenchless crossings at CWS are acceptable, subject to detailed design.
	The mitigation proposed for bats is appropriate and proportionate.	Agreed	The County Council is content that appropriate mitigation for bats has been identified and notes that during the design process the landfall has moved away from the key area of concerns for Barbastelle bats at the Paston Great Barn SAC colony.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Draft Development Consent Order (DCO)			
Wording of Requirement(s)	The Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to onshore ecology and ornithology are considered appropriate and adequate.	Agreed	It is agreed by both parties that the Requirements provided in the draft DCO are considered appropriate and adequate.

2.4 Traffic and Transport

23. The project has the potential to impact upon traffic and transport. Chapter 24 of the ES, (document reference 6.1.24 of the Application), provides an assessment of the significance of these impacts.
24. Table 6 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding traffic and transport.
25. Table 7 provides areas of agreement and disagreement regarding traffic and transport.
26. 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 5 Summary of Consultation with Norfolk County Council regarding traffic and transport

Date	Contact Type	Topic
Pre-Application		
25 th January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
17 th July 2017	Meeting	Initial results from the assessment, project updates.
29 th November 2017	Email from Norfolk County Council	PEIR feedback.
25 th January 2018	Meeting	Project updates, PEIR responses.
Post-Application		
26 th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 6 Traffic and transport

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Existing Environment	<p>Sufficient survey data (extent/duration) has been collected to inform the characterisation of the baseline environment.</p> <p>The Applicant has subsequently obtained additional traffic count data at Oulton from Ørsted, associated with Hornsea Project Three. This dataset aligns with the data presented within the Norfolk Vanguard application and confirms that the traffic data presented within the Norfolk Vanguard application, at Oulton, is appropriate to inform the baseline environment.</p>	Agreed – with the exception of the main compound at Oulton – see below. The applicant still need to confirm cumulative impacts arising from all three wind farm projects utilising the same access route at Oulton.	Not yet agreed
Assessment methodology	The impact assessment methodologies used for the assessment represent an appropriate approach to assessing potential impacts.	NCC has no specific points to raise	n/a
	<p>The methodology adopted for the Great Yarmouth port assessment (onshore construction traffic derived from the port) is acceptable.</p> <p>This was discussed and agreed in communications following the Expert Topic Group meeting in July 2017.</p> <p>All construction traffic associated with the onshore works, including that derived from relevant ports, will be included within the relevant Travel Plan for that stage of the works.</p>	Agreed	Agreed
	<p>The assessment adequately defines the realistic worst case scenario (RWCS) for traffic demand.</p> <p>This was discussed and agreed (in principle) during the Expert Topic Group meeting in July 2017.</p>	NCC have no specific points to raise	n/a
	The assessment adequately defines the realistic worst case scenario for employee distribution.	NCC have no specific points to raise	n/a

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>The assessment adequately characterises the baseline environment in terms of traffic and transport.</p> <p>The proposed use of The Street at Oulton is required to access a single mobilisation area (MA7) further east along Heydon Road. This access route is identified as Link 68 within the application. MA7 is only required to supports the construction works in proximity to Oulton, and is not a main works compound.</p> <p>Peak traffic demand for both the duct installation and cable pulling phases is presented within Appendix 24.7.</p> <p>During duct installation peak traffic demand is 96 daily HGV movements, during a 16 week period in 2022. And a further 6 weeks at 88 daily HGV movements also in 2022.</p> <p>During the cable pull peak traffic demand is 64 daily HGV movements for approximately 20 weeks during 2024.</p> <p>The derivation of the traffic demand on Link 68 (The Street at Oulton) as defined in Appendix 24.7 represents a robust basis for the assessment of potential impacts on this access route.</p> <p>A biomass plant was refused planning permission in 2014 that proposed to use The Street for its operational traffic. The proposed operational traffic for that development was 112 daily HGV movements (based on a 14-hour working day) and would occur throughout the operational life of that development (assumed to be approximately 25+ years). Operational traffic associated with that development would unavoidably occur during the peak background (harvest) traffic.</p>	<p>NCC have no specific points to raise</p> <p>The applicants still need to confirm cumulative impacts arising from all three wind farm projects utilising the same access route at Oulton.</p> <p>During duct installation peak traffic demand is 96 daily HGV movements, during a 16 week period in 2022. A further 6 weeks at 88 daily HGV movements also in 2022.</p> <p>During the cable pull peak traffic demand is 64 daily HGV movements for approximately 20 weeks during 2024.</p> <p>In comparison – PINS refused an Appeal, for a proposed biomass plant, by means of a hearing in 2014 that proposed to use The Street for its operational traffic. The proposed operational traffic for that development involved the import of 30,000 tons of crop over an 8 week period. At its peak there would have been approximately 34 deliveries per day. The maximum traffic flow per hour during harvesting of biomass or removal of bio fertiliser from the site was unlikely to exceed 8 trips per</p>	<p>Not agreed. The applicants still need to confirm cumulative impacts arising from all three wind farm projects utilising the same access route at Oulton and not just their own traffic.</p>

