

East Anglia ONE North Offshore Windfarm

Schedule of Mitigation

Offshore

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Glossary of Acronyms

	Assessed Declarate
ADD	Acoustic Deterrent Devices
AEZ	Archaeological Exclusion Zones
AONB	Area of Outstanding Natural Beauty
ATNMP	Aid to Navigation Management Plan
ATR	Air Traffic Control
CAA	Civil Aviation Authority
CEMP	Construction Environment Management Plan
CFWG	Commercial Fisheries Working Group
CMS	Construction Method Statement
CoCP	Code of Construction Practise
CLP	Cable Laying Plan
CTMP	Construction Traffic Management Plan
DCO	Development Consent Order
EA	Environment Agency
EMF	Electromagnetic Field
ERCoP	Emergency Response Co-operation Plan
ES	Environmental Statement
FLCP	Fisheries Liaison and Co-existence Plan
FLO	Fisheries Liaison Officer
HDD	Horizontal Directional Drilling
IALA	International Association of Lighthouse Authorities
ILE	Institute of Lighting Engineers
MCA	Maritime and Coastguard Agency
MMMP	Marine Mammal Mitigation Protocol
MMO	Marine Management Organisation
MNNS	Marine Non-Native Invasive Species
MPCP	Marine Pollution Contingency Plan
MoD	Ministry of Defence
NOIZ	Non-Auto Initiation Zone
NOTAMs	Notice to Airmen
NtMs	Notice to Mariners
OEP	Offshore Electrical Platform
OMM	Operational Meteorological Mast
OOMP	Offshore Operations and Maintenance Plan
PEMP	Project Environmental Management Plan
PEXA	Practice and Exercise Areas
PSR	Primary Surveillance Radars
PTS	Permanent Threshold Shift
SAC	Special Area of Conservation
SAR	Search and Rescue
SIP	Site Integrity Plan
SPA	Special Protection Area
SPS	Significant Peripheral Structure
SPR	ScottishPower Renewables
SSC	Suspended Sediment Concentrations
TH	Trinity House
TMZ	Transponder Mandatory Zone
UXO	Unexploded Ordnance Device
WSI	Written Scheme of Investigation
000	



Glossary of Terminology

Applicant	East Anglia ONE North Limited.
Construction, operation and	A fixed offshore structure required for construction, operation, and
maintenance platform	maintenance personnel and activities.
East Anglia ONE North	The proposed project consisting of up to 67 wind turbines, up to four
project	offshore electrical platforms, up to one construction operation and
	maintenance platform, inter-array cables, platform link cables, up to one
	operational meteorological mast, up to two offshore export cables, fibre
	optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
East Anglia ONE North	The offshore area within which wind turbines and offshore platforms will
windfarm site	be located.
Evidence Plan Process	A voluntary consultation process with specialist stakeholders to agree
	the approach to the EIA and the information required to support HRA.
Horizontal directional drilling	A method of cable installation where the cable is drilled beneath a
(HDD)	feature without the need for trenching.
Inter-array cables	Offshore cables which link the wind turbines to each other and the
	offshore electrical platforms, these cables will include fibre optic cables.
Landfall	The area (from Mean Low Water Springs) where the offshore export
	cables would make contact with land and connect to the onshore
0 "	cables.
Offshore	Area to seaward of nearshore in which the transport of sediment is not
Offshore cable corridor	caused by wave activity. This is the area which will contain the offshore export cables between
	offshore electrical platforms and landfall.
Offshore development area	The East Anglia ONE North windfarm site and offshore cable corridor
	(up to Mean High Water Springs).
Offshore electrical platform	A fixed structure located within the windfarm area, containing electrical
	equipment to aggregate the power from the wind turbine generators and
Offshore export cables	convert it into a more suitable form for export to shore. The cables which would bring electricity from the offshore electrical
	platforms to the landfall. These cables will include fibre optic cables.
Offshore platform	A collective term for the construction, operation and maintenance
· · · · · · · · · · · · · · · · · · ·	platform and the offshore electrical platforms.
Platform link cable	Electrical cable which links one or more offshore platforms, these
	cables will include fibre optic cables.
Safety zone	A marine area declared for the purposes of safety around a renewable
	energy installation or works / construction area under the Energy Act 2004.
Scour protection	Protective materials to avoid sediment being eroded away from the
	base of the foundations as a result of the flow of water.



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1 Schedule of Mitigation

1.1 Introduction

- 1. This document lists all the mitigation proposed in the Environmental Impact Assessment (EIA) for the proposed East Anglia ONE North project offshore works.
- 2. The following schedule lists all measures proposed on a topic by topic basis and signposts where the commitments made in the Environmental Statement (ES) are secured in the draft Development Consent Order (DCO) and associated documents.
- 3. The ES chapters which this schedule relates to are the following:
 - Chapter 7 Marine geology, Oceanography and Physical Processes (document reference 6.1.7);
 - Chapter 8 Marine Water and Sediment Quality (document reference 6.1.8);
 - Chapter 9 Benthic Ecology (document reference 6.1.9);
 - Chapter 10 Fish and Shellfish Ecology (document reference 6.1.10);
 - Chapter 11 Marine Mammals (document reference 6.1.11);
 - Chapter 12 Offshore Ornithology (document reference 6.1.12);
 - Chapter 13 Commercial Fisheries (document reference 6.1.13);
 - Chapter 14 Shipping and Navigation (document reference 6.1.14);
 - **Chapter 15 Civil and Military Aviation and Radar** (document reference 6.1.15);
 - Chapter 16 Offshore Archaeology and Cultural Heritage (document reference 6.1.16);
 - Chapter 17 Infrastructure and Other Users (document reference 6.1.17);
 - Chapter 28 Seascape, Landscape and Visual Impact Assessment (document reference 6.1.28).



1.2 Schedule

Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation		
Chapter 7 M	Chapter 7 Marine Geology Oceanography and Physical Processes						
Constructio	on						
1.1	Section 7.6.1	Sea bed disturbance	Detailed design process will optimise the foundation type and installation method to the site conditions	Minimise the effect on sea bed level changes and identified receptor	DCO Schedule 13, Part 2, DML Condition 17, Design Plan		
				groups	DCO Schedule 14, Part 2, DML Condition 13, Design Plan		
1.2	Section 7.3.3	Sea bed disturbance	For foundation types with the greatest scour potential, protection material shall be installed during construction	Minimise the effects of scour, increased suspended and bed level changes in the vicinity of each wind turbine.	DCO Schedule 13, Part 2, DML Condition 17, Design Plan and Construction Method Statement (CMS), specifically details of scour protection management and cable protection		
					DCO Schedule 14, Part 2, DML Condition 13, Design Plan and Construction Method Statement (CMS), specifically details of scour protection management and cable protection.		
1.3	Section 7.3.3	Sea bed disturbance	Where smaller volumes of sediment release due to scour are anticipated, the design would allow for local scour around the piles	Minimise the scour protection footprint that is introduced on the sea bed	DCO Schedule 13, Part 2, DML Condition 17, Design Plan and CMS, specifically details of scour protection management and cable protection		
					DCO Schedule 14, Part 2, DML Condition 13, Design Plan and CMS, specifically details of scour		



