East Anglia TWO Offshore Windfarm

Habitat Regulations Assessment

Appendix 2 – Information to Support AA Report - Screening Matrices (Tracked)

Applicant: East Anglia TWO Limited
Document Reference: 5.3.2
SPR Reference: EA2-DWF-ENV-REP-IBR-000932_002
Pursuant to APFP Regulation: 5(2)(g)

Author: Royal HaskoningDHV
Date: 2nd November 2020
Revision: Version 02

Applicable to East Anglia TWO

Revision Summary				
Rev	Date	Prepared by	Checked by	Approved by
001	08/10/2019	Paolo Pizzolla	Julia Bolton	Helen Walker
002	02/11/2020	Paolo Pizzolla	Lesley Jamieson	Rich Morris

Description of Revisions			
Rev	**Page**	**Section**	**Description**
001	n/a	n/a	Final for Submission
002	n/a	n/a	Final for Submission following Exa Qs 1.2.3

Glossary of Acronyms

AA	Appropriate Assessment
APP	Application Document
EIA	Environmental Impact Assessment
EMF	Electromagnetic Field
HRA	Habitats Regulations Assessment
LSE	Likely Significant Effect
SAC	Special Area of Conservation
SCI	Site of Community Importance
SPA	Special Protection Area

Glossary of Terminology

Applicant	East Anglia TWO Limited.
East Anglia TWO project	The proposed project consisting of up to 75 wind turbines, up to four 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 TWO windfarm site	The offshore area within which wind turbines and offshore platforms will be located.
European site	Sites designated for nature conservation under the Habitats Directive and Birds Directive, as defined in regulation 8 of the Conservation of Habitats and Species Regulations 2017 and regulation 18 of the Conservation of Offshore Marine Habitats and Species Regulations 2017. These include candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation and Special Protection Areas.
Evidence Plan Process (EPP)	A voluntary consultation process with specialist stakeholders to agree the approach to the EIA and the information required to support HRA.
Natura 2000 site	A site forming part of the network of sites made up of Special Areas of Conservation and Special Protection Areas designated respectively under the Habitats Directive and Birds Directive.
Offshore cable corridor	This is the area which will contain the offshore export cables between offshore electrical platforms and landfall.
Offshore development area	The East Anglia TWO windfarm site and offshore cable corridor (up to Mean High Water Springs).
Offshore export cables	The cables which would bring electricity from the offshore electrical platforms to the landfall. These cables will include fibre optic cables.
Offshore infrastructure	All of the offshore infrastructure including wind turbines, platforms, and cables.

Table of Contents

1 Introduction

1. This document provides the Information to Support Appropriate Assessment Report screening matrices for the proposed East Anglia TWO project. The matrices summarise information provided in ***Appendix 1*** (Offshore Habitats Regulations Assessment (HRA) Screening) of the Information to Support Appropriate Assessment (AA) report (document reference 5.3).

2. For Deadline 1 this document has been revised to address the following:

- A request from the Examining Authority to include the following sites that were missing from the Screening Matrices submitted with the application (Question 1.2.3):
  - Plymouth Sound and Estuaries SAC
  - Severn Estuary SAC
  - River Avon SAC
  - Havet Omkring Nordre Ronner (SAC or SPA - not stated)
  - Knudegrund SAC
  - Lønstrup Rødgrund SAC
  - Sandbanker ud for Thorsminde SAC
  - Sandbanker ud for Thyboron SAC
  - Thyboron Stenvolde SCI
  - Littoral Cauchois SAC
  - Panache De La Gironde Et Plateau Rocheux De Cordouan (Système Pertuis Gironde) SAC
  - Pertuis Charentais SAC
  - Mühlenberger Loch ~~/ Nessand SCI~~SPA
  - SchleswigHolsteinisches Elbastuar und angrenzende Flachen SAC
  - Unterelbe SCI
  - Saxa Water SPA and Ramsar site (this was a typographic error in the HRA screening report (APP-044) and should be 'Hamford Water SPA and Ramsar site'. Hamford Water SPA and Ramsar site was excluded from the screening matrices in error and has now been included)
  - Schleswig-Holsteinisches Elbastuar und angrenzende Flachen SAC

- Provide a revised version of the matrices with footnotes updated to include document and paragraph number references to the application materials where the evidence can be found (Question 1.2.4).

