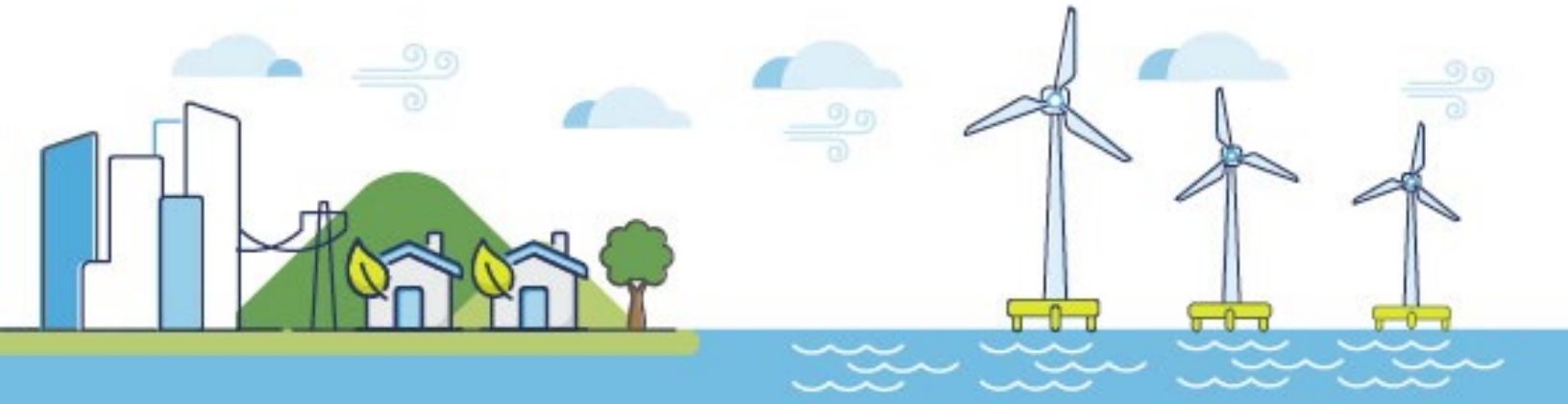
WHITE CROSS

White Cross Offshore Wind Farm Environmental Statement

Chapter 22: Traffic and Transport



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Glossary of Acronyms

Acronym	Definition
DCC	Devon County Council
EIA	Environmental Impact Assessment
ES	Environmental Statement
MMO	Marine Management Organisation
NPPF	National Planning Policy Framework
NPS	National Policy Statement
PTMP	Port Traffic Management Plan
UK	United Kingdom

Glossary of Terminology

Defined Term	Description
Applicant	Offshore Wind Limited
Cumulative effects	The effect of the Project taken together with similar effects from a number of different projects, on the same single receptor/resource. Cumulative impacts are those that result from changes caused by other past, present or reasonably foreseeable actions together with the Project.
Environmental Impact Assessment (EIA)	Assessment of the potential impact of the proposed Project on the physical, biological and human environment during construction, operation and decommissioning.
Front end engineering and design	Front-end engineering and design (FEED) studies address areas of windfarm system design and develop the concept of the windfarm in advance of procurement, contracting and construction.
Generation Assets	The infrastructure of the Project related to the generation of electricity within the windfarm site, including wind turbine generators, substructures, mooring lines, seabed anchors and inter-array cables
In-combination effects	In-combination effects are those effects that may arise from the development proposed in combination with other plans and projects proposed/consented but not yet built and operational.
Landfall	Where the offshore export cables come ashore
Mean high water springs	The average tidal height throughout the year of two successive high waters during those periods of 24 hours when the range of the tide is at its greatest.
Mean low water springs	The average tidal height throughout a year of two successive low waters during those periods of 24 hours when the range of the tide is at its greatest.
Mitigation	Mitigation measures have been proposed where the assessment identifies that an aspect of the development is likely to give rise to significant environmental impacts, and discussed with the relevant authorities and stakeholders in order to avoid, prevent or reduce impacts to acceptable levels. For the purposes of the EIA, two types of mitigation are defined: • Embedded mitigation: consisting of mitigation measures that are identified and adopted as part of the evolution of the project design, and form part of the project design that is assessed in the EIA • Additional mitigation: consisting of mitigation measures that are identified during the EIA process specifically to reduce or eliminate any predicted significant impacts. Additional mitigation is therefore subsequently adopted by OWL as the EIA process progresses.
NG Onshore Substation	Part of an electrical transmission and distribution system. Substations transform voltage from high to low, or the reverse by means of the electrical transformers.

