

East Anglia THREE

# Schedule of Mitigation Offshore

Document Reference – 6.8

Author – Royal HaskoningDHV  
East Anglia THREE Limited  
Date – November 2015  
Revision History – Revision A



**This Page is Intentionally Blank**

## Table of Contents

<b>1</b>	<b>Schedule of Mitigation - Offshore .....</b>	<b>1</b>
<b>1.1</b>	<b>Introduction .....</b>	<b>1</b>
<b>1.2</b>	<b>Schedule.....</b>	<b>3</b>

## 1 SCHEDULE OF MITIGATION - OFFSHORE

---

### 1.1 Introduction

1. This document lists all the mitigation proposed in the Environmental Impact Assessment for the proposed East Anglia THREE project. The following schedule lists all measures proposed on a topic by topic basis and signposts where the commitment made in the Environmental Statement are secured in the draft Development Consent Order and associated documents.
2. The following abbreviations are used in the schedule

AEZ	Archaeological Exclusion Zone
AIS	Aeronautical Information Service
ALARP	As Low As Reasonably Practicable
AIS	Automatic Identification System
AMSL	Above mean sea level
CAA	Civil Aviation Authority
CFWG	Commercial Fisheries Working Group
COLREGS	International Regulations for Preventing Collisions at Sea
DCO	Development Consent Order
DML	Deemed Marine Licence
EATL	East Anglia THREE Ltd
EMF	Electromagnetic Fields
EPS	European Protected Species
ERCoP	Emergency Response Cooperation Plan
HAT	Highest astronomical tide
IALA	International Association of Lighthouse Authorities
IPMP	In Principle Monitoring Plan
MARPOL	International Convention for the Prevention of Pollution from Ships
MCA	Marine & Coastguard Agency
MHWS	Mean high water springs
MMMP	Marine Mammal Mitigation Protocol
MMO	Marine Management Organisation
NOTAM	Notice to Airmen
NtM	Notice to Mariners
OOCEMP	Outline Offshore Construction Environmental Management Plan
OREI	Offshore Renewable Energy Installations
ORPAD	Offshore Renewables Protocol for Archaeological Discoveries
ROV	Remotely Operated Vehicle
SAR	Search and Rescue
SNCB	Statutory Nature Conservation Body
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UKHO	UK Hydrographic Office

UXO  
WSI

Unexploded ordnance  
Written Scheme of Investigation

## 1.2 Schedule

**Table 1.1. Offshore Mitigation Measures**

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
<b>General</b>					
1.1	Applicable to all	Minimisation of environmental impacts during construction.	EATL is committed to the use of best practice techniques and due diligence throughout all construction, operation and maintenance activities. Details of specific methods will be provided in further detail in the Outline Construction Environmental Management Plan	Embedded mitigation, no effect on significance of assessed impact	DCO or DML requirement – this will need to be filled in once the rest is complete
1.2	Applicable to all	Minimisation of environmental impacts during construction, operation and decommissioning.	Careful site selection of the East Anglia THREE site and offshore cable corridor has been carried out to avoid, as far as possible sensitive features	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement. Coordinates of the site are listed in DML, Part 1, 5
<b>Marine geology, Oceanography &amp; Physical Processes</b>					
2.1	Section 7.3.3, ES Chapter 07	Minimisation of potential impact to marine geology, oceanography and physical processes from interaction between adjacent turbines.	Minimum separation distance of 675m between turbines in each row, and a minimum row separation of 900m.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 1 (d)

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
2.2	Section 7.3.3, ES Chapter 07	Minimisation of effects of scour on the suspended sediment and bed level changes in the vicinity of each wind turbine location.	For the foundation types that would experience the potential for greatest scour, namely gravity base structures, scour protection material is likely to be installed.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 (e)
2.3	Section 7.3.3, ES Chapter 07	Minimisation of impacts to seabed and physical processes from the introduction of scour protection. t	For other foundation types, where the scour potential involves lower quantities of sediment release due to scour processes, the design would, where feasible to do so, allow for local scour around the piles to minimise the footprint of 'foreign' (scour protection) material that is introduced on the sea bed.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 (e)
2.4	Section 7.3.3, ES Chapter 07	Reduce levels of sediment suspended during foundation installation.	Where possible, piling of foundations would be undertaken rather than drilling.	No effect on significance of assessed impact	No specific requirement
2.5	Section 7.3.3, ES Chapter 07	Minimisation of suspended sediment and physical disturbance to the sea bed.	Micro-siting would be undertaken to minimise requirements for seabed preparation.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 (a) xii
2.6	Section 7.3.3, ES Chapter 07	Reduce risk of cable exposure which may result in seabed level	Where possible, cables will be buried to a target depth of 0.5-5.0m	Embedded mitigation, no effect on significance of	This will be included in the cable specification and installation plan; DML, Part