2 Screening Matrices

2.1 Effects Considered

~~1.~~3. Potential effects upon the European sites which are considered within the submitted Information to Support AA report are provided in ***Table 2.1***.

Table 2.1 Potential Effects consider in Screening

Site Type	Feature(s)	Potential Effects
Special Protection Area (SPA)	All birds	Offshore effects: • Collision mortality • Displacement/Disturbance • Barrier effect • Cumulative/ In-combination Onshore effects: • Direct effects within SPA boundary • Direct effects on ex-situ habitats • Indirect effects within SPA boundary • Indirect effects on ex-situ habitats
Special Area of Conservation/Site of Community Importance (SAC/SCI)	Benthic habitats	• Permanent loss (and introduction of new sediment where applicable) • Temporary physical disturbance • Smothering due to increased suspended sediment • Re- mobilisation of contaminated sediments • Underwater noise and vibration • Cumulative/ In-combination
	Marine mammals	• Underwater noise • Vessel Interactions • Indirect effects on prey • Changes to water quality • Cumulative/ In-combination

Site Type	Feature(s)	Potential Effects
	Fish	• Permanent loss (and introduction of new sediment where applicable) • Temporary physical disturbance • Smothering due to increased suspended sediment • Re- mobilisation of contaminated sediments • Underwater noise and vibration • Electromagnetic fields (EMF) • Cumulative/ In-combination
	Terrestrial	• Direct effects (e.g. habitat loss) • Impacts on ex-situ habitats functionally connected to the SAC • Impacts from alterations to geology and land contamination • Disturbance due to groundwater / hydrology changes • Impacts from noise disturbance • Impacts from changing air quality • Impacts from light disturbance • Impacts from visual disturbance

2.2 Sites Considered

~~2.~~4. The methodology for screening of sites and effects is discussed in ***Appendix 1*** of the Information to Support AA report.

~~3.~~5. The following sites displayed in ***Table 2.2*** were included in the Screening stage.

Table 2.2 Sites included in Screening

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
1 ~~1~~	Abberton Reservoir SPA & Ramsar	✓				
2 ~~2~~	Abers - Côtes des légendes SAC		✓			
3 ~~3~~	Agger Tange, Nissum Bredning, Skibsted Fjord og Agerø SAC		✓			

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
4 ~~4~~	Ålborg Bugt, Randers Fjord Og Mariager Fjord SAC		✓			
5 ~~5~~	Alde, Ore and Butley Estuaries SAC			✓		
6 ~~6~~	Alde-Ore Estuary SPA & Ramsar	✓				
7 ~~7~~	Anholt og havet nord for SAC		✓			
8 ~~8~~	Archipel des Glénan SAC		✓			
9 ~~9~~	Baie De Canche Et Couloir Des Trois Estuaires SAC		✓		✓	
10 ~~10~~	Baie de Morlaix SAC		✓			
11 ~~11~~	Baie de Seine Occidentale SAC		✓			
12 ~~12~~	Baie de Seine Occidentale SPA	✓				
13 ~~13~~	Baie de Seine Orientale SAC	✓	✓			
14 ~~14~~	Baie du Mont Saint-Michel SAC		✓			
15 ~~15~~	Balgö SAC		✓			
16 ~~16~~	Bancs Des Flandres SAC		✓	✓		
17 ~~17~~	Bassurelle Sandbank SAC			✓		
18 ~~18~~	Benacre to Easton Bavents SPA	✓				
19 ~~19~~	Benfleet and Southend Marshes SPA & Ramsar	✓				