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
					protection management and cable protection
1.4	Section 7.3.3	Sea bed disturbance	For piled foundation types, pile-driving will be used in preference to drilling (where ground conditions allow)	Minimise the quantity of sub-surface sediment that is released into the water column from the installation process	DCO Schedule 13, Part 2, DML Condition 17, CMS DCO Schedule 14, Part 2, DML Condition 13, CMS
1.5	Section 7.3.3	Sea bed disturbance	Micro-siting to be used where necessary Environmental micrositing mitigation would be agreed through consultation with the MMO on sensitive habitats	Minimise the requirements for sea bed preparation	DCO Schedule 13, Part 2, DML Condition 17, Design Plan DCO Schedule 14, Part 2, DML Condition 13, Design Plan
1.6	Section 7.3.3	Sea bed disturbance	Gravity Base Structures will not be used in areas characterised by sand banks or sand waves with heights greater than 5m	Minimise the requirements for sea bed preparation	DCO Schedule 13, Part 2, DML Condition 17, Design Plan DCO Schedule 14, Part 2, DML Condition 13, Design Plan
1.7	Section 7.3.3	Sea bed disturbance	Cables to be buried where possible, to a minimum burial depth of 1m	Reduce risk of cable exposure due to sea bed level changes and need for cable protection	DCO Schedule 13, Part 2, DML Condition 17, CMS, specifically the Cable Laying Plan (CLP) DCO Schedule 14, Part 2, DML Condition 13, CMS, specifically the CLP
1.8	Section 7.3.3	Interruption of sediment transport and marine physical processes	This measure has already been captured in the delineation of the Order Limits. During this process we ensured that cables could be installed towards the southern side of the cable corridor in the near shore area by an extension of the original corridor	Reduce impact to marine physical processes and marine geology along the Suffolk coast and nearshore sea bed	n/a embedded in Order Limit selection



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
			further to the south to accommodate this.		
1.9	Section 7.3.3	Coastal erosion	Install export cable at landfall using Horizontal Directional Drilling (HDD) techniques, with a pop out location to the south of the outcrop of Coralline Crag.	Minimise circulatory sediment transport pathways and avoid the need for cable protection in the intertidal and shallow nearshore zones	n/a embedded in Order Limit selection DCO Schedule 14, Part 2, DML Condition 13, Design Plan
1.10	Section 7.6.1	Sea bed disturbance	Any excavated sediment due to sand wave levelling for the inter-array and platform link cables would be disposed of within the East Anglia ONE North windfarm site.	No net loss of sand from the site	DCO Schedule 13, Part 1, DML Condition 2(1)(i) DCO Schedule 14, Part 1, DML Condition 2(1)(i)
Operation a	and Maintenance	1		1	1
1.11	Section 7.6.2	Interruption of sediment transport and marine physical processes	Export cable landfall will be towards the southern end of the offshore cable corridor at the coast. To accommodate this, the offshore cable corridor in the landfall area has been refined (increased to the south).	Reduce impact to marine physical processes and marine geology along the Suffolk coast and nearshore sea bed	n/a embedded in Order Limit selection
Decommiss	sioning				
1.12	Section 7.6.3	As per construction impacts or less	Decommissioning approach to be finalised nearer to the end of the lifetime of the project in accordance with the current legislation, policy and guidance at the time.	As per construction impact mitigation	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
Chapter 8 M	larine Water and Se	ediment Quality			
Constructio	on				
2.1	Section 8.3.3	Deterioration in water quality	A Project Environmental Management Plan (PEMP) will be implemented	Minimise impacts of spills and discharges on the marine environment	DCO Schedule 13, Part 2, DML Condition 17, Project Environmental Management Plan (PEMP) DCO Schedule 14, Part 2, DML Condition 13, Project Environmental
					Management Plan (PEMP)
2.2	Section 8.3.3	Deterioration in water quality	A PEMP will be produced including a a marine pollution contingency plan (MPCP).	Minimise the potential impacts any offshore maintenance activities will have on marine water and sediment quality	DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically the MPCP DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically the MPCP
2.3	Section 8.3.3	Deterioration in water quality	Oils and lubricants will be biodegradable where possible and all chemicals would be certified to the relevant standard	Minimise impacts of spills and discharges on the marine environment	DCO Schedule 13, Part 2, DML Condition 17, PEMP DCO Schedule 14, Part 2, DML Condition 13, PEMP
2.4	Section 8.3.3	Deterioration in water quality	Offshore platforms will be pre- assembled or manufactured on land as far as possible	Minimise impacts of spills and discharges on the marine environment	DCO Schedule 13, Part 2, DML Condition 17, CMS DCO Schedule 14, Part 2, DML Condition 17, CMS
2.5	Section 8.3.3	Deterioration in water quality	Avoid excess use of grout	Minimise impacts of spills and discharges on the marine environment	DCO Schedule 13, Part 2, DML Condition 17, CMS DCO Schedule 14, Part 2, DML Condition 13, CMS



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
2.6	Section 8.3.3	Deterioration in water quality	All wind turbines will incorporate appropriate provisions to retain spilled fluids within the nacelle and tower. In addition, offshore platforms would be designed with a self-contained bund to	Minimise impacts of spills and discharges on	DCO Schedule 13, Part 2, DML Condition 14
				the marine environment	DCO Schedule 13, Part 2, DML Condition 17, Design Plan
			contain any spills and prevent discharges		DCO Schedule 14, Part 2, DML Condition 10
					DCO Schedule 14, Part 2, DML Condition 13, Design Plan
2.7	Section 8.3.3		spills and discharges on	DCO Schedule 13, Part 2, DML Condition 14	
				the marine environment	DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically the MPCP
					DCO Schedule 14, Part 2, DML Condition 10
					DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically the MPCP
2.8	Section 8.3.3	Deterioration in water quality	An appropriate spill plan procedure will be included in a MPCP to be agreed post-consent.	Minimise impacts of spills and discharges on the marine environment	DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically the MPCP
					DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically the MPCP
2.9	Section 8.3.3	Deterioration in water quality	Control measures such as spill kits and appropriate training in line with the requirements of the PEMP and	Minimise impacts of spills and discharges on the marine environment	DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically the MPCP



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
			MPCP will be communicated and understood by vessel personnel		DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically the MPCP
2.10	Section 8.3.3	Deterioration in water quality	All work practices and vessels would adhere to the requirements of the International Convention for the Prevention of Pollution from Ships (MARPOL) 73/78; specifically Annex 1 Regulations for the prevention of pollution by oil concerning machine waters, bilge waters and deck drainage and Annex IV Regulations for the prevention of pollution by sewage from ships concerning black	Minimise impacts of spills and discharges on the marine environment	DCO Schedule 13, Part 2, DML Condition 14 DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically the MPCP DCO Schedule 14, Part 2, DML Condition 10 DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically the MPCP
2.11	Section 8.3.3	Deterioration in water quality	and grey waters External surface preparation and external protective coating repair (including painting) will be carried out in accordance with a Control of Substances Hazardous to Health (COSHH) assessment, MARPOL and the PEMP i.e. water ingress and dust minimisation, and waste storage and removal.	Minimise impacts of spills and discharges on the marine environment	DCO Schedule 13, Part 2, DML Condition 14 DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically the MPCP DCO Schedule 14, Part 2, DML Condition 10 DCO Schedule 14, Part 4, DML Condition 13, PEMP, specifically the MPCP
Operation a	and Maintenance				
2.12	Section 8.3.3	Deterioration in water quality	A PEMP will be produced.	Minimise impacts any offshore maintenance activities will have on	DCO Schedule 13, Part 2, DML Condition 17, PEMP



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
				marine water and sediment quality.	DCO Schedule 14, Part 2, DML Condition 13, PEMP
Decommiss	sioning				
2.13	n/a	As per construction impacts or less	Decommissioning approach to be finalised nearer to the end of the lifetime of the project in accordance with the current legislation, policy and guidance at the time.	As per construction impacts mitigation	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme
Chapter 9 B	enthic Ecology				
Constructio	on				
3.1	Section 9.3.3	Removal / disturbance of ecological conservation designations	Extensive site selection and route refinement process of the offshore windfarm site and offshore cable corridor (<i>Chapter 4 Site Selection</i> <i>and Assessment of Alternatives</i>)	Avoidance of designations of marine ecological conservation where practicable	n/a embedded in Order Limit selection
3.2	Section 9.3.3	Intertidal ecology and amenity disturbance	Offshore cable corridor has been designed to avoid cable crossings where possible. Where there are cable crossings these have, as far as possible, been aligned at a 90° angle.	Minimise the requirement for cable protection	n/a embedded in Order Limit selection
3.3	Section 9.3.3	Intertidal ecology and amenity disturbance	HDD will be used to drill underneath the intertidal zone from an onshore location to the subtidal zone.	Reduction of impact to intertidal ecology and coastal amenity	n/a embedded in project design



