



Norfolk Boreas Offshore Wind Farm

Statement of Common Ground

Trinity House

(Version 2)

Applicant: Norfolk Boreas Limited

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Photo: Ormonde Offshore Wind Farm





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Glossary of Acronyms

AtoN	Aids to Navigation	
110011		
DCO	Development Consent Order	
DWR	Deep Water Route	
DML	Deemed Marine Licence	
EIA	Environmental Impact Assessment	
ES	Environmental Statement	
FSA	Formal Safety Assessment	
HDD	Horizontal Directional Drill	
HVDC	High Voltage Direct Current	
IALA	International Association of Lighthouse Authorities	
km	Kilometre	
km²	Square Kilometre	
LiDAR	Light Detection and Ranging	
LMP	Lighting and Marking Plan	
m	Metre	
MCA	Maritime and Coastguard Agency	
MGN	Marine Guidance Note	
MW	Megawatt	
NRA	Navigation Risk Assessment	
OREI	Offshore Renewable Energy Installation	
PEIR	Preliminary Environmental Review	
SAR	Search and Rescue	
SoCG	Statement of Common Ground	
TH	Trinity House	

Glossary of Terminology

Baseline	Existing conditions within the array area or export cable route including navigation features and vessel routes.		
Development Principles	A set of rules defining how the layout will be designed post consent. The rules have been agreed with the Maritime and Coastguard Agency (MCA) and Trinity House (TH) to ensure safe navigation of third party surface vessels and Search and Rescue (SAR) helicopters and surface vessels.		
Formal Safety Assessment (FSA)	A structured and systematic process for assessing the risks and costs (if applicable) associated with shipping activity.		
Interconnector cables	Offshore cables which link offshore electrical platforms within the Norfolk Boreas site.		
Marine Guidance Note (MGN)	A system of guidance notes issued by the MCA which provide significant advice relating to the improvement of the safety of shipping and of life at sea, and to prevent or minimise pollution from shipping.		
Navigation Risk Assessment (NRA)	A document which assesses the overall impact to shipping and navigation of a proposed Offshore Renewable Energy Installation (OREI) based upon FSA.		





Project interconnector search area	The area within which the project interconnector cable would be installed.
Safety Zone	A marine zone demarcated for the purposes of safety around a possibly hazardous installation or works/construction area under the Energy Act 2004 and Electricity (Offshore Generating Station Stations (Safety Zones) (Applications Procedures and Control of Access Regulations 2007 (SI No 2007/1948)).
Study Area	A ten nautical buffer around any proposed development area.





1 INTRODUCTION

- 1. This Statement of Common Ground (SoCG) has been prepared with Trinity House (TH) and Norfolk Boreas Limited (hereafter 'the Applicant') to set out the areas of agreement and areas of ongoing discussion in relation to the Development Consent Order (DCO) application for the Norfolk Boreas Offshore Wind Farm (hereafter 'the project'). A full description of the project can be found in Chapter 5 of the Environmental Statement. Document reference 6.1.5 of the Application, APP-218.
- 2. This SoCG comprises an agreement log which has been structured to reflect the topics of interest to TH with regard to the Norfolk Boreas DCO application (hereafter 'the Application'). The agreement logs (in Table 2.1) outline all topic specific matters agreed and matters that are not agreed at this stage will be the subject of ongoing discussion wherever possible to resolve or refine the extent of disagreement between TH and the Applicant.
- 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.

1.1 Consultation with Trinity House

- 4. This section briefly summarises the consultation that the Applicant has had with TH. For further information on the consultation process please see the Consultation Report (document reference 5.1 of the Application, APP-027).
- 5. The Applicant has engaged with TH 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.
- 6. During formal (Section 42) consultation, TH provided comments on the Preliminary Environmental Information Report (PEIR) by way of a letter dated 26 October 2019.
- 7. Table 1.1 provides an overview of meetings and correspondence undertaken with TH to date. This is a live document that will be updated as the project progresses taking into account TH's Relevant Representation and any further consultation. 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, APP-027).