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
20 ~~20~~	Berwickshire and North Northumberland Coast SAC		✓	✓		
21 ~~21~~	Blackwater Estuary (Mid-Essex Coast Phase 4) SPA & Ramsar	✓				
22 ~~22~~	Borkum-Riffgrund SCI		✓		✓	
23 ~~23~~	Borkum-Riffgrund SPA	✓				
24 ~~24~~	Braemar Pockmarks SAC			✓		
25 ~~25~~	Breydon Water SPA & Ramsar	✓				
26 ~~26~~	Broadland SPA & Ramsar	✓				
27 ~~27~~	Bruine Bank pSPA	✓				
28 ~~28~~	Buchan Ness to Collieston Coast SPA	✓				
29 ~~29~~	Calf of Eday SPA	✓				
30 ~~30~~	Cap Sizun SAC		✓			
31 ~~31~~	Chausey SAC	✓	✓			
32 ~~32~~	Chaussée de Sein SAC		✓			
33 ~~33~~	Chesil Beach and The Fleet SPA & Ramsar	✓				
34 ~~34~~	Chichester and Langstone Harbours SPA & Ramsar	✓				
35 ~~35~~	Colne Estuary (Mid-Essex Coast Phase 2) SPA & Ramsar	✓				
36 ~~36~~	Copinsay SPA	✓				
37 ~~37~~	Coquet Island SPA	✓				

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
38 ~~38~~	Côte de Granit Rose-Sept Iles SAC	✓	✓			
39 ~~39~~	Cromarty Firth SPA & Ramsar	✓				
40 ~~40~~	Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA & Ramsar	✓				
41 ~~41~~	Deben Estuary SPA & Ramsar	✓				
42 ~~42~~	Dengie (Mid-Essex Coast Phase 1) SPA & Ramsar	✓				
43 ~~43~~	Doggerbank SCI		✓			
44 ~~44~~	Doggersbank SCI		✓			
45 ~~45~~	Dornoch Firth and Loch Fleet SPA & Ramsar	✓				
46 ~~46~~	Dornoch Firth and Morrich More SAC		✓			
47 ~~47~~	Dråby Vig SAC		✓			
48 ~~48~~	Dünenlandschaft Süd-Sylt SAC		✓			
49 ~~49~~	Dunes De La Plaine Maritime Flamande SAC		✓	✓		
50 ~~50~~	East Caithness Cliffs SPA	✓				
51 ~~51~~	Essex Estuaries SAC			✓		
52 ~~52~~	Estuaire de la Canche, dunes picardes plaquées sur l'ancienne falaise, forêt d'Hardelot et falaise d'Equihen SAC		✓			

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
53 ~~53~~	Estuaire de la Seine SCI		✓			
54 ~~54~~	Estuaires et Littoral Picards (baies de Somme et d'Authie) SAC		✓		✓	
55 ~~55~~	Exe Estuary SPA & Ramsar	✓				
56 ~~56~~	Fair Isle SPA	✓				
57 ~~57~~	Falaise du Bessin Occidental SPA	✓				
58 ~~58~~	Falaises du Cran Aux Oeufs et du Cap Gris-Nez, Dunes du Chatelet, Marais de Tardinghen et Dunes de Wissant SAC		✓	✓		
59 ~~59~~	Faray and Holm of Faray SAC		✓			
60 ~~60~~	Farne Islands SPA	✓				
61 ~~61~~	Fetlar SPA	✓				
62 ~~62~~	Firth of Forth SPA & Ramsar	✓				
63 ~~63~~	Firth of Tay & Eden Estuary SPA & Ramsar	✓				
64 ~~64~~	Firth of Tay & Eden Estuary SAC		✓			
65 ~~65~~	Flamborough and Filey Coast SPA	✓				
66 ~~66~~	Flamborough Head SAC			✓		
67 ~~67~~	Forth Islands SPA	✓				
68 ~~68~~	Foula SPA	✓				