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
3.4	Section 9.3.3	Intertidal and benthic ecology disturbance	Following industry best-practice, the use of scour protection will be minimised.	Minimise the use of scour protection and impact to intertidal and benthic ecology	DCO Schedule 13, Part 2, DML Condition 17, CMS, specifically the CLP and details of scour protection management and cable protection
					DCO Schedule 14, Part 2, DML Condition 13, CMS, specifically the CLP and details of scour protection management and cable protection
3.5	Section 9.3.3	Temporary disturbance to	Environmental micrositing to be used where necessary and practicable.	Minimise potential impacts to protected	DCO Schedule 13, Part 2, DML Condition 17, Design Plan
		benthic communities	Areas of Coralline Crag in the nearshore will be avoided by routing of the export cable to the south of the formation (<i>Chapter 6 Project</i> <i>Description</i>).	species and habitats (i.e. <i>Sabellaria</i> reef)	DCO Schedule 14, Part 2, DML Condition 13, Design Plan
			Environmental micrositing mitigation would be agreed through consultation with the MMO on sensitive habitats		
3.6	Section 9.3.3	Impacts to protected species and	Cables will be buried where possible	Minimise potential impacts to protected species and habitats	DCO Schedule 13, Part 2, DML Condition 13, CMS, specifically the CLP
		habitats			DCO Schedule 14, Part 2, DML Condition 17, CMS, specifically the CLP
3.7	Section 9.3.3	ction 9.3.3 Reef habitat disturbance	Sea bed sediment would not be disposed of within 50m of known	Minimise potential smothering of	DCO Schedule 13, Part 2, DML Condition 17, Design Plan
			Sabellaria reef identified during pre- construction surveys.	Sabellaria reef habitat	DCO Schedule 14, Part 2, DML Condition 13, Design Plan



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation			
3.8	Section 9.3.3	Spread of marine non- native invasive species	Use of best practice measures including appropriate vessel maintenance following International Convention for the Prevention of	Reduce the risk (and impact) of spreading non-native invasive species	DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically the MPCP			
		(MNNS)	Pollution from Ships (MARPOL) guidance.	species	DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically the MPCP			
3.9	Section 9.6.1	Increase in suspended	The export cable route and disposal sites would avoid sensitive features as	Minimise the potential for smothering of	DCO Schedule 13, Part 2, DML Condition 17, Design Plan			
		sediment concentrations (SSCs)	agreed with the MMO	benthic receptors in the offshore cable corridor	DCO Schedule 14, Part 2, DML Condition 13, Design Plan			
Operation a	nd Maintenance	1		1	1			
3.10	Section 9.6.2	on 9.6.2 Electromagnetic field (EMF)	Offshore export cables will be buried where possible (between $1 - 3m$).	Reduced impact on marine fauna and flora from EMF	DCO Schedule 13, Part 2, DML Condition 13, CMS, specifically the CLP			
					DCO Schedule 14, Part 2, DML Condition 17, CMS, specifically the CLP			
Decommiss	sioning	1		1				
3.11	Section 9.6.3	As per construction impacts or less	Decommissioning approach to be finalised nearer to the end of the lifetime of the project in accordance with the current legislation, policy and guidance at the time	Decommissioning impacts to be managed based on latest information	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme			
Chapter 10	Chapter 10 Fish and Shellfish Ecology							
Constructio	Construction, Operation and Maintenance							



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
4.1	Section 10.3.3	Impacts on fish and shellfish ecology	Site selection of the offshore windfarm site and offshore cable corridor has been carefully undertaken to avoid designated sites where practicable	Minimise potential impacts on marine designations of ecological conservation	n/a embedded in Order Limit selection
4.2	Section 10.3.3	Impacts on fish and shellfish ecology	Offshore export cables will be buried where possible (between 1 – 3m)	Reduce the effect of EMF and the need for surface cable protection (reduces the introduction of hard substrate and modification of habitat)	DCO Schedule 13, Part 2, DML Condition 13, CMS, specifically the CLP DCO Schedule 14, Part 2, DML Condition 17, CMS, specifically the CLP
4.3	Section 10.3.3	Impacts on fish and shellfish ecology	24 hour working practices will be employed	Reduce the overall period for potential impacts to fish communities near the offshore development area	DCO Schedule 13, Part 2, DML Condition 17, Construction Programme and CMS DCO Schedule 14, Part 2, DML Condition 13, Construction Programme and CMS
4.4	Section 10.3.3.1	Impacts on fish and shellfish ecology	Only one UXO would be detonated at a time during UXO clearance operations in the East Anglia ONE North offshore development area. There would be no simultaneous UXO detonations, but potentially more than one UXO detonation could occur in a 24 hour period.	Minimise impact of noise on fish and shellfish	DCO Schedule 13, Part 2, DML Condition 16, Marine Mammal Mitigation Protocol (MMMP) and Site Integrity Plan (SIP)
4.5	Section 10.3.3.1	Impacts on fish and shellfish ecology	There would be no concurrent piling at East Anglia ONE North, with only one pile being installed at a time, with no overlap in the piling duration of any two piles. Piles will be installed	Minimise impact of noise on fish and shellfish	DCO Schedule 13, Part 2, DML Condition 17, MMMP and SIP DCO Schedule 14, Part 2, DML Condition 13, MMMP and SIP



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
			sequentially, and more than one pile could be installed in a single 24 hour period.		
4.6	Section 10.3.3.1	Impacts on fish and shellfish ecology	There would be no UXO detonation in the East Anglia ONE North offshore development area at the same time as piling in the East Anglia ONE North	Minimise impact of noise on fish and shellfish	DCO Schedule 13, Part 2, DML Condition 16, Marine Mammal Mitigation Protocol (MMMP) and Site Integrity Plan (SIP)
			offshore development area during the winter period, in that although they may occur in the same day or 24 hour period, they would not occur at exactly the same time.		DCO Schedule 14, Part 2, DML Condition 12, MMMP and SIP
4.7	Section 10.3.3.1	ection 10.3.3.1 Impacts on fish and shellfish ecology	UXO detonation between the	Minimise impact of noise on fish and shellfish	DCO Schedule 13, Part 2, DML Condition 17, MMMP and SIP
					DCO Schedule 14, Part 2, DML Condition 13, MMMP and SIP
			time.		DCO Schedule 13, Part 2, DML Condition 16, Marine Mammal Mitigation Protocol (MMMP) and Site Integrity Plan (SIP)
					DCO Schedule 14, Part 2, DML Condition 12, MMMP and SIP
4.8	Section 10.3.3.2	Section 10.3.3.2 Impacts on fish and shellfish ecology	Soft start and ramp up protocol for pile driving will be implemented in accordance with the MMMP	Minimises impact to mobile fish and shellfish receptors able to vacate the vicinity	DCO Schedule 13, Part 2, DML Condition 17, MMMP
					DCO Schedule 14, Part 2, DML Condition 13, MMMP