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
		hour i.e. 4 vehicles in and 4 vehicles out. Accordingly NCC still has concerns in relation to this aspect of the application.	
Abnormal Indivisible Loads	<p>Consideration of Abnormal Indivisible Loads (AIL) is presented within the Outline Traffic Management plan (OTMP) (document reference 8.8). An AIL Route Access Study is included as Appendix 2 of the OTMP, which sets out the type of management measures which could be employed to minimise disruption to traffic during AIL delivery.</p> <p>The movement of AILs will be subject to separate agreement with the relevant highway authorities and police through the Electronic Service Delivery for Abnormal Loads system.</p>	Agreed	NCC is satisfied that any impact from abnormal loads will be insignificant and falls outside the current assessment. However, it will still need to be assessed at a later and appropriate time.
Approach to mitigation	With the exception of points identified separately in this SoCG, the measures described in the OTMP, Outline Travel Plan (TP) and Outline Access Management Plan (AMP) (document reference 8.8, 8.9 and 8.10) are considered appropriate. Further detail and site-specific measures will be developed in the final documents post-consent and will require approval from the relevant planning authority in consultation with the highways authority. This is secured through DCO Requirement 21.	<p>The TMP; TP and AMP are all in outline form only. Accordingly, they are working documents that need to be progressed as the project develops.</p> <p>In particular temporary signage will be required in accordance with TSRGD as well as Temporary speed limits via Temporary Traffic Regulation Orders. The exact details to be confirmed via the CTMP. Also require a commitment to remove temporary construction access otherwise approved by the HA.</p>	Agreed

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
		<p>The County Council expect the developer to:</p> <p>(A) enter into a legal agreement with the Highway Authority to ensure any damage is rectified;</p> <p>(B) set up local stakeholder involvement group/s to enable any traffic issues arising during the construction phase to be discussed and resolved.”</p>	
	<p>Within the submitted Outline Traffic Management Plan TMP (DCO doc. 8.8) Link 68 (The Street at Oulton), serving mobilisation area MA7, is identified as requiring traffic management measures based on the peak traffic demand.</p> <p>Given the relatively limited period that peak construction traffic will be using this mobilisation area (outlined above in assessment methodology) the proposed traffic management measures (use of a pilot vehicle) for this route is appropriate for Norfolk Vanguard construction traffic alone.</p>	<p>PINS refused an Appeal, for a proposed biomass plant, by means of a hearing in 2014 that proposed to use The Street for its operational traffic. The proposed operational traffic for that development involved the import of 30,000 tons of crop over an 8 week period. At its peak there would have been approximately 34 deliveries per day. The maximum traffic flow per hour during harvesting of biomass or removal of bio fertiliser from the site was unlikely to exceed 8 trips per hour i.e. 4 vehicles in and 4 vehicles out. Accordingly NCC still has concerns in relation to this aspect of the application.</p>	Not agreed

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>The Applicant is continuing to engage with Highways England on the approach to junction design off the A47(T). An SoCG between the Applicant and Highways England is also being progressed. A Substation Access Briefing Note (SABN) related to access proposals off the A47(T) has been submitted to Highways England for review. The SABN clarifies the approach the Applicant will take for subsequent design work to ensure that the final junction design will be undertaken to the satisfaction of Highways England.</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.</p> <p>Following agreement of the SABN (and on the understanding that the work outlined within the document is delivered to the satisfaction of Highways England post-consent), 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>The intention is for the Applicant to extend the Necton substation with vehicular access provided from the A47(T). Traffic assessments for the A47(T) are issues for Highways England to comment upon and not NCC. Nevertheless, NCC has expressed concern regarding the proposed access arrangements. In our professional opinion a right turn lane is needed.</p>	<p>NCC remain of the opinion that a full right turn lane is needed but acknowledge the applicant and Highways England are in discussion. Accordingly, we will leave Highways England to advise upon the suitability of the final junction design.</p>
Cumulative impacts	<p>The Applicant is working closely with Ørsted to identify potential cumulative impacts with Hornsea Project 3 in the Reephams area where the onshore cable route for the two projects cross. As outputs from this exercise become available the Applicant will engage with Norfolk County Council.</p>	<p>The Applicant still needs to confirm cumulative impacts arising from all three wind farm projects utilising the same access route at Oulton.</p> <p>The outcome is still awaited.</p>	Still in discussion
Draft Development Consent Order (DCO)			
Wording of Requirement(s)	<p>The wording of Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to traffic and transport are considered appropriate and adequate.</p>	<p>Yet to be discussed – we have now started to look at this and should be able to provide an update prior to hearing 1.</p>	