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
69 ~~69~~	Foulness (Mid-Essex Coast Phase 5) SPA & Ramsar	✓				
70 ~~70~~	Fowlsheugh SPA	✓				
71 ~~71~~	Frisian Front SPA	✓				
72 ~~72~~	Gibraltar Point SPA & Ramsar	✓				
73 ~~73~~	Great Yarmouth North Denes SPA	✓				
74 ~~74~~	Greater Wash SPA	✓				
75 ~~75~~	Gule Rev SCI		✓			
76 ~~76~~	Gullmarsfjorden SAC		✓			
77 ~~77~~	Haisborough, Hammond and Winterton SAC			✓		
78 ~~78~~	Hamburgisches Wattenmeer SCI		✓			
79	Hamford Water SPA & Ramsar	✓				
80 ~~79~~	Havet Omking Norde Ronner SAC		✓			
~~79~~81 ~~80~~79	Helgoland mit Helgoländer Felssockel SAC		✓			
~~80~~82 ~~81~~80	Hermaness, Saxa Vord and Valla Field SPA	✓				
~~81~~83 ~~82~~81	Hesselø med omliggende stenrev SAC		✓			
~~82~~84 ~~83~~82	Hirsholmene, havet vest herfor og Ellinge Å's udløb SAC		✓			

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
~~83~~85 ~~8483~~	Hornsea Mere SPA	✓				
~~84~~86 ~~8584~~	Hoy SPA	✓				
~~85~~87 ~~8685~~	Humber Estuary SAC		✓	✓	✓	
~~86~~88 ~~8786~~	Humber Estuary SPA & Ramsar	✓				
~~87~~89 ~~8887~~	Hund und Paapsand SCI		✓			
~~88~~90 ~~8988~~	Imperial Dock Lock, Leith SPA	✓				
~~89~~91 ~~9089~~	Inner Dowsing, Race Bank and North Ridge SCI			✓		
~~90~~92 ~~9190~~	Inner Moray Firth SPA & Ramsar	✓				
~~91~~93 ~~9291~~	Isle of May SAC		✓			
~~92~~94 ~~9392~~	Klaverbank SAC		✓			
95 ~~94~~	Knu~~n~~degrund SAC		✓			
~~93~~96 ~~9593~~	Kosterfjorden-Väderöfjorden SAC		✓			
~~94~~97 ~~9694~~	Kungsbackafjorden SAC		✓			
~~95~~98 ~~9795~~	Küsten- und Dünenlandschaften Amrums SAC		✓			
~~96~~99 ~~9896~~	Lindisfarne SPA & Ramsar	✓				
100 ~~99~~	Littoral Cauchois SAC			✓		
~~97~~101 ~~1009 7~~	Littoral Seino-Marin SPA	✓				
~~98~~102 ~~1019 8~~	Loch of Strathbeg SPA & Ramsar	✓				

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
103 ~~102~~	Lønstrup Rødgrund SAC		✓			
~~99~~104 ~~1039~~	Løgstør Bredning, Vejlerne og Bulbjerg SAC		✓			
~~100~~105 ~~1041 00~~	Lovns Bredning, Hjarbæk Fjord og Skals, Simested og Nørre Ådal, Skravad Bæk SAC		✓			
~~101~~106 ~~1051 01~~	Malmöfjord SAC		✓			
~~102~~107 ~~1061 02~~	Marais du Cotentin et du Bessin - Baie des Veys SAC		✓			
~~103~~108 ~~1071 03~~	Margate and Long Sands SCI			✓		
~~104~~109 ~~1081 04~~	Marwick Head SPA	✓				
~~105~~110 ~~1091 05~~	Måseskär SAC		✓			
~~106~~111 ~~1101 06~~	Medway Estuary and Marshes SPA & Ramsar	✓				
112	Minsmere to Walberswick Heaths and Marshes SAC			✓	✓	
~~107~~113 ~~1111 07~~	Minsmere-Walberswick SPA & Ramsar	✓		-	-	
~~108~~114 ~~1121 08~~	Montrose Basin SPA & Ramsar	✓				
~~109~~115 ~~1131 09~~	Moray and Nairn Coast SPA & Ramsar	✓				
~~110~~116 ~~1141 10~~	Mousa SPA	✓				