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
		change and further physical disturbance due to reburial activities.		assessed impact	2, 13 (g)
2.7	Section 7.3.3, ES Chapter 07	Minimisation of impacts to seabed and physical process from the introduction of scour protection.	In the near shore, between the coastline and the Greater Gabbard Offshore Wind Farm and Galloper Wind Farm cable routes, where larger amounts of cable protection could adversely affect the physical processes, a limit of 2.5% would be set as an upper limit of the length of cable where cable protection is employed	Embedded mitigation, no effect on significance of assessed impact	No specific requirement
2.8	Section 7.3.3, ES Chapter 07	Minimisation of impacts to marine geology, oceanography and physical processes during cable installation processes.	A Cable Specification and Installation Plan, would be agreed with the relevant authorities post application. This plan would include a detailed cable laying plan for the Order limits, incorporating a burial risk assessment to ascertain suitable burial depths and cable laying techniques, including cable protection	Embedded mitigation, no effect on significance of assessed impact	This will be included in the cable specification and installation plan; DML, Part 2, 13 (g)
<b>Marine Water &amp; Sediment Quality</b>					
3.1	Section 8.3.3, ES Chapter 08	Change in Water and Sediment Quality due to Accidental Releases or Spills of Construction Materials or Chemicals.	Oils and lubricants used in the wind turbines would be biodegradable where possible and all chemicals would be certified to the relevant standard.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 (d) ii



Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
3.2	Section 8.3.3, ES Chapter 08	Change in Water and Sediment Quality due to Accidental Releases or Spills of Construction Materials or Chemicals.	All wind turbines would incorporate appropriate provisions to retain spilled fluids within the nacelle and tower. In addition, converter and collector stations would be designed with a self-contained bund to contain any spills and prevent discharges to the environment.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 11 (3)
3.3	Section 8.3.3, ES Chapter 08	Change in Water and Sediment Quality due to Accidental Releases or Spills of Construction Materials or Chemicals.	To avoid discharge or spillage of oils it is anticipated that the transformers would be filled for their operational life and would not need interim oil changes.	Embedded mitigation, no effect on significance of assessed impact	DML Part 2 13 (d) (i)
3.4	Section 8.3.3, ES Chapter 08	Suspension of contaminants within seabed sediments during dredging activities for cable installation near Station30.	If required EATL would make use of any opportunity to further analyse the levels of arsenic within that area. If consistently high levels of the contaminant were found across this area an appropriate method of disposal for any dredged material from that area would be agreed with the MMO prior to any construction activities taking place within the export cable corridor	Embedded mitigation, no effect on significance of assessed impact  However this has implications for any dredging and disposal from the area	DML, Part 2, 13 (b) iii covers pre-construction survey, also DML Part 2, 17
3.5	Section 8.6.5.1, ES Chapter 08	Change in Water and Sediment Quality due to	Best practice procedures would be put in place when transferring oil or fuel between	Embedded mitigation, no effect	MPCP covered by DML, Part 2, 13 (d) i

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
		Accidental Releases or Spills of Construction Materials or Chemicals.	converter and collector stations and service vessels. Appropriate spill plan procedures would also be implemented in order to appropriately deal with any unexpected discharge into the marine environment, these would be included in a Marine Pollution Contingency Plan (MPCP) to be agreed with stakeholders post-consent	on significance of assessed impact	
3.6	Section 8.6.2.2, ES Chapter 08	Change in sediment and water quality as a result of the release of hazardous materials, specifically accidental spillages and discharges of grey water	In addition to the control measures required under the MARPOL Convention Regulations, EATL will produce the MPCP in agreement with stakeholders post-consent.	Embedded mitigation, no effect on significance of assessed impact	MPCP covered by DML, Part 2, 13 (d) i
3.7	Section 8.6.3.2, ES Chapter 08	Deterioration in water quality due to release of hazardous materials, specifically accidental spillages	A decommissioning plan will be required by the Secretary of State under the Energy Act 2004. The plan will reduce the likelihood of these releases through the visual monitoring of the structures during their removal. Operating procedures contained within the decommissioning plan would be developed in order to address this potential risk.	Embedded mitigation, no effect on significance of assessed impact	DCO Sch 1, Part 3, 10
<b>Underwater Noise &amp; Electromagnetic Fields</b>					
4.1	Section 9.3.3	Underwater noise	Commitments for reducing underwater	Embedded	Foundation installation