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation				
4.9	Section 10.3.3.2	Impacts on fish and shellfish ecology	A MMMP and Southern North Sea Special Areas of Conservation (SAC) SIP for piling and Unexploded Ordnance Device (UXO) clearance will be implemented,	Any mitigation beneficial to the marine mammals would also potentially reduce impacts on fish and shellfish ecology.	DCO Schedule 13, Part 2, DML Condition 16, MMMP and SIP DCO Schedule 13, Part 2, DML Condition 17, MMMP and SIP DCO Schedule 14, Part 2, DML Condition 12, MMMP and SIP DCO Schedule 14, Part 2, DML Condition 13, MMMP and SIP				
4.10	Section 10.6.1	Impacts on fish and shellfish ecology	Ensure no release of contaminants as a result of the project. All vessels must adhere to the requirements with appropriate preventative and control measures.	Minimise risk of spillages / leakages	DCO Schedule 13, Part 2, DML Condition 14 DCO Schedule X, Part X, DML Condition 13, PEMP DCO Schedule 13, Part 2, DML Condition 10DCO Schedule X, Part X, DML Condition 17, PEMP				
Decommiss	ioning								
4.9	n/a	As construction or less	Decommissioning approach to be finalised nearer to the end of the lifetime of the project in accordance with the current legislation, policy and guidance at the time.	As per construction impacts mitigation	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme				
Chapter 11	Chapter 11 Marine Mammals								
Constructio	on								



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
5.1	Section 11.3.3.1	Underwater noise impacts to marine mammals	Only one UXO would be detonated at a time during UXO clearance operations in the East Anglia ONE North offshore development area. There would be no simultaneous UXO detonations, but potentially more than one UXO detonation could occur in a 24 hour period.	Minimise impact of noise on marine mammals	DCO Schedule 13, Part 2, DML Condition 17, MMMP and SIP DCO Schedule 14, Part 2, DML Condition 13, MMMP and SIP
5.2	Section 11.3.3.1	Underwater noise impacts to marine mammals	There would be no concurrent piling at East Anglia ONE North, with only one pile being installed at a time, with no overlap in the piling duration of any two piles. Piles will be installed sequentially, and more than one pile could be installed in a single 24 hour period.	Minimise impact of noise on marine mammals	DCO Schedule 13, Part 2, DML Condition 16, Marine Mammal Mitigation Protocol (MMMP) and Site Integrity Plan (SIP) DCO Schedule 14, Part 2, DML Condition 12, MMMP and SIP
5.3	Section 11.3.3.1	Underwater noise impacts to marine mammals	There would be no UXO detonation in the East Anglia ONE North offshore development area at the same time as piling in the East Anglia ONE North offshore development area during the winter period, in that although they may occur in the same day or 24 hour period, they would not occur at exactly the same time.	Minimise impact of noise on marine mammals	DCO Schedule 13, Part 2, DML Condition 17, MMMP and SIP DCO Schedule 14, Part 2, DML Condition 13, MMMP and SIP DCO Schedule 13, Part 2, DML Condition 16, Marine Mammal Mitigation Protocol (MMMP) and Site Integrity Plan (SIP) DCO Schedule 14, Part 2, DML Condition 12, MMMP and SIP
5.4	Section 11.3.3.1	Underwater noise impacts	There would be no concurrent piling or UXO detonation between the proposed East Anglia ONE North and	Minimise impact of noise on marine mammals	DCO Schedule 13, Part 2, DML Condition 17, MMMP and SIP



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
		to marine mammals	East Anglia TWO projects if both projects are constructed at the same time.		DCO Schedule 14, Part 2, DML Condition 13, MMMP and SIP
5.5	Section 11.3.3	Underwater noise impacts to marine	Soft-start pile driving will be implemented in accordance with the MMMP.	Minimise impact of noise on marine mammals	DCO Schedule 13, Part 2, DML Condition 17, MMMP
		mammals			DCO Schedule 14, Part 2, DML Condition 13, MMMP
5.6	Section 11.3.3	Underwater noise impacts	A MMMP will be developed in the pre- construction period and based upon	Minimise impact of noise or risk of physical	DCO Schedule 13, Part 2, DML Condition 16, MMMP and SIP
		to marine mammals	best available information, methodologies and industry best practice. Specific MMMPs will be	or auditory injury to marine mammals	DCO Schedule 13, Part 2, DML Condition 17, MMMP and SIP
			produced for piling and UXO clearance during the pre-construction		DCO Schedule 14, Part 2, DML Condition 12, MMMP and SIP
			period.		DCO Schedule 14, Part 2, DML Condition 13, MMMP and SIP
5.7	Section 11.3.3	Underwater noise impacts	A mitigation zone, based on maximum potential instantaneous Permanent	Minimise impact of noise or risk of physical	DCO Schedule 13, Part 2, DML Condition 16, MMMP
	to marine Threshold Shift (PTS) impact ranges, or auditory injury to marine mammals		DCO Schedule 13, Part 2, DML Condition 17, MMMP		
					DCO Schedule 14, Part 2, DML Condition 12, MMMP
					DCO Schedule 14, Part 2, DML Condition 13, MMMP



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
5.8	Section 11.3.3	Underwater noise impacts	If required, acoustic deterrent devices (ADDs) will be activated prior to the	Minimise impact of noise or risk of physical	DCO Schedule 13, Part 2, DML Condition 16, MMMP
		to marine mammals	soft-start piling activities.	or auditory injury to marine mammals	DCO Schedule 13, Part 2, DML Condition 17, MMMP
					DCO Schedule 14, Part 2, DML Condition 12, MMMP
					DCO Schedule 14, Part 2, DML Condition 13, MMMP
5.9	Section 11.3.3	Section 11.3.3 Underwater noise impacts to marine mammals	A SIP will be developed for the Southern North Sea SAC, setting out the approach to deliver any project mitigation or management measures in relation to the SAC for harbour porpoise.	Minimise impact of noise or risk of physical or auditory injury to marine mammals	DCO Schedule 13, Part 2, DML Condition 16, SIP
					DCO Schedule 13, Part 2, DML Condition 17, SIP
					DCO Schedule 14, Part 2, DML Condition 12, SIP
					DCO Schedule 14, Part 2, DML Condition 13, SIP
5.10	Section 11.6.2	Change to prey resource	Mitigation outlined in row 5.1 – 5.6 applies.	Minimise impact to marine mammals prey	DCO Schedule 13, Part 2, DML Condition 17, PEMP
				resource	DCO Schedule 14, Part 2, DML Condition 13, PEMP



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
Operation a	and Maintenance				
5.11	Section 11.6.2	Change to prey resource	Mitigation outlined in row 5.1 – 5.6 applies.	Minimise impact to marine mammals prey	DCO Schedule 13, Part 2, DML Condition 17, PEMP
				resource	DCO Schedule 14, Part 2, DML Condition 13, PEMP
Decommiss	sioning				
5.12	n/a	As per construction or less	Decommissioning approach to be finalised nearer to the end of the lifetime of the project in accordance with the current legislation, policy and guidance at the time.	As per construction impacts mitigation	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme
Chapter 12	Offshore Ornitholo	ду	-	1	
Constructio	on				
6.2	Section 12.3.3.2	disturbance to	A best-practice protocol for minimising disturbance to red-throated divers during construction will be adopted.	Minimise disturbance to red-throated divers	DCO Schedule 13, Part 2, DML Condition 17, PEMP
					DCO Schedule 14, Part 2, DML Condition 13, PEMP
Operation a	and Maintenance		-	-	
6.3	Section 12.3.3	Physical disturbance to offshore ornithology	Only one offshore cable corridor will be used in the near shore for both East Anglia ONE North and East Anglia TWO projects.	Reduce spatial extent of potential disturbance and displacement of offshore ornithology	n/a embedded in Order Limit selection
6.4	Section 12.3.3	Physical disturbance to	Appropriate vessel traffic management and best practice protocol will be formulated	Reduce risk of physical injury or disturbance to	DCO Schedule 13, Part 2, DML Condition 17, PEMP