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
~~111~~117 ~~1151 11~~	Mousa SAC		✓			
118 ~~116~~	Muhlenberger Loch SPA		✓	✓	✓	
~~112~~119 ~~1171 12~~	Nationalpark Niedersächsisches Wattenmeer SAC		✓			
~~113~~120 ~~1181 13~~	Nibe Bredning, Halkær Ådal og Sønderup Ådal SAC		✓			
~~114~~121 ~~1191 14~~	Nidingen SAC		✓			
~~115~~122 ~~1201 15~~	Noordzeekustzone SAC		✓	✓	✓	
~~116~~123 ~~1211 16~~	Nordre älvs estuarium SAC		✓			
~~117~~124 ~~1221 17~~	Nordvästra Skånes havsområde SAC		✓			
~~118~~125 ~~1231 18~~	North Caithness Cliffs SPA	✓				
~~119~~126 ~~1241 19~~	North Norfolk Coast SPA & Ramsar	✓				
~~120~~127 ~~1251 20~~	North Norfolk Sandbanks and Saturn Reef SAC			✓		
~~121~~128 ~~1261 21~~	Northumbria Coast SPA & Ramsar	✓				
~~122~~129 ~~1271 22~~	Noss SPA	✓				
~~123~~130 ~~1281 23~~	NTP S-H Wattenmeer und angrenzende Küstengebiete SAC		✓			
~~124~~131 ~~1291 24~~	Oosterschelde SAC		✓			

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
~~125~~132 ~~1301 25~~	Orfordness - Shingle Street SAC			✓		
~~126~~133 ~~1311 26~~	Östliche Deutsche Bucht SPA	✓				
~~127~~134 ~~1321 27~~	Ouessant-Molène SAC		✓			
~~128~~135 ~~1331 28~~	Outer Thames Estuary SPA	✓				
~~129~~136 ~~1341 29~~	Papa Stour SPA	✓				
137 ~~135~~	Panache De La Gironde Et Plateau Rocheux De Cordouan (Systeme Pertuis Gironde) SAC		✓	✓	✓	
~~130~~138 ~~1361 30~~	Papa Westray (North Hill and Holm) SPA	✓				
~~131~~139 ~~1371 31~~	Pater Noster-skärgården SAC		✓			
~~132~~140 ~~1381 32~~	Pentland Firth Islands SPA	✓				
141 ~~139~~	Pertuis Charentais SAC		✓	✓	✓	
142 ~~140~~	Plymouth Sound and Estuaries SAC			✓	✓	
~~133~~143 ~~1411 33~~	Portsmouth Harbour SPA & Ramsar	✓				
~~134~~144 ~~1421 34~~	Presqu'ile de Crozon SAC		✓			
~~135~~145 ~~1431 35~~	Ramsar-Gebiet S-H Wattenmeer und angrenzende Küstengebiete SPA	□				
~~136~~146 ~~1361 44~~	Récifs et marais arrière-littoraux du Cap Lévi à la Pointe de Saire SAC		✓			

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
~~137~~147 ~~1371~~45	Récifs Gris-Nez Blanc-Nez SAC		✓	✓		
~~138~~148 ~~1461~~38	Ridens et dunes hydrauliques du détroit du Pas-de-Calais SAC		✓	✓		
149 ~~147~~	River Avon SAC				✓	
~~139~~150 ~~1481~~39	River Derwent SAC				✓	
~~140~~151 ~~1401~~49	Ronas Hill - North Roe and Tingon SPA	✓				
~~141~~152 ~~1501~~41	Rousay SPA	✓				
~~142~~153 ~~1511~~42	Sälöfjorden SAC		✓			
~~143~~154 ~~1521~~43	Sanday SAC		✓			
155 ~~153~~	Sandbanker ud for Thyboron SAC		✓			
156 ~~154~~	Sandbanker ud for Thorsminde SAC		✓			
~~144~~157 ~~1551~~44	Sandlings SPA	✓				✓
~~145~~158	SBZ 1 / ZPS 1 SAC		✓			
~~146~~159 ~~1591~~46	SBZ 2 / ZPS 2 ~~SPA~~SAC	✓				
~~147~~160 ~~1601~~47	SBZ 3 / ZPS 3 ~~SPA~~SAC	✓				
~~148~~161 ~~1611~~48	Scanner Pockmark SAC			✓		
162 ~~162~~	Schleswig-Holsteinisches Elbastuar und		✓	✓	✓	