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
		propagation	noise are provided on a receptor specific basis.	mitigation, no effect on significance of assessed impact	and soft start covered by DML, Part 2, 13 (c) i, ii
4.2	Section 9.8.3, ES Chapter 09	Electric (E) field propagation	All cables would be sheathed and armoured, which would prevent the propagation of electric (E) fields into the surrounding environment.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 (g) i
4.3	Section 9.8.3, ES Chapter 09	Electric (E) field propagation	Inter-array and export cables would be buried where possible to depths between 0.5 to 5m. Cable protection measures would be applied in areas where burial is not possible, for example at cable crossings and in areas of hard ground	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 (g) i
4.4	Section 9.8.3, ES Chapter 09	Electric (E) field propagation	Electro Magnetic Fields emitted by HVAC three core offshore subsea cables are minimised due to the method of manufacture, with the three cores laid together in trefoil and as the phase currents are balanced, the magnetic fields of the three cores tend to zero.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 (g) (i)
4.5		to test predictions in the environmental statement (construction)	Noise monitoring	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 18

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
Benthic Ecology					
5.1	Section 10.3.3, ES Chapter 10	Disturbance or physical impact to European Designated sites and MCZs	Careful site selection of the East Anglia THREE site and offshore cable corridor has been carried out to avoid, as far as possible, European designated sites and any proposed Marine Conservation Zones (MCZ)	Embedded mitigation, no effect on significance of assessed impact	Coordinates of the site are listed in DML, Part 1, 5
5.2	Section 10.3.3, ES Chapter 10  Section 10.6.1.1, ES Chapter 10	Temporary physical disturbance and habitat loss	EATL would conduct a pre-construction survey, which would assess the presence and extent of Habitats of Principal Importance / Annex 1 reef <sup>1</sup> habitats as detailed in the In Principle Monitoring Plan (IPMP). Should such habitats be identified in close proximity to proposed foundation locations EATL would agree appropriate mitigation with Natural England and the MMO, which may include a post-construction survey to confirm no impacts to these habitats had been sustained	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 (b) iii,  Specific to HPI - DML Part 2, 17 (2) a
5.3	Section 10.3.3, ES Chapter 10	Temporary physical disturbance and habitat loss	Micro-siting of foundations and cables would be employed in accordance with the marine licence to avoid Habitats of Principal	Embedded mitigation, no effect on significance of	IPMP section 5.4 covers pre-construction survey and potential for

<sup>1</sup> It should be noted that Natural England and MMO's recent advice is for *Sabellaria spinulosa* reef outside of current designated Annex 1 sites to be referred to as a "Habitat of Principal Importance" in line with Section 41 of the NERC act. However, as this terminology may not be recognised by all, the term Annex I habitat is also used (and has historically been used by Natural England and others in the consultation responses).

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
	Section 10.6.1.1, ES Chapter 10		Importance as far as is practicable.	assessed impact	mitigation DML, Part 2, 13 (a) (x)
5.4	Section 10.3.3, ES Chapter 10	Seabed disturbance due to the placement of gravity based structures.	Sea bed disturbance would be minimised by not placing gravity base structures in areas where sandwaves are greater than 5m, therefore reducing the potential for increased suspended sediment, reducing the potential for habitat impact.	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement,
5.5	Section 10.3.3, ES Chapter 10	Impacts from EMF and placement of artificial substrate due to cable installation.	Cables will be buried as far as possible to reduce the effects of EMF and reducing the need for cable protection and the amount of introduced hard substrate.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 (g) i
5.6	Section 10.3.3, ES Chapter 10	Release of contaminants and subsequent uptake by benthic habitat due to dredging activities at Station 30.	See Commitment 3.4	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement.  DML, Part 2, 13 (b) iii covers pre-construction survey, also DML Part 2, 17
5.7	Section 10.3.3, ES Chapter 10	Physical disturbance to benthic habitats at land fall.	The use of pre-installed (by East Anglia ONE) ducts would reduce the potential for impacts at the landfall location.	Embedded mitigation, no effect on significance of assessed impact	DCO Sch 1, Part1, 1 – description of work 5B
5.8	Section 10.3.3, ES Chapter 10	Disturbance to benthic habitats from the introduction of artificial	See commitment 2.7	Embedded mitigation, no effect on significance of	Introduction of substrate covered by DCO Sch 1, Part3, 2– which covers

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
		substrate		assessed impact	maximum parameters for infrastructure including cable and scour protection.
5.9	Section 10.3.3, ES Chapter 10	Release of contaminants from vessels or operations,	See commitment 3.6	Embedded mitigation, no effect on significance of assessed impact	MPCP covered by DML, Part 2, 13 (d) i
5.10	Section 10.6.2.4	Introduction of non-native species	EATL have committed to applying best-practice techniques including appropriate vessel maintenance as outlined in the International Convention for the Prevention of Pollution from Ships (MARPOL). This would minimise the risk of the introduction of non-native species.	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement.  Covered in OOCEMP section 6.5 Wastewater discharges
5.11	DML, Part 2, 17	To test predictions in the environmental statement (pre-construction)	Appropriate surveys of any benthic communities/benthos constituting habitats of principal importance in whole or in part inside the area(s) within the Order limits in which construction works were carried out;	N/A	DML, Part 2, 17
5.12	DML, Part 2, 19	To test predictions in the environmental statement (pre-construction)	Appropriate surveys of any benthic communities/benthos constituting habitats of principal importance in whole or in part inside the area(s) within the Order limits in which construction works were carried out	N/A	DML, Part 2, 19