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
		offshore ornithology		offshore ornithology by vessel movements	DCO Schedule 14, Part 2, DML Condition 13, PEMP
Decommiss	sioning	1		I	1
6.5	n/a	As per construction or less	Decommissioning approach to be finalised nearer to the end of the lifetime of the project in accordance with the current legislation, policy and guidance at the time.	As per construction impacts mitigation	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme
Chapter 13	Commercial Fisher	ies			
Constructio	on				
7.1	Section 13.3.3	commercial	commercial Group (CFWG) has been established	Minimise risks of navigational hazards	DCO Schedule 13, Part 2, DML Condition 10
		fisheries	and will undertake appropriate liaison with all relevant fishing interests to ensure that they are fully informed of development planning, construction and maintenance	and snagging of fishing gear.	DCO Schedule X, Part X, DML Condition 17, specifically the appointment of a Fisheries Liaison Officer (FLO) and the Fisheries liaison and coexistence plan (FLCP)
					DCO Schedule 14, Part 2, DML Condition 6
					DCO Schedule 14, Part 2, DML Condition 13, specifically the appointment of a FLO and the FLCP
7.2	Section 13.3.3	Impacts to commercial fisheries	A FLO will be appointed during construction and operational phases	Minimise impacts on commercial fishing activity.	DCO Schedule 13, Part 2, DML Condition 17, PEMP and specifically the appointment of a FLO



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
			of the project and FLOWW Guidance (2014; 2015) will be adhered to.		DCO Schedule 14, Part 2, DML Condition 13, PEMP and specifically the appointment of a FLO
7.3	Section 13.3.3	Impacts to commercial fisheries	A Fisheries Liaison and Co-existence Plan (FLCP) will be produced for the proposed East Anglia ONE North project, post-consent.	Minimise impacts on commercial fishing activity	DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically the FLCP DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically the FLCP
7.4	Section 13.3.3	Impacts to commercial fisheries infrastructure	The FLCP will also include protocols for the 'snagging' or loss/damage of fishing gear associated with the project infrastructure	Minimise risks of navigational hazards and snagging of fishing gear.	DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically the FLCP DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically the FLCP
7.5	Section 13.3.3	Impacts to commercial fisheries	A CLP and details of cable monitoring will be required as part of the DML. Within this plan there will be an agreed protocol for monitoring of post- installation cable burial if required.	Minimise risks of navigational hazards and snagging of fishing gear.	DCO Schedule 13, Part 2, DML Condition 17, CMS, specifically the CLP and details of cable monitoring DCO Schedule 14, Part 2, DML Condition 13, CMS, specifically the CLP and details of cable monitoring
7.6	Section 13.3.3	Impacts to commercial fisheries	Additionally, the construction of the project will be undertaken against an agreed 'dropped objects procedure' that will require the Applicant to notify the MMO of any dropped objects and	Minimise risks of navigational hazards and snagging of fishing gear.	DCO Schedule 13, Part 2, DML Condition 14 DCO Schedule 14, Part 2, DML Condition 10



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
			agreement over their recovery, where required		
7.7	Section 13.3.3	Impacts to commercial fisheries	Timely and efficient Notices to Mariners (NtMs), Kingfisher and other navigational warnings will be issued to the fishing industry prior to all survey and construction works through a project specific marine co-ordination system.	Minimise risks of navigational hazards and snagging of fishing gear.	DCO Schedule 13, Part 2, DML Condition 10 DCO, Schedule 14, Part 2, DML Condition 6
7.8	Section 13.3.3	Impacts to commercial fisheries	The UK Hydrographic Office (UKHO) will be informed of both the progress and completion of the proposed windfarm.	Minimise risks of navigational hazards and snagging of fishing gear.	DCO Schedule 13, Part 2, DML Condition 10 DCO Schedule 14, Part 2, DML Condition 6
Operation a	and Maintenance	1	I	1	
7.9	Section 13.6.2		methods of protection where burial is not feasible), including maintenance and monitoring of the protection	Minimise impacts to traditional fishing grounds	DCO Schedule 13, Part 2, DML Condition 17, CMS, specifically CLP, details of cable monitoring and details of scour protection and management
					DCO Schedule 14, Part 2, DML Condition 13, CMS, specifically the CLP, details of cable monitoring and details of scour protection and management
7.10	Section 13.6.2	Safety issues for fishing vessels	Appropriate communication with the fishing industry will be undertaken in the event that cables become unburied during the operational phase	Minimise safety issues for fishing vessels	DCO Schedule 13, Part 2, DML Condition 10



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
			of the project (i.e. through the FLO and appropriate channels such as the Kingfisher Information Service).		DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically appointment of a FLO and FLCP
					DCO Schedule 14, Part 2, DML Condition 6
					DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically appointment of a FLO and FLCP
7.11	Section 13.6.2	Interference with fishing activity	Appropriate two-way liaison with local fishermen as outlined in the construction phase will continue during the operational phase. COLREGS as specified in the construction phase will apply to operation and maintenance vessels.	Mitigate risks of interference with static gears	DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically appointment of a FLO and FLCP DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically appointment of a FLO and FLCP
7.12	Section 13.6.2	Safety issues for fishing vessels	Location of cable protection and crossings would be made available to fishing stakeholders and in line with standard oil and gas industry practice, in instances where cable protection is required, procedures would be carried out to ensure that the protection methods used are compatible with fishing activities where feasible and practical. Required levels of information distribution would be undertaken through the channels of the Kingfisher Information System, Notices to Mariners, along with direct	Minimise safety issues for fishing vessels	DCO Schedule 13, Part 2, DML Condition 10 DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically appointment of a FLO and FLCP DCO Schedule 14, Part 2, DML Condition 6 DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically appointment of a FLO and FLCP



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
			liaison with fishermen and their representatives.		
7.13	Section 13.6.2	Impact of seabed	In instances of objects accidently dropped overboard the standard	Minimise the risk of collision of shipping /	DCO Schedule 13, Part 2, DML Condition 14
		obstacles on shipping industry	requirements of reposition recording and recovery will apply. In addition, snagging and loss of gear protocols will be developed by the Applicant.	fishing industry gear with seabed obstacles	DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically the FLCP
					DCO Schedule 14, Part 2, DML Condition 10
					DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically the FLCP
Decommiss	sioning	<u> </u>	1	1	
7.14	n/a	As per construction or less	Decommissioning approach to be finalised nearer to the end of the lifetime of the project in accordance with the current legislation, policy and guidance at the time.	As per construction impacts mitigation	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme
Chapter 14	Shipping and Navig	gation	•	•	
Constructio	on and Operation ar	nd Maintenance			
8.1	Section 14.3.3	Impacts to safety of	The East Anglia ONE North windfarm site will meet the applicable requirements of MGN543 and its annexes, including requirements to facilitate SAR access	Minimise impacts to shipping	DCO Schedule 13, Part 2, DML Condition 11
		industry anne			DCO Schedule 13, Part 2, DML Condition 17, Aids to Navigation Management Plan (ATNMP)



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
					DCO Schedule 13, Part 2, DML Condition 18
					DCO Schedule 14, Part 2, DML Condition 7
					DCO Schedule 14, Part 2, DML Condition 13, Aids to Navigation Management Plan (ATNMP)
					DCO Schedule 14, Part 2, DML Condition 14
8.2	Section 14.3.3		Anglia ONE North windfarm site in line	Minimise impacts to shipping	DCO Schedule 13, Part 2, DML Condition 11
			with IALA guidance O-139 (2013)		DCO Schedule 13, Part 2, DML Condition 12
					DCO Schedule 13, Part 2, DML Condition 17, Aids to Navigation Management Plan (ATNMP)
					DCO Schedule 13, Part 2, DML Condition 18
					DCO Schedule 14, Part 2, DML Condition 7
					DCO Schedule 14, Part 2, DML Condition 13, Aids to Navigation Management Plan (ATNMP)
					DCO Schedule 14, Part 2, DML Condition 14