Table 1.1 Pre-Application Consultation

Date	Contact Type	Topic
Pre-Application		
05 June 2017	Scoping Opinion	Compliance with International Association of Lighthouse Authorities (IALA) guidance - Wind farm structures should be marked in line with IALA O-139 requirements, and additional Aids to Navigation (AtoN) (e.g., buoyage) may be necessary.
		Cumulative vessel routeing - Cumulative effects on shipping routes should be assessed.
		Separation distances -A buffer zone between the wind farm and the Deep Water Route (DWR) to the west should be considered.
		Transboundary - National transboundary issues should be assessed, through consultation with the Dutch authorities.
		Decommissioning plan - A decommissioning plan is required.
		Marine traffic surveys - TH noted that the Navigational Risk Assessment (NRA) should include a comprehensive vessel traffic analysis in accordance with MGN 543.
29 May 2018	Consultation meeting	Baseline environment - Any issues relating to alignment with platforms (oil or gas) will need to be assessed.
		Decommissioning Plan - Oil and gas decommissioning activities will need to be assessed cumulatively where information is publicly available.
26 October 2018	PEIR response	Contents of letter noted.
27 January 2019	Consultation meeting	Lighting and marking - No concerns marking sample layouts shown and indicated that lighting was likely to initially be done on a project in isolation basis with lights
		removed (turned) off as required when other projects were built or decommissioned.
		Layout design and use of Development Principles - Content with the Development Principles being noted within the DCO as long as the condition still allowed for final sign off.
04 March 2019	Order Limits Change report	TH has no objections to the revised order limits and has no further comments.





Date	Contact Type	Topic			
09 April 2019	Consultation meeting	Layout design and use of Development Principles - Meeting to finalise and agree the wording of the development principles.			
Post-Application	Post-Application				
21 August 2019	Teleconference	Call to discuss the first draft of the SoCG.			





2 STATEMENT OF COMMON GROUND

- 1. The project has the potential to impact upon shipping and navigation. Chapter 15 of the Norfolk Boreas Environmental Statement (ES) (document reference 6.1.15 of the Application, APP-228) provides an assessment of the significance of these impacts.
- 2. Table 2.1 provides areas of agreement (common ground) and areas of ongoing discussion regarding shipping and navigation between TH and the Applicant.
- 3. This SoCG represents the position of the parties as they currently stand. It is intended to be a live document that will be updated throughout the examination process as the Applicant and TH work to resolve any outstanding issues.





Table 2.1 Agreement Log – Shipping and Navigation

Topic	Norfolk Boreas Limited position	TH Comment	Final position			
Consultation						
Consultation	Consultation - TH has been adequately consulted regarding shipping and navigation to date.	No further comment	Agreed It is agreed that the consultation has been adequate to date.			
Environmental Impact Asse	essment					
Existing environment	Marine traffic surveys - Marine traffic survey data collected for Norfolk Boreas for the characterisation of shipping and navigation are	No further comment	Agreed It is agreed that the marine traffic survey data			
	suitable for the assessment.		collection is as per MGN 543 and therefore suitable for the assessment.			
	Traffic routeing - The NRA and Environmental Statement (ES) adequately characterises the baseline environment in terms of shipping and navigation including normal and adverse weather routeing. This includes cumulative traffic routeing.	No further comment	Agreed It is agreed that the NRA (document reference 6.3.15.1 of the application, APP-569) and ES (document reference 6.1.15 of the Application, APP-228) adequately characterises the baseline environment in Chapter 15: Shipping and navigation of the ES which includes the NRA.			
	The baseline environment section of the NRA includes consideration of oil and gas assets within the study area.	No further comment	Agreed			
Assessment methodology	Compliance with Guidance - Appropriate legislation, planning policy and guidance relevant to shipping and navigation has been used.	No further comment	Agreed It is agreed that the appropriate legislation, planning policy and guidance has been used in the NRA (document reference 6.3.15.1 of the application, APP-569) and Chapter 15: Shipping and Navigation of the ES (document reference 6.1.15 of the Application, APP-228).			





Topic	Norfolk Boreas Limited position	TH Comment	Final position	
	Identification of impacts - The potential impacts identified within the chapter represent a comprehensive list of potential effects on shipping and navigation from the project.	No further comment	Agreed It is agreed that the Applicant has comprehensively identified navigational safety impacts on shipping and navigation receptors from the project.	
	Compliance with guidance - The FSA based approach to the assessment of effects is deemed appropriate for the purposes of predicting changes to the receiving environment.	No further comment	identified navigational safety impacts on shipping	
	Worst case scenario - The worst case scenarios identified for each effect are appropriate based on the information presented in the Project Description (Chapter 5: Project Description, APP-218).	No further comment	It is agreed that the design parameters of the	