2.5 Onshore Archaeology and Cultural Heritage

27. The project has the potential to impact upon onshore archaeology and cultural heritage. Chapter 28 of the ES, (document reference 6.1.28 of the Application), provides an assessment of the significance of these impacts.
28. Table 8 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding onshore archaeology and cultural heritage.
29. Table 9 provides areas of agreement and disagreement regarding onshore archaeology and cultural heritage.
30. Further details on the Evidence Plan for onshore archaeology and cultural heritage can be found in Appendix 9.22 and Appendix 25.4 of the Consultation Report (document reference 5.1 of the Application).

Table 7 Summary of Consultation with Norfolk County Council regarding onshore archaeology and cultural heritage

Date	Contact Type	Topic
Pre-Application		
1 st February 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
2 nd May 2017	Meeting	Coastal, intertidal and nearshore archaeological considerations.
19 th July 2017	Meeting	Initial assessment results in the draft PEIR.
29 th November 2017	Email from Norfolk County Council	PEIR feedback.
24 th January 2018	Meeting	Assessment results, approach to mitigation, PEIR feedback
Post-Application		
26 th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 8 Onshore archaeology and cultural heritage

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Existing Environment	Sufficient survey data (extent/duration) has been collected to inform the assessment. This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that sufficient survey data have been collected to undertake the assessment.
	It is accepted that outstanding geophysical surveys (scheme-wide) may be undertaken post-consent. This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that the approach to survey data collection is appropriate to undertake the assessment.
	The approach to the selection of priority geophysical survey areas was appropriate and sufficient to inform the assessment of impacts. This was agreed after the Expert Topic Group meeting in July 2017.	Agreed	It is agreed by both parties that the approach to survey data collection is appropriate to undertake the assessment.
	Heritage setting viewpoint locations are representative and appropriate.	Agreed	It is agreed by both parties that the heritage setting viewpoint locations are representative.
	Archaeological trial trenching is not required to inform the assessment of impacts pre-application. Further evaluation will be completed post-consent. This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that the approach to survey data collection is appropriate to undertake the assessment.
Assessment methodology	The impact assessment methodologies used for the assessment (DMRB Volume 11, Section 3, Part 2: Cultural Heritage) provide an appropriate approach to assessing potential impacts of the project. This was agreed after the Expert Topic Group meeting in February 2017.	Agreed	It is agreed by both parties that the impact assessment methodologies used in the EIA are appropriate.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>The worst-case scenario presented in the assessment is appropriate.</p> <p>This was agreed after the Expert Topic Group meeting in February 2017.</p>	Agreed	It is agreed by both parties that the worst-case scenario presented in the ES is appropriate for this project.
	<p>The assessment adequately characterises the baseline environment in terms of onshore archaeology and cultural heritage, including the setting of designated heritage assets.</p> <p>This was agreed after the Expert Topic Group meeting in July 2017.</p>	Agreed	It is agreed by both parties that the ES adequately characterises the baseline environment.
	<p>The scope of the Archaeological Desk Based Assessment (ADBA) is appropriate to inform the assessment.</p> <p>This was agreed after the Expert Topic Group meeting in February 2017.</p>	Agreed	It is agreed by both parties that the ADBA is appropriate to inform the assessment.
Assessment findings	<p>Based on all of the currently available information and assuming the inclusion of the mitigation described and commitment to further evaluation post-consent, impacts on onshore archaeology and cultural heritage during construction, operation and decommissioning, are very likely to be non-significant in EIA terms.</p>	Agreed	It is agreed by both parties that based on the currently available information impacts are very likely to be non-significant. Accepting that there is a small risk that highly-significant, previously-unrecorded and unexpected heritage assets with archaeological interest could be encountered.
	<p>The assessment of cumulative effects is appropriate and, assuming the inclusion of the mitigation described, cumulative impacts on onshore archaeology and cultural heritage are non-significant in EIA terms.</p>	Agreed	It is agreed by both parties that the assessment of cumulative impact is appropriate and that the proposed mitigation will result in non-significant impacts.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Approach to mitigation	The provision of a pre-construction and construction Archaeological Written Scheme of Investigation (WSI) (Onshore) (to be based on the outline WSI, document reference 8.5) is considered suitable, with respect to Set-Piece Excavation (SPE); Strip, Map and Sample and archaeological monitoring/watching brief scenarios.	Agreed	It is agreed by both parties that the provision of a WSI is considered suitable.
	The mitigation proposed for potential impacts on buried and above-ground archaeological remains is appropriate.	Agreed	It is agreed by both parties that the proposed mitigation will result in non-significant impacts.
Draft Development Consent Order (DCO)			
Wording of Requirement(s)	<p>The wording of the Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to onshore archaeology and cultural heritage are considered appropriate and adequate.</p> <p>Specifically, Requirement 23 states: <i>“No stage of the onshore transmission works may commence until for that stage an archaeological written scheme of investigation (which accords with the outline written scheme of investigation (onshore)) has, after consultation with Historic England and Norfolk County Council, been submitted to and approved by the relevant planning authority”.</i></p> <p>And <i>“In the event that archaeological site investigation is required, the scheme must include details of the following—</i></p> <ul style="list-style-type: none"> (a) <i>an assessment of significance and research questions; and</i> (b) <i>the programme and methodology of site investigation and recording;</i> (c) <i>the programme for post investigation assessment;</i> 	Agreed	Both parties are in agreement that potential impacts to archaeology and cultural heritage impacts will be adequately managed subject to the submission and approval of a final Written Scheme of Investigation.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	<p>(d) <i>provision to be made for analysis of the site investigation and recording;</i></p> <p>(e) <i>provision to be made for publication and dissemination of the analysis and records of the site investigation;</i></p> <p>(f) <i>provision to be made for archive deposition of the analysis and records of the site investigation. “</i></p>		