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
8.3	Section 14.3.3	Impacts to safety of shipping industry	Guard vessels will be used as appropriate (during the construction period or during periods of major maintenance)	Minimise impacts to shipping	DCO Schedule 13, Part 2, DML Condition 17, PEMP, specifically the FLCP DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically the FLCP
8.4	Section 14.3.3	Impacts to safety of shipping industry	Wind turbines will have at least 22m air clearance above MHWS as per MGN 543 and RYA requirements	Minimise impacts to shipping	DCO Schedule 1, Part 3, Requirement 2(1)(e) and DCO Schedule X, Part X, DML Condition 1
8.5	Section 14.3.3	Impacts on under keel clearance and shipping industry	Under keel clearance will be risk assessed against MCA and RYA guidance	Minimise impacts to shipping	DCO Schedule 13, Part 2, DML Condition 17, CMS, specifically the CLP DCO Schedule 14, Part 2, DML Condition 13, CMS, specifically the CLP
8.6	Section 14.3.3	Impacts to safety of shipping industry	Cables will be buried (or alternative methods of protection where burial is not feasible), including maintenance and monitoring of the protection during the operational phase	Minimise impacts to shipping	DCO Schedule 13, Part 2, DML Condition 17, CMS, specifically the CLP DCO Schedule 14, Part 2, DML Condition 13, CMS, specifically the CLP
8.7	Section 14.3.3	Impacts to safety of	Safety zones and buoyed areas during construction or major maintenance	Minimise impacts to shipping	DCO Schedule 13, Part 2, DML Condition 11



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
		shipping industry	work will be agreed with Trinity House prior to deployment		DCO Schedule 13, Part 2, DML Condition 17, ATNMP
					DCO Schedule 14, Part 2, DML Condition 7
					DCO Schedule 14, Part 2, DML Condition 13, ATNMP
8.8	Section 14.3.3	Impacts to safety of	Structures and cables will be marked on appropriately scaled navigational	Minimise impacts to shipping	DCO Schedule 13, Part 2, DML Condition 10
		shipping industry	charts		DCO Schedule 14, Part 2, DML Condition 6
8.9	Section 14.3.3	safety of proposed East Anglia ONE North shipping project will comply with international industry regulations as adopted by the flag	proposed East Anglia ONE North	Minimise impacts to shipping	DCO Schedule 13, Part 2, DML Condition 17, ATNMP
			regulations as adopted by the flag state (most notably International Convention for the Prevention of Collision at Sea (COLREGS) (IMO		DCO Schedule X, Part X, DML Condition 18
					DCO Schedule 14, Part 2, DML Condition 13, ATNMP
			1972) and International Convention for the Safety of Life at Sea (SOLAS) (IMO 1974)		DCO Schedule 14, Part 2, DML Condition 14
8.10	Section 14.3.3	Impacts to safety of	A dedicated Marine Coordination Centre to manage on site vessels will	Minimise impacts to shipping	DCO Schedule 13, Part 2, DML Condition 17, ATNMP
	shipping be established industry	be established		DCO Schedule 13, Part 2, DML Condition 18	
					DCO Schedule 14, Part 2, DML Condition 13, ATNMP
					DCO Schedule 14, Part 2, DML Condition 14



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
8.11	Section 14.3.3	Impacts to safety of	An ERCoP will be produced	Reduce the effect of diminishing emergency	DCO Schedule 13, Part 2, DML Condition 18
		shipping industry		response resources	DCO Schedule 14, Part 2, DML Condition 14
8.12	Section 14.3.3	Impacts to shipping	Relevant information will be promulgated via NtMs, Kingfisher	Minimise impacts to shipping	DCO Schedule 13, Requirement 2, DML Condition 10
		industry	Information Service-Offshore Renewable Cable Awareness (KIS- ORCA) and other appropriate media		DCO Schedule 14, Require 2, DML Condition 6
8.13	Section 14.3.3	ection 14.3.3 Impacts to shipping industry Continuous compliance with COLREGs including conduct of vessel in restricted visibility, following safe speed principles and 'give way' rules, would be complied with	ng COLREGs including conduct of vessel	Minimise impacts to shipping	DCO Schedule 13, Part 2, DML Condition 18
			speed principles and 'give way' rules,		DCO Schedule 13, Part 2, DML Condition 21, construction traffic monitoring
				DCO Schedule 13, Part 2, DML Condition 22, post construction traffic monitoring	
					DCO Schedule 14, Part 2, DML Condition 14
			DCO Schedule 14, Part 2, DML Condition 17, construction traffic monitoring		
					DCO Schedule 14, Part 2, DML Condition 18, post construction traffic monitoring



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation			
8.14	Section 14.3.3	Impacts to shipping industry	Works vessels coordination, consultation and consideration of the final site design including cable burial	Minimise impacts to shipping	DCO Schedule 12, Part 2, DML Condition 17, Design Plan, CMS and Construction programme			
			and the locations of larger offshore structures		DCO Schedule 13, Part 2, DML Condition 21, construction traffic monitoring			
					DCO Schedule 13, Part 2, DML Condition 22, post construction traffic monitoring			
					DCO Schedule 14, Part 2, DML Condition 13, Design Plan, CMS and Construction programme			
					DCO Schedule 14, Part 2, DML Condition 17, construction traffic monitoring			
					DCO Schedule 14, Part 2, DML Condition 18, post construction traffic monitoring			
Decommiss	ioning							
8.15	n/a	As per construction or less	As Decommissioning approach to be finalised nearer to the end of the lifetime of the project in accordance with the current legislation, policy and guidance at the time.	As per construction impacts mitigation	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme			
Chapter 15	Chapter 15 Civil and Military Aviation and Radar							
Constructio	Construction							



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
9.1	Section 15.3.3		Minimise the risk of physical impacts to	DCO Schedule 1, Part 3, Requirement 31	
		aviation	requirements for the promulgation of the obstacle locations on charts and in aeronautical documentation,	aviation	DCO Schedule 13, Part 2, DML Condition 13
			combined with the permanent marking and lighting of obstacles		DCO Schedule 14, Part 2, DML Condition 9
9.2	Section 15.3.3	Physical impacts to	Details of the East Anglia ONE North project will be communicated with the	Minimise the risk of physical impacts to	DCO Schedule 1, Part 3, Requirement 31
		aviation	aviation sector prior to construction. Measures include:	aviation	DCO Schedule 13, Part 2, DML Condition 13
			Notice to Airmen (NOTAMs);		DCO Schedule 14, Part 2, DML
			Aeronautical Information Circulars (AICs);		Condition 9
			 Warning of the establishment of obstacles within the East Anglia ONE North windfarm site; and 		
			• Publicity in aviation publications i.e. Safety Sense and General Aviation Safety Information Leaflet (GASIL).		
9.3	Section 15.3.3	Physical impacts to	Details of the position, height (amsl) and lighting of each completed	Minimise the risk of physical impacts to	DCO Schedule 1, Part 3, Requirement 31
		forwarded to the C Information Servic relevant aeronaut notifiable permane	permanent structure would be forwarded to the CAA Aeronautical Information Service (AIPs) and on	aviation	DCO Schedule 13, Part 2, DML Condition 13
			relevant aeronautical charts as notifiable permanent obstructions throughout the project.		DCO Schedule 14, Part 2, DML Condition 9