Defined Term	Description
NG Grid Connection	The point at which the White Cross Offshore Windfarm connects into the distribution network at East Yelland substation and the distributed electricity network. From East Yelland substation electricity is transmitted to Alverdiscott where it enters the national transmission network.
Offshore Development Area	The Windfarm Site (including wind turbine generators, substructures, mooring lines, seabed anchors, inter-array cables and Offshore Substation Platform (as applicable)) and Offshore Export Cable Corridor to MHWS at the Landfall. This encompasses the part of the project that is the focus of this application and Environmental Statement and the parts of the project consented under Section 36 of the Electricity Act and the Marine and Coastal Access Act 2009
Offshore Export Cables	The cables which bring electricity from the Offshore Substation Platform or the inter-array cables junction box to the Landfall
Offshore Export Cable Corridor	The proposed offshore area in which the export cables will be laid, from Offshore Substation Platform or the inter-array cable junction box to the Landfall
Offshore Infrastructure	All of the offshore infrastructure including wind turbine generators, substructures, mooring lines, seabed anchors, Offshore Substation Platform and all cable types (export and inter-array). This encompasses the infrastructure that is the focus of this application and Environmental Statement and the parts of the project consented under Section 36 of the Electricity Act and the Marine and Coastal Access Act 2009
The Offshore Project	The Offshore Project for the offshore Section 36 and Marine Licence application includes all elements offshore of MHWS. This includes the infrastructure within the windfarm site (e.g. wind turbine generators, substructures, mooring lines, seabed anchors, inter-array cables and Offshore Substation Platform (as applicable)) and all infrastructure associated with the export cable route and landfall (up to MHWS) including the cables and associated cable protection (if required).
Offshore Substation Platform	A fixed structure located within the Windfarm Site, containing electrical equipment to aggregate the power from the wind turbines and convert it into a more suitable form for export to shore
Offshore Transmission Assets	The aspects of the project related to the transmission of electricity from the generation assets including the Offshore Substation Platform (as applicable)) or offshore junction box, Offshore Cable Corridor to MHWS at the landfall
Onshore Development Area	The onshore area above MLWS including the underground onshore export cables connecting to the White Cross Onshore Substation and onward to the NG grid connection at East Yelland. The onshore development area will form part of a separate Planning application to the Local Planning Authority (LPA) under the Town and Country Planning Act 1990
Onshore Export Cables	The cables which bring electricity from MLWS at the Landfall to the White Cross Onshore Substation and onward to the NG grid connection at East Yelland

Defined Term	Description
Onshore Export Cable Corridor	The proposed onshore area in which the export cables will be laid, from MLWS at the Landfall to the White Cross Onshore Substation and onward to the NG grid connection at East Yelland
Onshore Infrastructure	The combined name for all infrastructure associated with the Project from MLWS at the Landfall to the NG grid connection point at East Yelland. The onshore infrastructure will form part of a separate Planning application to the Local Planning Authority (LPA) under the Town and Country Planning Act 1990
Onshore Transmission Assets	The aspects of the project related to the transmission of electricity from MLWS at the Landfall to the NG grid connection at East Yelland including the Onshore Export Cable, the White Cross Onshore Substation and onward connection to the NG grid connection at East Yelland
the Onshore Project	The Onshore Project for the onshore TCPA application includes all elements onshore of MLWS. This includes the infrastructure associated with the offshore export cable (from MLWS), landfall, onshore export cable and associated infrastructure and new onshore substation (if required).
Offshore Wind Limited	Offshore Wind Ltd (OWL) is a joint venture between Cobra Instalaciones Servicios, S.A., and Flotation Energy Ltd
the Project	the Project is a proposed floating offshore windfarm called White Cross located in the Celtic Sea with a capacity of up to 100MW. It encompasses the project as a whole i.e. all onshore and offshore infrastructure and activities associated with the Project
White Cross Offshore Windfarm	100MW capacity offshore windfarm including associated onshore and offshore infrastructure
White Cross Onshore Substation	A new substation built specifically for the White Cross project. It is required to ensure electrical power produced by the offshore windfarm is compliant with NG electrical requirements at the grid connection at East Yelland.
Windfarm Site	The area within which the wind turbines, Offshore Substation Platform and inter-array cables will be present
Works completion date	Date at which construction works are deemed to be complete and the windfarm is handed to the operations team. In reality, this may take place over a period of time.