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
Fish and Shellfish Ecology					
6.1	Section 11.6.1.3.1	Instantaneous injury due to piling noise	Soft start pile driving would be implemented to allow mobile species to move away from the area of highest noise impact.	Embedded mitigation, no effect on significance of assessed impact	Foundation installation and soft start covered by DML, Part 2, 13 (c) i, ii
6.2	Section 11.6.2.2  Section 11.6.2.4	Minimisation of introduced substrate  Electromagnetic fields	Where possible the inter-array, platform link cables (between offshore electrical platforms), interconnector cables and export cables would be armoured, and buried in the sea bed at a depth of between 0.5m and 5m.  Appropriate cable protection methods would be used where burial is not possible, however this would be limited to 10% of the cable length.	Embedded mitigation, no effect on significance of assessed impact	This will be included in the cable specification and installation plan; DML, Part 2, 13 (g)
6.3	Section 11.6.2.2	Minimisation of introduced substrate	The preferred method of cable protection would be mattresses (see Chapter 5 Description of the Development, section 5.5.14.2) as these would have the smallest ecological footprint.	Embedded mitigation, no effect on significance of assessed impact	This will be included in the cable specification and installation plan; DML, Part 2, 13 (g)
6.4	Section 11.3.3	Minimisation of disturbance	During construction, overnight working practices would be employed so that construction activities would be 24 hours, thus reducing the overall period for potential impacts to fish communities near	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement.

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
			the East Anglia THREE site.		
6.5	DML, Part 2, 18	To test predictions in the environmental statement (construction)	Noise monitoring	N/A	DML, Part 2, 18
<b>Marine Mammal Ecology</b>					
7.1	Section 12.3, ES Chapter 12	Disturbance to marine mammal designated sites.	At the time of the lease agreement with The Crown Estate, the East Anglia THREE site was selected to ensure there is no overlap between marine mammal designated sites at the East Anglia THREE site or offshore cable corridor.	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement. Coordinates of the site are listed in DML, Part 1, 5
7.2	Section 12.3, ES Chapter 12	Underwater noise generated by piling	The development of the project design has resulted in an increase in wind turbine size reducing the overall number of wind turbines. This would reduce noise impacts during construction and indirect impacts on prey species as a result of less pile driving and less vessel movements.	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement. DCO Sch 1, Part3, 2– which covers maximum parameters for foundations.
7.3	Section 12.3, ES Chapter 12 Section 12.6.1.1, ES Chapter 12	Physical injury from underwater noise generated by piling.	EATL will commit to the use of soft start and mitigation zones, agreed as part of the MMMP to prevent auditory injury to marine mammals during pile driving activities.	Embedded mitigation, no effect on significance of assessed impact	Foundation installation and soft start covered by DML, Part 2, 13 (c) i, ii MMMP covered by DML, Part 2, 13 (f)



Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
7.4	Section 12.3, ES Chapter 12	Physical injury from underwater noise generated by piling.	EATL have provided a MMMP with this application. The MMMP would be developed in the pre-construction period and will be based upon best available information and methodologies at that time in consultation with the relevant authorities.	Embedded mitigation, no effect on significance of assessed impact	MMMP covered by DML, Part 2, 13 (f)
7.5	Section 12.3, ES Chapter 12	Physical injury and disturbance during foundation installation.	EATL will continue to review the development of alternative foundation installation (through industry and academic studies) and more efficient mitigation options for marine mammals.	N/A	No specific DML requirement.
7.6	Section 12.6.1.1, Chapter 12	Disturbance and injury to EPS species	EATL will apply for an EPS licence for Harbour Porpoise but acknowledge that other species may need to be included on the EPS Licence.	Embedded mitigation, no effect on significance of assessed impact	Covered in Section 4.1 of MMMP.
7.7	Section 12.7.4, ES Chapter 12	Cumulative disturbance with other developments.	EATL confirms their ongoing support of strategic initiatives and will continue to work with other developers, Regulators and SNCBs in order to understand and reduce cumulative impacts where possible and improve the evidence base.	N/A	No specific DML requirement.
7.8	Section 12.7.4, ES Chapter 12	Cumulative disturbance with other developments.	EATL and both parent companies are strong supporters of industry project established to understand the consequences of displacement on harbour porpoise based	N/A	No specific DML requirement.