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
	angrenzende Flachen SAC					
~~149~~163 ~~1631 49~~	Seevogelschutzgebiet Helgoland SPA	✓				
164 ~~164~~	Severn Estuary SAC			✓	✓	
~~150~~165 ~~1651 50~~	Skagens Gren og Skagerrak SAC		✓			
~~151~~166 ~~1661 51~~	Solent and Southampton Water SPA & Ramsar	✓				
~~152~~167 ~~1671 52~~	Soteskär SAC		✓			
~~153~~168 ~~1681 53~~	Southern North Sea SAC		✓			
~~154~~169 ~~1691 54~~	St Abb`s Head to Fast Castle SPA	✓				
~~155~~170 ~~1701 55~~	Staverton Park and the Thicks Wantisden SAC					✓
~~156~~171 ~~1711 56~~	Steingrund SAC		✓			
~~157~~172 ~~1721 57~~	Store Rev SCI		✓			
~~158~~173 ~~1731 58~~	Stour and Orwell Estuaries SPA & Ramsar	✓				
~~159~~174 ~~1741 59~~	Strandenge på Læsø og havet syd herfor SAC		✓			
~~160~~175 ~~1751 60~~	Sumburgh Head SPA	✓				
~~161~~176 ~~1761 61~~	Sydlige Nordsø SAC		✓			
~~162~~177 ~~1771 62~~	Sylter Außenriff SCI	✓	✓			

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
~~163~~178 ~~1781~~ ~~63~~	Teesmouth and Cleveland Coast SPA & Ramsar	✓				
~~164~~179 ~~1791~~ ~~64~~	Thames Estuary and Marshes SPA & Ramsar	✓				
~~165~~180 ~~1801~~ ~~65~~	Thanet Coast and Sandwich Bay SPA & Ramsar	✓				
~~166~~181 ~~1811~~ ~~66~~	Thanet Coast SAC			✓		
~~167~~182 ~~1821~~ ~~67~~	The Swale SPA & Ramsar	✓				
~~168~~183 ~~1831~~ ~~68~~	The Wash and North Norfolk Coast SAC		✓	✓		
~~169~~184 ~~1841~~ ~~69~~	The Wash SPA & Ramsar	✓				
185 ~~185~~	Thyboron Stenvolde SCI		✓			
~~170~~186 ~~1701~~ ~~86~~	Tregor Goëlo SAC		✓			
~~171~~187 ~~1711~~ ~~87~~	Troup, Pennan and Lion`s Heads SPA	✓				
188 ~~188~~	Unterelbe SCI				✓	
~~172~~189 ~~1721~~ ~~89~~	Unterems und Außenems SCI		✓			
~~173~~190 ~~1731~~ ~~90~~	Vadehavet med Ribe Å, Tved Å og Varde Å vest for Varde SAC		✓			
~~174~~191 ~~1741~~ ~~91~~	Venø, Venø Sund SAC		✓			
~~175~~192 ~~1751~~ ~~92~~	Vlaamse Banken SAC		✓	✓	✓	

East Anglia TWO Reference Number	Designated site	Ornithology	Marine Mammals	Benthic Habitats	Fish	Terrestrial
~~176~~193 ~~1761~~ ~~93~~	Vlakte van de Raan SCI/SAC		✓		✓	
~~177~~194 ~~1771~~ ~~94~~	Voordelta SAC and SPA	✓	✓	✓	✓	
~~178~~195 ~~1781~~ ~~95~~	Vrångöskärgården SAC		✓			
~~179~~196 ~~1791~~ ~~96~~	Waddenzee SPA	✓				
~~180~~197 ~~1801~~ ~~97~~	Waddenzee SAC		✓	✓		
~~181~~198 ~~1811~~ ~~98~~	West Westray SPA	✓				
~~182~~199 ~~1821~~ ~~99~~	Westerschelde & Saeftinghe SAC				✓	
~~183~~200 ~~1832~~ ~~00~~	Winterton – Horsey Dunes SAC		✓			
~~184~~201 ~~1842~~ ~~01~~	Yell Sound Coast SAC		✓			
~~185~~202 ~~1852~~ ~~02~~	Ythan Estuary, Sands of Forvie and Meikle Loch SPA	✓				

2.3 Assessment of potential effects

~~4.~~6. A summary of the evidence presented in the determination of the risk of likely significant effects (LSE) on the relevant qualifying features of a site is detailed within the footnotes to the screening matrices below.