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
9.4	Section 15.3.3	Physical impacts to aviation	En-route navigation charts will be updated as site construction proceeds. All obstacles over 300ft amsl will be notified to the CAA for inclusion in the UK AIP and on aeronautical maps and to Defence Geographic Centre for inclusion in MoD databases.	Minimise the risk of physical impacts to aviation	DCO Schedule 1, Part 3, Requirement 31 DCO Schedule 13, Part 2, DML Condition 13 DCO Schedule 14, Part 2, DML Condition 9
9.5	Section 15.3.3	Physical impacts to aviation	 Wind turbines within the East Anglia ONE North windfarm site will have marking and lighting as set out in requirements in the following documentation: International Civil Aviation Organisation (ICAO) Annex 14 – Aerodrome Design and Operations; CAA CAP 393 – The Air Navigation Order 2016 and Regulations, 5th edition Amendment March 2019; CAA CAP 764 – CAA Policy and Guidelines on Wind Turbines; MGN 543; MCA guidance document – Offshore Renewable Energy Installations: Requirements, Guidance and Operational 	Minimise the risk of physical impacts to aviation	DCO Schedule 1, Part 3, Requirement 31 DCO Schedule 13, Part 2, DML Condition 13 DCO Schedule 13, Part 2, DML Condition 17 DCO Schedule 14, Part 2, DML Condition 9 DCO Schedule 14, Part 2, DML Condition 13



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
			Considerations for Search and Rescue and Emergency Response, version 2, November 2018;		
			 MoD Obstruction Lighting Guidance, issued by Low Flying Operations Squadron, 21 November 2014; and 		
			 CAA CAP 437 – Standards for offshore helicopter landing areas, Edition 8.1, September 2018. 		
9.6	15.3.3	5.3.3 Physical impacts to aviation	An ERCoP will be developed and implemented for all phases of the proposed project in line with MCA's standard template.	Minimise the risk of physical impacts to aviation	DCO Schedule 13, Part 2, DML Condition 18
					DCO Schedule 14, Part 2, DML Condition
Operation a	and Maintenance	1		1	
9.7	15.6.2	Permanent interference on	Mitigation is required in respect of the Cromer Air Traffic Control (ATR)	Minimise the risk of potential permanent	DCO Schedule 1, Part 3, Requirement 34
		civil and military radars	Primary Surveillance Radars (PSR) and Trimingham AD PSRinterference on civil a military radars	interference on civil and military radars	DCO Schedule 1, Part 3, Requirement 35
Decommiss	sioning	1		1	
9.8	Section 15.6.3	As per construction or less	The embedded mitigation in the form of International and National SARPs with respect to notification, marking and lighting (as outlined in Construction phase) would be	As per construction impacts mitigation	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation			
			retained until decommissioning had been completed.					
Chapter 16	Chapter 16 Marine Archaeology and Cultural heritage							
Constructio	on and Operation							
10.1	Section 16.3.3	Impacts to known maritime or aviation heritage assets	Comprehensive assessment and understanding of the proposed project on the significance of any known maritime or aviation heritage assets will be undertaken.	Minimise impacts to maritime or aviation heritage assets	DCO Schedule 13, Part 2, DML Condition 17, Written Scheme of Archaeological Investigation (WSI) (Offshore)			
		(A1s)			DCO Schedule 14, Part 2, DML Condition 13, WSI (Offshore)			
10.2	Section 16.3.3	3 Impacts to known marine	A phased and targeted approach to further assessment will be carried out	Minimise impacts to known marine archaeology and cultural heritage assets	DCO Schedule 13, Part 2, DML Condition 17, WSI (Offshore)			
		archaeology and cultural heritage assets (A1s)	post-consent based on existing data.		DCO Schedule 14, Part 2, DML Condition 13, WSI (Offshore)			
10.3	Section 16.3.3	Section 16.3.3 Impacts to known marine	Implementation of Archaeological Exclusion Zones (AEZs) around the	Minimise impacts to known marine	DCO Schedule 13, Part 2, DML Condition 17, Design Plan			
		archaeology and cultural heritage assets (A1s)	extents of known wreck sites and anomalies of archaeological interest (A1s) (full details of AEZs will be provided in the Design Plan)	archaeology and cultural heritage assets	DCO Schedule 14, Part 2, DML Condition 13, Design Plan			
10.4	known marine where appropr archaeology material is bro and cultural for any intrusiv	known marine where appropriat	Watching briefs will be undertaken, where appropriate, where sea bed	Minimise impacts to known marine	DCO Schedule 13, Part 2, DML Condition 17, WSI (Offshore)			
		material is brought to the surface and for any intrusive works carried out in the intertidal zone.	archaeology and cultural heritage assets	DCO Schedule 14, Part 2, DML Condition 13, WSI (Offshore)				



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
10.5	Section 16.3.3	Impacts to unknown marine archaeology and cultural heritage assets (A2s and A3s)	Further archaeological assessment of geophysical survey data to identify and understand the nature of sea bed features which may represent previously unidentified maritime or aviation heritage assets.	Minimise impacts to unknown marine archaeology and cultural heritage assets (A2s and A3s)	DCO Schedule 13, Part 2, DML Condition 17, WSI (Offshore) DCO Schedule 14, Part 2, DML Condition 13, WSI (Offshore)
10.6	Section 16.3.3	Impacts to unknown marine archaeology and cultural heritage assets (A2s and A3s)	An Outline Offshore WSI will be developed in consultation with Historic England in accordance with industry standards and guidance including <i>Model Clauses for Archaeological</i> <i>Written Schemes of Investigation:</i> <i>Offshore Renewables Projects</i> (The Crown Estate 2010).	Minimise impacts to unknown marine archaeology and cultural heritage assets (A2s and A3s)	DCO Schedule 13, Part 2, DML Condition 17, WSI (Offshore) DCO Schedule 14, Part 2, DML Condition 13, WSI (Offshore)
10.7	Section 16.3.3	Impacts to unknown marine archaeology and cultural heritage assets (A2s and A3s)	Environmental micrositing and / or avoidance of identified anomalies (A2s) and previously recorded sites that have not been seen in the geophysical data (A3s) and at which presence of surviving material is considered unlikely	Minimise impacts to unknown marine archaeology and cultural heritage assets (A2s and A3s)	DCO Schedule 13, Part 2, DML Condition 17, Design Plan DCO Schedule 13, Part 2, DML Condition 17, WSI (Offshore) DCO Schedule 14, Part 2, DML Condition 13, Design Plan DCO Schedule 14, Part 2, DML Condition 13, WSI (Offshore)
10.8	Section 16.3.3	Impacts to unknown marine archaeology and cultural	Where avoidance is not possible, further investigation will be undertaken to determine mitigative measures proportionate to the significance of the asset will be considered on a case by case basis).	Minimise impacts to unknown marine archaeology and cultural heritage assets (A2s and A3s)	DCO Schedule 13, Part 2, DML Condition 17, WSI (Offshore) DCO Schedule 14, Part 2, DML Condition 13, WSI (Offshore)



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation	
		heritage assets (A2s and A3s)				
10.9	Section 16.3.3	Impacts to unknown marine archaeology and cultural heritage assets (A2s and A3s)	A formal protocol will be established in the event of unforeseen impact to potential sites.	Minimise impacts to unknown marine archaeology and cultural heritage assets (A2s and A3s)	DCO Schedule 13, Part 2, DML Condition 17, WSI (Offshore) DCO Schedule 14, Part 2, DML Condition 13, WSI (Offshore)	
10.10	Section 16.3.4	Impacts to marine archaeology and cultural heritage assets	Monitoring for Marine Archaeology will be outlined in the In Principle Plan (IPMP) as secured under the draft conditions of the DML.	Minimise impacts to marine archology and cultural heritage assets	DCO Schedule 13, Part 2, DML Condition 17, Monitoring Plan which accords with the In Principle Monitoring Plan (IPMP) DCO Schedule 14, Part 2, DML Condition 13, Monitoring Plan which accords with the IPMP	
10.11	Section 16.3.4	Impacts to intertidal archaeological and cultural heritage assets.	Avoidance of all known and potential intertidal assets through the use of HDD.	Minimise impacts to intertidal archaeological and cultural heritage assets.	n/a embedded in Order Limit selection	
10.12	Section 16.6.1	Impacts to site preservation conditions from drilling fluid breakout	Drilling fluid used during the drilling process will be monitored and an action plan and procedures will be developed.	Minimise impacts to site preservation conditions from drilling fluid breakout	DCO Schedule 14, Part 2, DML Condition 13, PEMP, specifically the MPCP	
Decommiss	Decommissioning					