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
			on empirical data.		
7.9	DML, Part 2, 17	To test predictions in the environmental statement (pre-construction)	Appropriate marine mammal surveys covering the area(s) within the Order limits in which construction works were carried out and any wider area(s) where appropriate, as required to test predictions in the environmental statement concerning key marine mammal interests of relevance to the authorised scheme	N/A	DML, Part 2, 17
7.10	DML, Part 2, 18	To test predictions in the environmental statement (construction)	Noise monitoring	N/A	DML, Part 2, 18
7.11	DML, Part 2, 19	To test predictions in the environmental statement (post-construction)	Appropriate marine mammal surveys covering the area(s) within the Order limits in which construction works were carried out and any wider area(s) where appropriate, as required to test predictions in the environmental statement concerning key marine mammal interests of relevance to the authorised scheme	N/A	DML, Part 2, 19
<b>Offshore Ornithology</b>					
8.1	Table 13.3, Section 13.3.5, ES Chapter 13,	Impacts to European Designated Sites	The East Anglia THREE site was identified through the Zonal Appraisal and Planning process and has been sited to avoid	Embedded mitigation, no effect on significance of	No specific DML requirement. Coordinates of the site are

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
			European sites.	assessed impact	listed in DML, Part 1, 5
8.2	Table 13.3, Section 13.3.5, ES Chapter 13,	Disturbance to ornithological receptors.	In order to reduce the spatial extent of potential disturbance and displacement impacts the decision was taken to use only one offshore cable corridor in near shore for multiple projects. This measure avoids potential impacts over a wider area.	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement. Coordinates of the site are listed in DML, Part 1, 5
8.3	Table 13.3, Section 13.3.5, ES Chapter 13,	Physical injury and displacement of ornithological receptors during operational phase.	The option of using a larger number of 5MW wind turbines has been dropped from the proposed project design. That decision reduces the potential for collision mortality and the magnitude of potential displacement.	Embedded mitigation, no effect on significance of assessed impact	DCO Sch 1, Part3, 2—covers maximum parameters for infrastructure
8.4	DML, Part 2, 17	To test predictions in the environmental statement (pre-construction)	Appropriate surveys of existing ornithological activity inside the area(s) within the Order limits in which it is proposed to carry out construction works, and any wider area(s) where appropriate, which is required to test predictions in the environmental statement concerning key ornithological interests of relevance to the authorised scheme.	N/A	DML, Part 2, 17
8.5	DML, Part 2, 19	To test predictions in the environmental statement (post-construction)	Appropriate surveys of existing ornithological activity inside the area(s) within the Order limits in which it is proposed to carry out construction works,	N/A	DML, Part 2, 19

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
			and any wider area(s) where appropriate, which is required to test predictions in the environmental statement concerning key ornithological interests of relevance to the authorised scheme.		
Commercial Fisheries					
9.1	Section 14.3.3, 14.6.1. 14.6.2, 14.6.3	All impacts upon fisheries	The appropriate liaison will be undertaken with all relevant fishing interests to ensure they are fully informed of all construction and maintenance activities. In order to aid and maintain regular communication between East Anglia Offshore Wind Limited and local fishermen potentially affected by the projects in the East Anglia Zone, a Commercial Fisheries Working Group (CFWG) has been established with a representative from each local port which could potentially impacted by the proposed East Anglia THREE project	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13, d v
9.2	Section 14.3.3, 14.6.1. 14.6.2, 14.6.3	All impacts upon fisheries	The DML includes the requirement for a Co-Existence and Fisheries Liaison Plan.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13, d v
9.3	Section 14.3.3, 14.6.1. 14.6.2, 14.6.3	All impacts upon fisheries	Timely and efficient Notices to Mariners (NtMs), Kingfisher and other navigational warnings (of the position and nature of the	Embedded mitigation, no effect on significance of	DML, Part 2, 6 (7, 8)

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
			works including offshore cable corridor crossings) will be issued to the fishing industry.	assessed impact	
9.4	Section 14.3.3, 14.6.1. 14.6.2, 14.6.3	All impacts upon fisheries	The UKHO will be informed of both the progress and completion of proposed East Anglia THREE project	Embedded mitigation, no effect on significance of assessed impact	DML part 2, 7 (9)
9.5	Section 14.3.3 14.6.2.2	Complete Loss or Restricted Access to Traditional Fishing Grounds	Inter-array and offshore export cables within the offshore cable corridor will be buried where possible, to the maximum required depth to prevent damage to and from fishing gear. Cable protection measures will be applied in areas where burial is not possible	Embedded mitigation, no effect on significance of assessed impact	Cable protection plan DML, Part 2, 13 (g) i
9.6	Section 14.3.3 14.6.2.2	Complete Loss or Restricted Access to Traditional Fishing Grounds	There would be a minimum separation of 675m between wind turbines within rows, and a minimum of 900m between each row, and these would be arranged in a regular pattern	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 1 (d)
9.7	Section 14.3.3		All contractors undertaking site works would be contractually obliged and monitored by client representatives to ensure compliance with standard offshore policies.	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement.  DML Part 2, 11 (10) covers
		Obstacles on the Sea			