2.6 Tourism and recreation

31. The project has the potential to impact upon tourism and recreation. Chapter 30 of the ES, (document reference 6.1.30 and 6.1.31 of the Application), provides an assessment of the significance of these impacts.
32. Table 10 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding tourism and recreation.
33. Table 11 provides areas of agreement and disagreement regarding tourism and recreation.
34. Further details on the Evidence Plan for tourism and recreation can be found in Appendix 9.21 of the Consultation Report (document reference 5.1 of the Application).

Table 9 Summary of Consultation with Norfolk County Council regarding tourism and recreation

Date	Contact Type	Topic
Pre-Application		
25 th January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
29 th November 2017	Email from Norfolk County Council	PEIR feedback.
Post-Application		
26 th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 10 Tourism and recreation

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Existing Environment	Appropriate datasets have been presented to inform the assessments	Agreed	It is agreed by both parties that datasets are appropriate.
Assessment methodology	The impact assessment methodologies used provide an appropriate approach to assessing potential impacts of the project.	Agreed	It is agreed by both parties that the methodologies used are appropriate.
	The worst-case scenario presented in the assessments is appropriate.	Agreed	It is agreed by both parties that worst case scenario presented is appropriate.
	The assessment adequately characterises the baseline environment in terms of tourism and recreation.	Agreed	It is agreed by both parties that the baseline environment has been adequately characterised.
Assessment findings	The assessment of effects for construction, operation and decommissioning presented is appropriate and, assuming the inclusion of the mitigation described, impacts on tourism and recreation are non-significant in EIA terms.	Agreed	It is agreed by both parties that the residual impacts are non-significant.
	The assessment of cumulative effects is appropriate and, assuming the inclusion of the mitigation described, cumulative impacts on tourism and recreation are non-significant in EIA terms.	Agreed	It is agreed by both parties that the residual cumulative impacts are non-significant.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Approach to mitigation	The mitigation measures identified within the Public Right of Way Strategy and the Code of Construction Practice (CoCP), are considered to be appropriate to mitigate impacts on the PRoW and Trails network.	Agreed	Norfolk County Council believes these documents should result in appropriate measures to manage impacts in relation to cable-laying. The County Council welcomes the intention of the applicant to liaise with the PRoW Officers and Trail Officers.
	The Applicant has committed to trenchless crossing techniques at a number of sensitive footpaths, which will avoid direct impacts to those routes. These include the Norfolk Coast Path, and Marriott's Way, Paston Way and Wensum Way Long Distance Trails. This is detailed in Appendix 30.1.	Agreed	Norfolk County Council welcomes the use of HDD underneath some of the particularly heavily-used recreational routes (long-distance trails).
Draft Development Consent Order (DCO)			
Wording of Requirement(s)	Given the impacts of the project, the wording of the Requirements provided within the draft DCO (and supporting certified documents) for the mitigation of impacts to tourism and recreation are considered appropriate and adequate.	Agreed	It is agreed by both parties that the wording of Requirements within the DCO are appropriate and adequate.