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
10.13	n/a	As per construction or less	As Decommissioning approach to be finalised nearer to the end of the lifetime of the project in accordance with the current legislation, policy and guidance at the time.	As per construction impacts mitigation	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme
Chapter 17	Infrastructure and	Other Users		•	
Constructio	on				
11.1	Section 17.3.3	Impacts to infrastructure assets and users	Extensive site selection and route refinement to avoid existing infrastructure such as oil and gas wells, licensed dredging and extraction areas, Ministry of Defence (MOD) danger areas, Practice and Exercise Areas (PEXA), pipelines, telecommunication and transmission cables where possible (see Chapter 4 Site Selection and Assessment of Alternatives).	Minimise impacts to neighbouring infrastructure assets and users	n/a embedded in Order Limit selection
11.2	Section 17.3.3	Impacts to neighbouring infrastructure assets	The East Anglia ONE North offshore export cables would be aligned so that where there are crossings with other cables as near as practicable to a 90° angle is achieved	Minimise impacts to neighbouring infrastructure assets	DCO Schedule 13, Part 2, DML Condition 17, Design Plan and CMS, specifically the CLP DCO Schedule 14, Part 2, DML Condition 13, Design Plan and CMS, specifically the CLP
11.3	Section 17.3.3	Impacts to EDF Energy Infrastructure	Routeing of the offshore cable corridor to achieve a minimum distance of 500m between the corridor and outfall and intake structures associated with EDF Energy's Sizewell B nuclear	Minimise impacts to EDF infrastructure	n/a embedded in Order Limit selection



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
			power station and the proposed Sizewell C nuclear power station. Note that since the publication of EDF Energy's Stage 4 consultation for Sizewell C New Nuclear Power Station in July 2019, the offshore boundary for that project has been moved seaward and there is potential for water cooling infrastructure to move further offshore as a result. With regard to Sizewell C the Applicant will follow the progress of the Sizewell C New Nuclear Power Station proposals and continue to liaise with EDF Energy regarding potential interactions between the projects (see <i>Chapter 4 Site Selection and</i> <i>Assessment of Alternatives</i> and <i>Chapter 7 Marine Geology,</i> <i>Oceanography and Physical</i> <i>Processes</i>).		
11.4	Section 17.3.3	Disruption to nearshore coastal processes, indirect impacts to Sizewell B nuclear power station	Areas of Coralline Crag in the nearshore will be avoided by routeing of the export cable to the south of the formation (<i>Chapter 6 Project</i> <i>Description</i> and <i>Chapter 7 Marine</i> <i>Geology, Oceanography and</i> <i>Physical Processes</i>).	Minimise impacts to nearshore coastal processes, thus minimising indirect impacts to the operation of Sizewell B nuclear power station	n/a embedded in Order Limit selection
11.5	Section 17.3.3	Sterilisation of areas of high potential	Alignment of the offshore cable corridor southern route with the East	Minimise sterilisation of aggregate resource in	n/a embedded in Order Limit selection



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
		aggregate resource	Anglia ONE / East Anglia THREE offshore cable corridor area	the offshore cable corridor	
11.6	Section 17.3.3	Sterilisation of former licenced aggregate area	Routeing of the offshore cable corridor southern route to avoid a former licenced aggregate area identified by the Crown Estate.	Minimise overlap of offshore cable corridor southern route with former licenced aggregate area (not possible to avoid area entirely and there is a 0.6km ² area of overlap, however this represents a very small proportion of the wider resource in the southern North Sea region).	n/a embedded in Order Limit selection
11.7	Section 17.6.1	Impacts to sub- sea cables	Compliance with private cable crossing agreements with other operators will be agreed prior to construction.	Minimise impacts to sub-sea cables.	Separate commercial agreements
11.8	Section 17.6.1	Impacts to sub- sea cables	Ongoing consultation and commercial and technical agreements with cable owners prior to construction.	Minimise impacts to sub-sea cables.	Separate commercial agreements
11.9	Section 17.6.1	Impacts to the WaveRider buoy	The WaveRider buoy will be relocated, if required, to a location as close to its current location as possible.	Minimise the risk of interaction with installation or vessel anchoring.	DCO Schedule 14, Part 2, DML Condition 13
Operation a	nd Maintenance	1		I	1



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
11.10	Section 12.6.2	Impacts to sub- sea cables	Private cable crossing agreements with other operators will be agreed prior to construction.	Minimise impacts to sub-sea cables.	Separate commercial agreements
Decommiss	sioning				
11.11	Section 17.6.3	As per construction or less	As Decommissioning approach to be finalised nearer to the end of the lifetime of the project in accordance with the current legislation, policy and guidance at the time.	As per construction impacts mitigation	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme
Chapter 28	Offshore Seascape	, Landscape and	Visual Amenity	•	•
Constructio	on, Operation and M	laintenance			
12.1	Section 28.3.3	Impact to offshore seascape, landscape and visual amenity	The proposed East Anglia ONE North project is located outside territorial waters, 8km off undesignated coasts and 13km off Areas of Outstanding Natural Beauty (AONB) and heritage coasts.	Reduce potential visual impacts to offshore seascape, landscape and visual amenity	n/a embedded in Order Limit selection
12.2	Section 28.3.3	Impact to offshore seascape, landscape and visual amenity	Wind turbines, Operational Meteorological Mast (OMM), Offshore Electrical Platform (OEP) and the construction, operation and maintenance platform will be lit in accordance with the International Association of Lighthouse Authorities (IALA) standards and Civil Aviation Authority (CAA) requirements.	Reduce potential visual impacts to offshore seascape, landscape and visual amenity	DCO Schedule 1, Part 3, Requirement 31 DCO Schedule 13, Part 2, DML Condition 11 DCO Schedule 13, Part 2, DML Condition 18 DCO Schedule 14, Part 2, DML Condition 7



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
					DCO Schedule 14, Part 2, DML Condition 14
12.3	Section 28.3.3	Impact to offshore seascape, landscape and visual amenity	 The proposed East Anglia ONE North windfarm site has reduced its geographic extent with the following measures: Reduced lateral spread; Concentrated grouping; and Increased distance offshore. 	Reduce potential visual impacts to offshore seascape, landscape and visual amenity.	n/a embedded in Order Limit selection
12.4	Section 28.3.3	Impact to offshore seascape, landscape and visual amenity	Aviation warning lights will only be fitted to significant peripheral wind turbines and will allow for reduction in lighting intensity at and below the horizon when visibility from every wind turbine is more than 5km.	Reduce potential visual impacts to offshore seascape, landscape and visual amenity.	DCO Schedule 1, Part 3, Requirement 31
12.5	Section 28.3.3	Impact to offshore seascape, landscape and visual amenity	SAR lighting of each of the non- periphery turbines will be low intensity hazard lights, individually switchable from the control centre at the request of the MCA.	Reduce potential visual impacts to offshore seascape, landscape and visual amenity.	DCO Schedule 13, Part 2, DML Condition 18
12.6	Section 28.3.3	Impact to offshore seascape, landscape and visual amenity	Marine navigational lights will be fitted at the platform level only on SPS.	Reduce potential visual impacts to offshore seascape, landscape and visual amenity.	DCO Schedule 13, Part 2, DML Condition 11 DCO Schedule 14, Part 2, Condition 7
Decommiss	sioning	1	1	1	1



Reference	Cross Reference to ES	Impact	Mitigation Measures Commitment	Effect of Mitigation	Means of Implementation
12.7	n/a	As per construction or less	As Decommissioning approach to be finalised nearer to the end of the lifetime of the project in accordance with the current legislation, policy and guidance at the time.	As per construction impacts mitigation	DCO Schedule 1, Part 3, Requirement 10, Decommissioning Programme



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