22. Traffic and Transport

22.1 Introduction

1. This chapter of the Environmental Statement (ES) provides an assessment of the potential impacts of all offshore infrastructure and activities seaward of Mean High Water Springs (MHWS) associated with the White Cross Offshore Windfarm Project (hereafter referred to as 'the Offshore Project) on traffic and transport receptors.

2. Specifically, this chapter considers the potential onshore traffic impacts (landward of MHWS) associated with the Offshore Project infrastructure. In summary, the Offshore Project elements include the infrastructure within the Windfarm Site, all infrastructure associated with the Offshore Export Cable Corridor, Landfall (up to Mean High-Water Springs) and the crossing below the Taw Estuary (from MHWS to MWHS).

3. The ES has been finalised with due consideration of pre-application consultation to date (see **Chapter 7: Consultation**) and the ES will accompany the application to the Marine Management Organisation (MMO) on behalf of the Secretary of State for Business for The Department for Business, Energy and Industrial Strategy for Section 36 Consent and relevant Marine Licences under the Marine and Coastal Access Act, 2009.

4. All onshore infrastructure and activities associated with the White Cross Offshore Windfarm Project landward of Mean Low Water Springs (MLWS) (hereafter referred to as 'the Onshore Project') will require a separate planning permission under the Town and Country Planning Act 1990 (TCPA 1990) with an Onshore Project ES. The Onshore Project ES considers the traffic and transport impacts of the Onshore Project. In summary the Onshore Project elements include the infrastructure associated with the Offshore Export Cable (from MLWS), Landfall (from MLWS), Onshore Export Cable and associated infrastructure and a new White Cross Onshore Substation (if required).

22.2 Policy, Legislation and Guidance

5. **Chapter 3: Policy and Legislative Context** describes the wider policy and legislative context for the Offshore Project. The principal policy and legislation used to inform the assessment of potential impacts on traffic and transport for the Offshore Project are outlined in this section.

22.2.1 National Policy Statement

6. The specific assessment requirements for traffic and transport are set out within the overarching National Policy Statement (NPS) for Energy (EN-1) (Department of Energy and Climate Change, 2011) and summarised in **Table 22.1**.

7. It is noted that the NPS for Energy (EN-1) is in the process of being revised and a draft version was published for consultation in September 2021 (Department for Business Energy and Industrial Strategy, 2021). **Table 22.1** therefore also includes consideration of any additional requirements.

Table 22.1 Summary of NPS EN-1 provisions relevant to traffic and transport

Summary	How and where this is considered in the ES
"If a project is likely to have significant transport implications, the applicant's ES should include a Transport Assessment, using the New Approach To Appraisal / Transport Analysis Guidance methodology stipulated in Department for Transport guidance, or any successor to such methodology." - **(EN-1), section 5.13.3**	**Section 22.4** outlines a willingness by the Applicant to be conditioned to a Port Traffic Management Plan (PTMP). The PTMP would include an assessment of the Offshore Projects potential impacts (including cumulative effects) and therefore satisfy the NPS requirement to provide a transport assessment. The scope of any assessment of the potential effects on the transport network would be agreed with the relevant planning and highway authorities as part of agreeing the scope of the PTMP. The PTMP would also provide an outline of measures to monitor and mitigate the traffic and transport impacts of the Offshore Project employee traffic movements, i.e. travel plan measures.
"Where appropriate, the applicant should prepare a Travel Plan including demand management measures to mitigate transport impacts. The applicant should also provide details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for car parking associated with the proposal and to mitigate transport impacts." - **EN-1, section 5.13.3**	
The draft **(EN-1)** NPS, includes for an additional sentence at the end of **section 5.13.4** of the NPS. This states that: *The assessment should also consider any possible disruption to services and infrastructure (such as road, rail and airports).*	

22.2.2 National Planning Policy Framework

8. The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, updated July 2021) is the primary source of national planning guidance in England. Sections relevant to this aspect of the ES are summarised below in **Table 22.2**.

Table 22.2 Summary of NPPF Policy relevant to traffic and transport

Summary	How and where this is considered in the ES
"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe" **- NPPF, Paragraph 111**	**Section 22.4** outlines a willingness by the Applicant to be conditioned to a Port Traffic Management Plan (PTMP). The PTMP would include an assessment of the Offshore Project potential impacts (including cumulative effects) and therefore satisfy the NPPF test to provide a transport assessment/statement. The PTMP would also provide an outline of measures to monitor and mitigate the traffic and transport impacts of the Offshore Project employee traffic movements, i.e. travel plan measures.
"All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed." **- NPPF, Paragraph 113**	

22.3 Assessment Methodology and Consultation

9. A Scoping Report for the Project was submitted by the Applicant in January 2022 (Offshore Wind Ltd., 2022). The Scoping Report outlined a proposed approach to scoping out of the potential traffic and transport impacts associated with the Offshore Project from the EIA.