2.7 Socio-economics

35. The project has the potential to impact upon socio-economics. Chapter 31 of the ES, (document reference 6.1.31 of the Application), provides an assessment of the significance of these impacts.
36. Table 10 provides an overview of meetings and correspondence undertaken with Norfolk County Council regarding socio-economics.
37. Table 11 provides areas of agreement and disagreement regarding socio-economics.
38. Further details on the Evidence Plan for socio-economics can be found in Appendix 9.21 of the Consultation Report (document reference 5.1 of the Application).

Table 11 Summary of Consultation with Norfolk County Council regarding socio-economics

Date	Contact Type	Topic
Pre-Application		
25 th January 2017	Meeting	Method statement, project updates and approach to the assessment (methodology, impacts, data collection etc).
29 th November 2017	Email from Norfolk County Council	PEIR feedback.
Post-Application		
26 th September	Meeting	To discuss Relevant Representation and content of SoCG.

Table 12 Socio-economics

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
Environmental Impact Assessment			
Existing Environment	Appropriate datasets have been presented to inform the assessments	Agreed	It is agreed by both parties that datasets are appropriate.
Assessment methodology	The impact assessment methodologies used provide an appropriate approach to assessing potential impacts of the project.	Agreed	It is agreed by both parties that the methodologies used are appropriate.
	The worst-case scenario presented in the assessments is appropriate.	Agreed	It is agreed by both parties that worst case scenario presented is appropriate.
	The assessment adequately characterises the baseline environment in terms of socio-economics.	Agreed	It is agreed by both parties that the baseline environment has been adequately characterised.
Approach to mitigation	<p>As set out in Chapter 21 Land Use and Agriculture (para 144), private agreements (or compensation in line with the compulsory purchase compensation code) will be sought between Norfolk Vanguard Limited and relevant landowners/occupiers regarding any measures required in relation to crop loss incurred as a direct consequence of the construction phase of the project.</p> <p>Norfolk Vanguard Ltd. is committed to exploring options for delivering a provision for communities, with the aim of recognising hosts and accounting for change, where benefits acknowledge and address tangible local change. The form of the benefit and its purpose will be explored with relevant stakeholders at the appropriate time, separate to the DCO process.</p>	Not agreed	The reduction in the potential impacts and disruption to business as a consequence of using HVDC technology is welcomed, however, it is felt that Vattenfall should commit to providing appropriate compensation for businesses and communities adversely affected by the construction works.

Topic	Norfolk Vanguard Limited position	Norfolk County Council position	Final position
	Given the impacts of the project, the mitigation proposed for socio-economics are considered appropriate and adequate. Where significant impacts are identified suitable mitigation is proposed.		
	Where there is likely to be a demonstrable impact (i.e. during: construction; operation and/or decommissioning) on commercial fishing affecting communities in Norfolk, individual agreements will be reached as necessary, with any agreements based on evidence and track record and in accordance with FLOWW Best Practice Guidance for Offshore Renewables Developments.	Agreed	The County Council welcomes the revised/amended design of the above proposal and mitigation measures set out in the applicant's ES.
	Norfolk Vanguard Ltd. recognises the economic benefits of using local Port facilities at Great Yarmouth and has signed an agreement with Peel Ports that reserves space for the potential future operations and maintenance use of the site. This is subject to DCO consent award and other regulatory considerations.	Agreed	The County Council will continue to work pro-actively with Vattenfall to demonstrate the economic benefits of using the Port facilities at Great Yarmouth for
	Vattenfall is actively seeking to collaborate with stakeholders to support, complement and enhance where appropriate, local skills development programmes. The aim shared with these stakeholders is to work towards a sustainable and resilient employment pipeline, and to channel into / retain more local intellectual and social capital within the green energy sector. To date this has included collaborations with University of East Anglia, UTCN Norwich, local schools, EEEGR, NCC, NALEP and others.	Agreed	The County Council will also continue to work with the Applicant to develop the creation of apprenticeships and work experience.

The undersigned agree to the provisions within this SOCG

Name	Stephen Faulkner
Position	Principal Planner
On behalf of	Norfolk County Council
Date	21.12.2018

Name	Rebecca Sherwood
Position	Norfolk Vanguard Consents Manager
On behalf of	Norfolk Vanguard Ltd (the Applicant)
Date	21.12.2018