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
	14.6.2.5	Bed Post-Construction	These policies prohibit the discarding of any objects or material overboard and require rapid recovery of any accidentally dropped objects.		unauthorised deposits
9.8	Section 14.3.3		Transiting East Anglia THREE works vessels will also fully comply with the international regulations (COLREGS). This should negate the requirement for fishing vessels engaged in fishing to alter course or to pose any risk to fishing gears being towed.	Embedded mitigation, no effect on significance of assessed impact	Transit routes are part of the construction method statement DML Part 2, 13, c v
9.9	Section 14.3.3, 14.6.2.5	Obstacles on the Sea Bed Post-Construction	Should post installation surveys identify the presence of any construction related sea bed obstacles such as mounds, boulders or berms that could have the potential to interfere with fishing, appropriate rectification would be undertaken.	Embedded mitigation, no effect on significance of assessed impact	DCO, Sch 1, Part 3, 10 covers decommissioning plan but this is not specifically mentioned DML Part 2, 11 (10) covers unauthorised deposits
<b>Shipping &amp; Navigation</b>					
10.1	Table 15.3, Section 15.3.5, ES Chapter 15	Navigation and collision risk to maritime users within the of the project area.	The proposed East Anglia THREE project would be charted by the UKHO. This would include wind turbines, offshore cable corridor (specific location of export cables) and inter-array cables for the appropriate scale charts	Embedded mitigation, no effect on significance of assessed impact	DML Part 2, 7 (10)
10.2	Table 15.3, Section 15.3.5, ES Chapter 15	Navigation and collision risk to maritime users	Appropriate liaison and dissemination of information and warnings through Notices	Embedded mitigation, no effect	DML, Part 2, 7 (7, 8)

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
		within the of the project area.	to Mariners and other appropriate media, (e.g., Admiralty Charts and fishermen's awareness charts) would enable vessels to effectively and safely passage plan around the East Anglia THREE site and the offshore cable corridor.	on significance of assessed impact	
10.3	Table 15.3, Section 15.3.5, ES Chapter 15	Navigation and collision risk to maritime users within the of the project area.	Structures within the East Anglia THREE site would be marked and lit in accordance with IALA Recommendation O-139 on the Marking of Man-Made Offshore Structures (IALA, 2008), but may also include the use of other visual and sounds aids to navigation as agreed with Trinity House Lighthouse Service.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 7, 8
10.4	Table 15.3, Section 15.3.5, ES Chapter 15	Safety risk to vessels travelling close to turbines, in particular, vessels mooring alongside turbine foundations.	Wind turbines would be constructed to ensure that the minimum rotor blade clearance (air draught) is at least 22m above MHWS.	Embedded mitigation, no effect on significance of assessed impact	DCO Sch 1, Part 3, 2e
10.5	Table 15.3, Section 15.3.5, ES Chapter 15	Navigational and safety risk to vessels crossing or anchoring on cables.	Inter-array and export cables would be protected appropriately taking into account fishing and anchoring practices and an appropriate burial protection index study. Positions of cables would be promulgated and charted by appropriate means.	Embedded mitigation, no effect on significance of assessed impact	Cable protection plan DML, Part 2, 13 (g) i Charting DML part 2, 6 (9)

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
10.6	Table 15.3, Section 15.3.5, ES Chapter 15	Impediment and safety to Search and Rescue operators.	Annex Five specifies 'standards and procedures for generator shutdown and other operational requirements in the event of a Search and Rescue, counter pollution or salvage incident in around an OREI	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 (4)  Compliance with MCA's Marine Guidance Notice (MGN) 371 including Annex 5
10.7	Table 15.3, Section 15.3.5, ES Chapter 15	Navigation and collision risk to maritime users within the of the project area.	Where required 500m rolling safety zones would be used around current areas of constructions, major maintenance and decommissioning.	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement.
10.8	Table 15.3, Section 15.3.5, ES Chapter 15	Impediment and safety to Search and Rescue operators.	An ERCoP would be developed and implemented for the construction, operational & maintenance and decommissioning phases. The ERCoP would be based on the standard MCA template and would consider the potential for self-help capability as part of the ongoing process.	Embedded mitigation, no effect on significance of assessed impact	DML ,14(5) of schedules 10 - 15
10.9	Table 15.3, Section 15.3.5, ES Chapter 15	Navigation and collision risk to maritime users within the of the project area.	Guard vessels would be used during construction, decommissioning and significant maintenance to both protect the installations and workers on the wind turbines, particularly in areas in proximity to main traffic routes. Their role would be to both alert vessels to the East Anglia THREE activity and provide support in the	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement.



Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
			<p>event of an emergency situation.</p> <p>This includes adequate protection for any partially buried or unprotected cables.</p>		
10.10	Table 15.3, Section 15.3.5, ES Chapter 15	Navigation and collision risk to maritime users within the of the project area.	Active monitoring of development to ensure that the structures and / or cables would not become a hazard to navigation over time, for example, export or inter-array cables becoming exposed.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 6 (6)
10.11	Table 15.3, Section 15.3.5, ES Chapter 15	Navigation and collision risk to maritime users within the of the project area.	All support craft associated with the proposed East Anglia THREE project would carry an AIS.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 15
10.12	Table 15.3, Section 15.3.5, ES Chapter 15	Impediment and safety to Search and Rescue operators.	Recent changes to marine guidance (MGN 371) require all offshore windfarm sites to maintain at least one single direction of orientation to assist surface craft navigation and also used as search and rescue corridors. Phased development will also be required to consider cumulative impacts of alignment.	Embedded mitigation, no effect on significance of assessed impact	DML Part 2, 13 (a)
10.13	Table 15.3, Section 15.3.5, ES Chapter 15	Navigation and collision risk to maritime users within the of the project area.	Individual OREI marking should conform to a spread sheet layout, i.e. lettered on the horizontal axis, and numbered on the vertical axis. The detail of this will depend on the shape, geographical orientation of the final sites. Again cumulative	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 7, 8

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
			considerations with phasing shall also be considered		
10.14	Section 15.6.1	Impacts on Commercial Vessel Safe Navigation	Compliance with COLREGs	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement.
10.15	Section 15.6.1	Impacts on Commercial Vessel Safe Navigation	Where cable protection is required, assessment carried out in line with a number of factors, including marine traffic data, to ensure it does not present a risk to anchoring, emergency anchoring or under keel clearance. It is assumed that partially buried cables would be marked and guarded as required to ensure they do not present a risk to anchoring vessels.	Embedded mitigation, no effect on significance of assessed impact	Cable protection plan DML, Part 2, 13 (g) ii
<b>Aviation &amp; MOD</b>					
11.1	Section 16.3.2, ES Chapter 16.	Creation of an aviation obstacle environment during construction and operation.	Measures would be adopted at the commencement of works at the East Anglia THREE site to ensure that the aviation sector is made aware of the creation of a further aviation obstacle environment. These measures would include issuing permanent short-term NOTAMs and Aeronautical Information Circulars (AICs), warning of the establishment of obstacles within the area of the East Anglia THREE	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 10

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
			site and publicity in such aviation publications as Safety Sense and General Aviation Safety Information Leaflet (GASIL).		
11.2	Section 16.3.2, ES Chapter 16	Creation of an aviation obstacle environment during construction and operation.	At various points during the project, details of the position, height (AMSL) and lighting of each of the completed permanent structures in the project would be forwarded to the CAA Aeronautical Information Service (AIS) for inclusion in Aeronautical Information Publications (AIPs) and on relevant aeronautical charts, as notifiable permanent obstructions. This permanent information would replace the short-term NOTAMs that would continue to be issued to cover the project until construction has been completed.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 10
11.3	Section 16.3.2, ES Chapter 16	Creation of an aviation obstacle environment during operation.	In terms of marking the wind turbines, in keeping with recent practice for offshore windfarms, it is anticipated that Trinity House would require all structures to be painted yellow from the level of HAT to a height directed by Trinity House and above the yellow section, all wind turbines would be painted submarine grey (colour code RAL7035).  See also commitment 10.3.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 7, 8

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
11.4	Section 16.3.2, ES Chapter 16	Creation of an aviation obstacle environment during operation.	EATL would light the East Anglia THREE site in accordance with CAP 393. ANO Article 219 defines an 'en-route obstacle' as any building, structure or erection, the height of which is 150 m or more above ground level (AGL) and requires these to be lit	Embedded mitigation, no effect on significance of assessed impact	Compliance with CAP 393
11.5		Creation of an aviation obstacle environment during operation.	The MCA is seeking that wind turbine tips are marked in red, together with markings down the blade, to safeguard Search and Rescue (SAR) helicopter operations as set out in MGN 371. EATL would consider reasonable proposals from SAR operators for a lighting scheme and wind turbine shutdown protocol to be applied during rescue situations. An ERCoP would be developed and implemented for all phases of the proposed project, based upon the MCA's standard template	Embedded mitigation, no effect on significance of assessed impact	DML ,14(5) of schedules 10 – 15  Compliance with MGN 371
11.6	Section 16.6.2, ES Chapter 16	Wind turbines causing permanent interference on civil and military radars.	If the wind farms design, based on the agreed parameters, result in a probability of detection above the system threshold, additional mitigation, if required, would be implemented.	Embedded mitigation, no effect on significance of assessed impact	DCO Sch 1, Part 3, 33
Offshore Archaeology & Cultural Heritage					
12.1	Section 17.3.3.1, ES	Direct impacts to known	The implementation of AEZs around known	Embedded mitigation, no effect	DML, Part 2, 13 h iv