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Safety zones	The Applicant will submit an application (post consent) for the use of safety zones. The following safety zones are being considered at this stage in order to manage navigational safety risks identified: • Up to 500m during construction and decommissioning rolling with activity. • Up to 500m, major maintenance (as defined in Part 1, Regulation 2 of the 2007 Regulations) during the operation phase. • 50m pre commissioning around all structures.	No further comment	Agreed The post-consent use of construction, major maintenance and decommissioning safety zones are noted and supported by TH.
Cable Specification and Installation Plan	The Applicant will submit a Cable Specification, Installation and Monitoring Plan post-consent in accordance with the details secured in Condition 14(1)(g) of the Generation DMLs (Schedule 9-10), Condition 9(1)(g) of the Transmission DMLs (Schedule 11-12), and Condition 7(1)(f) of the Project Interconnector DML (Schedule 13).	TH notes that it may be necessary for the cables to be protected by rock armour, concrete mattresses or similar protection which may reduce under keel clearance depths.	Agreed
Cumulative and transboundary impact assessment	The cumulative (and in combination) and transboundary assessment of potential changes to shipping and navigation is appropriate and no cumulative impacts will be significant in Environmental Impact Assessment (EIA) terms. This includes	With appropriate risk mitigation measures in place TH agrees.	Agreed





Topic	Norfolk Boreas Limited position	TH Comment	Final position
	considerations of cumulative vessel routeing.		
Decommissioning plan	As stated in Schedule 1 requirement 14 of the DCO no offshore works may commence until a written decommissioning programme, in compliance with any notice served upon the undertaker by the Secretary of State pursuant to section 105(2) of the 2004 Act, has been submitted by the Applicant to the Secretary of State for approval.	No further comment - Agreed	Agreed
Mitigation and Manageme	nt		
Lighting and marking Schedule 9 Part 4 10, Schedule 10 Part 4 10, Schedule 11 Part 4 5, Schedule 12 Part 4 5, Schedule 13 Part 4 4,	Appropriate aids to navigation, including lighting and marking arrangements, will be developed post-consent and agreed with MCA and TH. This will include compliance with IALA O-139.	No further comment	It is agreed that all lighting and marking arrangements will need to be agreed with TH. The requirements laid out by these conditions will be displayed and agreed within a Lighting and Marking Plan (LMP); however that plan will not be a separate condition to avoid duplication of requirements. An Aids to Navigation Management Plan will be submitted as per condition 14(1)(k) (Schedule 9-10) and condition 9(1)(k) (Schedule 11-12). An Aids to Navigation Management Plan is not required for the Project Interconnector assets under Schedule 13 given that there is no above ground infrastructure associated with this DML.





Topic	Norfolk Boreas Limited position	TH Comment	Final position
Layout design and use of Development Principles	Development Principles - The Applicant has consulted with TH on Development Principles that will ensure that the post consent layout approval process is undertaken effectively. The intention of the rules is to ensure effective layout approval in conjunction with TH (and MCA) post consent.		Agreed It is agreed that the final turbine layout design will be agreed in writing with the MMO in consultation with TH and the MCA prior to construction (post consent) to minimise the risks to surface vessels within the site. This final layout will be submitted as per DML Condition 14(1)(a) - Design Plan in accordance with the parameters defined within the Development Principles. The Development Principles were agreed with TH on the 24 th April 2019.
	Separation distances – Separation distances between Norfolk Boreas and the DWR are as agreed on Norfolk Vanguard and East Anglia projects in order to maintain alignment and continuity.	No further comment	Agreed It is agreed that alignment and continuity should be maintained.
Draft DCO and DML			
Arbitration and Deemed Approval	The Applicant intends to be guided by the outcomes of the Norfolk Vanguard determination.	Ongoing discussion	Not Agreed – awaiting Norfolk Vanguard Determination.
Schedule 9 Part 4 9 (8), Schedule 10 Part 4 9 (8), Schedule 11 Part 4 4 (8), Schedule 12 Part 4 4 (8), Schedule 13 Part 4 3 (8)	Applicant request that 14 days is replaced with 10 days to ensure consistency with the Norfolk Vanguard Project (as per the draft DCO submitted): The undertaker must ensure that a notice to mariners is issued at least 10 Days prior to the commencement of the authorised project or	Ongoing discussion	Timeframes Not Agreed— awaiting Norfolk Vanguard Determination.