10. In response, the MMOs Scoping Opinion (MMO, 2022) (Case reference: EIA/2022/00002) responded that:

    "The MMO considers that there is potential for likely significant effects to occur in relation to traffic and transport during construction and decommissioning in terms of delivery and/ or removal of plant and materials for the offshore component of the Proposed Development, which according to the Applicant are assumed to be via the road network.

    Therefore, the MMO does not agree to scope these matters out of the ES. Where the final selection of port(s) has not been determined at the time of any consent submission, an assessment should be presented in the ES on the basis of parameters that establish the maximum significant adverse effects."

11. Following receipt of the Scoping Opinion, the Applicant met with the MMO to further explain the rationale for scoping out the potential traffic and transport impacts associated with the Offshore Project elements, in response the MMO advised that:

"…in principle as it [Offshore Project] is part of the wider project that it should be included in the ES, you should provide at least an outline of anticipated offshore transportation…"

12. Noting the advice of the MMO and the Scoping Opinion comments, the following **Section 22.4** of the ES provides an outline of the anticipated offshore terrestrial traffic impacts and a mechanism for securing the post consent assessment of the adopted base port(s).

22.4 Potential Impacts

13. The Offshore Project elements by definition would require deliveries to be transported offshore from a base port(s). For the operational and maintenance phase, the base port could potentially be located anywhere on the west or south west coast of the United Kingdom (UK), whilst for the construction/ decommissioning phases the base port(s) could be located anywhere along the coast of the UK or Continental Europe.

14. Due to the scale of most windfarm components, they would need to be delivered to the base port(s) by sea. Terrestrial traffic would therefore likely be limited to personnel vehicles and delivery of small components, originating from a widely dispersed area with a common destination at the chosen base port location.

15. The maximum magnitude of traffic effects would likely occur at the base port location and the immediate locality. The level of demand could be managed to ensure that traffic impacts were not concentrated and could be accommodated with the port transport environment. Therefore, it is forecast that any residual transport effects would not be significant (or not severe when considering the NPPF test).

16. The preferred base port(s) for construction, operation and maintenances, and decommissioning of the Offshore Project are not currently known and any decision would be commercially driven and not be made until consent surety. It is considered an attempt to assume or identify a potential port location (either in the UK or Continental Europe) in the Application could compromise the subsequent commercial negotiations.

17. The Applicant therefore considers a pre-commencement condition would be the best mechanism for addressing this uncertainty and accordingly, the Scoping Report identifies a willingness by the Applicant to be conditioned to a Port Traffic Management Plan (PTMP) to assess impacts (including cumulative effects), monitor and mitigate the traffic and transport impacts of the adopted base port(s).

18. The proposed approach to scoping out the onshore traffic and transport impacts of offshore construction, operation and maintenance and decommissioning has been

accepted for other recently consented offshore windfarm projects, including Norfolk Boreas, Norfolk Vanguard, Hornsea Three, East Anglia TWO and East Anglia ONE North.

19. The proposed approach has also been discussed and agreed with the relevant local highway authority (Devon County Council) at a meeting on 6th April 2022.

22.5 Summary

20. It is the Applicant's position that they will not be able to confirm which port(s) will be used for each of the Offshore Project phases until post-consent and therefore no further meaningful assessment of traffic and transport impacts can be presented at this stage. Furthermore, as outlined in **Section 22.4** any attempt to assume or identify a location could compromise commercial negotiations.

21. The Applicant considers a pre-commencement condition would be the best mechanism for addressing this uncertainty and accordingly, the Applicant has identified a willingness to be conditioned to a PTMP.

22. This approach to scoping out the terrestrial traffic and transport impacts of the Offshore Project has been agreed with the local highway authority (DCC) and has also been accepted for other recently consented offshore windfarm projects.

22.6 References

Department for Business, Energy and Industrial Strategy (2021). Draft Overarching National Policy Statement for Energy (EN-1).

Department of Energy and Climate Change (2011). Overarching National Policy Statement for Energy (EN-1)

Marine Management Organisation (2022). Scoping Opinion – White Cross Floating Offshore Wind farm

Ministry of Housing, Communities and Local Government (July 2021). National Planning Policy Framework

Offshore Wind Limited (2022). White Cross Offshore Windfarm EIA scoping Report