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
	Chapter 17	archaeological receptors	archaeological assets.	on significance of assessed impact	
12.2	Section 17.3.3.1, ES Chapter 17	Direct impacts to known archaeological receptors	The design-layout to avoid, where possible, the sites identified through geophysical survey as having potential archaeological interest	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 a xii DML, Part 2, 13 h iv
12.3	Section 17.3.3.1, ES Chapter 17	Direct impacts to known or unknown archaeological receptors	Measures to deal with unavoidable impacts to potential receptors, if they should occur, will be set out in a Written Scheme of Investigation (WSI).	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 h
12.4	Section 17.3.3.3	Direct impacts or indirect impacts to unknown archaeological receptors	The potential for unexpected discoveries during the course of the project would be accounted for through the implementation of the ORPAD.	Embedded mitigation, no effect on significance of assessed impact	DML, Part 2, 13 h (vi)
<b>Infrastructure &amp; Other Users</b>					
13.1	Section 18.3.3, ES Chapter 18	Disruption to other marine infrastructure/users (oil & gas, aggregate, military).	The location of the East Anglia THREE site and offshore cable corridor has been selected to minimise potential interaction with neighbouring infrastructure. It has been located outside any existing active oil and gas wells, areas of licensed dredging and aggregate extraction, Ministry of Defence danger areas and known military practice and exercise areas.	Embedded mitigation, no effect on significance of assessed impact	No specific DML requirement. Coordinates of the site are listed in DML, Part 1, 5
13.2	Section 18.3.3, ES	Interference and	The East Anglia THREE site has been located	Embedded	No specific DML

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
	Chapter 18	Damage to Sub-sea Cables and Pipelines	to avoid existing telecommunication and transmission cables. The East Anglia THREE offshore export and interconnector cables would be aligned so that where there are crossings with other cables and pipelines as near as practicable to a 90° angle	mitigation, no effect on significance of assessed impact	requirement. Coordinates of the site are listed in DML, Part 1, 5
13.3	Section 18.3.3. ES Chapter 18.	Interference and Damage to Sub-sea Cables and Pipelines	Owners and operators of other infrastructure (including oil and gas developers, dredging companies and electrical and telecommunication cable operators) are, and will continue to be, consulted by EATL and legal agreements would be put in place where required. These may relate to setback distances or cable crossing agreements should the project achieve consent. Cable crossing agreements would be agreed in the outline design.	Embedded mitigation, no effect on significance of assessed impact	No DML requirement.  Would be agreed through Cable Crossing agreements
13.4	Section 18.3.3, ES Chapter 18	Risk from unexploded ordinance.	An Enhanced Risk Assessment would be required to ascertain the requirements for geophysical survey coverage of site investigation at specific locations within the East Anglia THREE site and offshore cable corridor due to the large variety of threat items that may be present across these areas. This would provide an analysis of the contacts at the location and a sign-off	Embedded mitigation, no effect on significance of assessed impact	No DML requirement.

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
			certificate would be provided to the contractor to determine that the risks associated with site investigation are reduced to ALARP.		
13.5	Section 18.3.3, ES Chapter 18	Risk from unexploded ordinance.	Upon detailed review of geophysical data (including side scan sonar and a detailed magnetometer survey) and other available data, where necessary recovery operations using ROVs would be considered prior to construction to confirm details of any suspected UXO.	Embedded mitigation, no effect on significance of assessed impact	No DML requirement.
13.6	Section 18.3.3, ES Chapter 18	Risk from unexploded ordinance.	A UXO operational plan would be implemented. The plan would include the nomination of an experienced crew member to be trained as a UXO co-ordinator, enabling them to recognise potential UXO and equipping them with the knowledge on how to react following the discovery of a UXO.	Embedded mitigation, no effect on significance of assessed impact	No DML requirement.
13.7	Section 18.3.3, ES Chapter 18	Risk from unexploded ordinance.	Crew level munition safety and awareness briefings within the inductions and toolbox talks.	Embedded mitigation, no effect on significance of assessed impact	No DML requirement.
13.8	Section 18.3.3, ES Chapter 18	Risk from unexploded ordinance.	Munition recognition posters for use on-board all vessels.	Embedded mitigation, no effect on significance of	No DML requirement.

Reference	Cross reference to Environmental Statement	Environmental impact	Mitigation measure commitment	Effect of mitigation	Means of implementation
				assessed impact	
13.9	Section 18.3.3, ES Chapter 18	Risk from unexploded ordinance.	Where necessary micro-siting of infrastructure to avoid potential UXO based on further detailed investigation.	Embedded mitigation, no effect on significance of assessed impact	No DML requirement.

**Document 6.8 Ends Here**