Торіс	Norfolk Boreas Limited position	TH Comment	Final position
	any part thereof advising of the start date of each Work No. <insert> and the expected vessel routes from the construction ports to the relevant location.</insert>		
Schedule 9 Part 4 9 (12) ,Schedule 10 Part 4 9 (12) ,Schedule 11 Part 4 4 (12), Schedule 12 Part 4 4 (12) Schedule 13 Part 4 3 (12)	Condition wording with the DCO to reflect the changes made to the Norfolk Vanguard DCO — 'In case of exposure of cables on or above the seabed, the undertaker must within three days following identification of a potential cable exposure, notify mariners by issuing a notice to mariners and by informing Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO and MCA within five days'.	No further comment - Agreed	Agreed – Wording has been amended on the Norfolk Boreas draft DCO submitted at Deadline 5 to reflect the changes agreed (between the Applicant and the MCA) as part of the updated Norfolk Vanguard DCO.
Schedule 9 Part 4 14 (1)(g) Schedule 10 Part 4 14 (1)(g), Schedule 11 Part 4 9(1)(g), Schedule 12 Part 4 9(1)(g), Schedule 13 Part 4 7(1)(f)	Applicant requests the following to ensure consistency with the Norfolk Vanguard Project (as per the draft DCO submitted): A cable specification, installation and monitoring plan, to include— (i) technical specification of offshore cables (including fibre optic cables) below MHWS, including a desk-based assessment of attenuation of electro-magnetic field strengths, shielding and cable burial depth in accordance with industry good practice; (ii) a detailed cable (including fibre optic cables) laying plan for the Order limits, incorporating a burial risk assessment to ascertain suitable burial depths and cable laying techniques,	Ongoing discussion TH wishes for the following to be added to this condition: a detailed cable laying plan of the Order limits, incorporating a burial risk assessment encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to chart datum and, in the event that any area of cable protection exceeding 5% of navigable depth is	Not Agreed - It is noted that Norfolk Boreas intends to await the determination of Norfolk Vanguard; however it is noted that the Applicant agrees with the requirements requested by TH.





Topic Norfolk Boreas Limited position	TH Comment	Final position	
including cable protection; and (iii) proposals for monitoring offshore of (including fibre optic cables) including protection during the operational lifetic the authorised scheme which includes based approach to the management of unburied or shallow buried cables. Schedule 11 and 12 additionally state: (iv) appropriate methods such as a trace drift net to be deployed along Work Note 4B (export cables and fibre optic cable following the survey referred to in con- 15(2)(b) to assess any seabed obstruct resulting from burial of the export cab- fibre optic cables. The Applicant believes that these requ- are already addressed by compliance MGN 543 (Schedule 9-10, 15(8) and Sc 11-12, 10(8)) – which include a require consult with MCA, should under keel of depths should the reduction exceed 5t Schedule 9-10, 14(1a) and Schedule 12 (1a) which cover agreement with the I consultation with Trinity House and M the length and arrangements of all cab part of the design plan.	cable ime of a risk of Trinity House) to be taken to ensure existing and future so navigation is not compromisuch similar assessment to ascertain suitable burial depand cable laying techniques including cable protection. association suitable burial depand cable laying techniques including cable protection. association suitable burial depand cable laying techniques including cable protection. association with the MCA is the suitable of the suitable burial depand cable laying techniques including cable protection. association with the MCA is the suitable of the suitable burial depand cable laying techniques including cable protection. association with the MCA is the suitable burial depand cable laying techniques including cable protection. association with the MCA is the suitable burial depand cable laying techniques including cable protection.	and to safe ised or epths	





Topic	Norfolk Boreas Limited position	TH Comment	Final position
Schedule 9 Part 4 19 (1) (4), Schedule 10 Part 4 20 (1) (d) and Schedule 9 Part 4 20 (2) (4), Schedule 10 Part 4 20 (1) (d)	Given than Norfolk Boreas Ltd has submitted a 'outline marine traffic monitoring strategy' the Applicant requests the condition reads (as per the draft DCO submitted): Construction monitoring must include traffic monitoring in accordance with the outline marine traffic monitoring strategy, including the provision of reports on the results of that monitoring periodically as requested by the MMO in consultation with the MCA and Trinity House' and - Post-construction traffic monitoring in accordance with the outline marine traffic monitoring strategy, including the provision of reports on the results of that monitoring periodically as requested by the MMO in consultation with the MCA and Trinity House. This includes the requirements requested by the MCA and TH.	Ongoing discussion TH is concerned that given the current strategy document we will not receive such reports and also that there are no specific timeframes regarding report submissions to relevant authorities.	Agreed Norfolk Boreas Ltd notes that the Outline Marine Traffic Monitoring Strategy must be updated to include submission to TH post consent.





The names inserted below are to confirm that these are the current positions of the two parties contributing to this SOCG

Printed Name	Trevor Harris
Position	Navigation (Examiner) Manager
On behalf of	Trinity House
Date	05/03/20

Printed Name	Jake Laws
Position	Norfolk Boreas Consents Manager
On behalf of	Norfolk Boreas Limited (the Applicant)
Date	04/03/2020