~~5.~~7. The following abbreviations are used within the screening matrices:

- Y = LSE **cannot** be excluded
- N = LSE **can** be excluded
- C = construction
- O = operation
- D = decommissioning

~~6.~~8. Where effects are not applicable to a particular feature they are greyed out.

Site	1										
Name of European Site:	Abberton Reservoir SPA and Ramsar										
Distance to East Anglia TWO (km)	88 (windfarm site) and 62 (offshore cable corridor)										
Site Features	Likely effect(s) of East Anglia TWO										
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features shoveler *Anas clypeata*, teal *Anas crecca*, wigeon *Mareca penelope*, gadwall *Mareca strepera*, pochard *Mareca strepera*, tufted duck *Aythya fuligula*, goldeneye *Bucephala clangula*, mute swan *Cygnus olor*, coot *Fulica atra*, great crested grebe *Podiceps cristatus*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding cormorant *Phalacrocorax carbo*		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of the SPA features found at that site occurring in the East Anglia TWO windfarm site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO windfarm site (see section 5.1 of Appendix 12.2 (APP-470), none of these species were recorded in the East Anglia TWO windfarm site). Also see Table 8.2 of the HRA Screening Report (APP-044)).

b) Maximum foraging range of breeding cormorants from their colonies is 35km (Thaxter et al. 2012); the East Anglia TWO site is therefore located beyond the maximum range and so has no breeding season connectivity. It is extremely unlikely that cormorants from Abberton Reservoir SPA would visit the East Anglia TWO windfarm site in the non-breeding season as they mostly overwinter in freshwater habitat in southern England Survey data show no evidence of cormorant occurring in the East Anglia TWO windfarm site (see section 5.1 of Appendix 12.2 (APP-470).

Site	**1**
Name of European Site:	**Abberton Reservoir SPA and Ramsar**

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Abberton Reservoir SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**2**														
Name of European Site:	**Abers - Côtes Des Legendes SAC**														
Distance to East Anglia TWO (km)	**599 (windfarm site)**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

a) The distance between the potential impact range of the East Anglia TWO windfarm site and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 190 and 191 and Table 7.3 of the HRA Screening Report (APP-044)).

Site	**3**
Name of European Site:	**Agger Tange, Nissum Bredning, Skibsted Fjord og Agerø SAC**
Distance to East Anglia TWO (km)	**603**
Site Features	Likely effect(s) of East Anglia TWO

Site	3														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	4														
Name of European Site:	Ålborg Bugt, Randers Fjord og Mariager Fjord SAC														
Distance to East Anglia TWO (km)	843														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	5																	
Name of European Site:	Alde, Ore and Butley Estuaries SAC																	
Distance to East Anglia TWO (km)	3.6																	
Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Offshore habitats																		
Mudflats and sandflats not covered by seawater at low tide	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Estuaries	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Atlantic Salt Meadows	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

a) Within range of theoretical indirect effect (sediment deposition) but effect negligible as features are primarily sedimentary (see paragraphs 120 and 121 of the HRA Screening Report (APP-044).

Site	6											
Name of European Site:	Alde-Ore Estuary SPA and Ramsar											
Distance to East Anglia TWO (km)	37 (windfarm site) and 4 (offshore cable corridor)											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D

Site	6											
Name of European Site:	Alde-Ore Estuary SPA and Ramsar											
Distance to East Anglia TWO (km)	37 (windfarm site) and 4 (offshore cable corridor)											
Breeding lesser black-backed gulls *Larus fuscus*		**Y (a)**		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (h)	**Y (a)**	N (h)
Breeding marsh harrier *Circus aeruginosus*		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (ch)	N (hc)	N (ch)
Breeding avocet *Recurvirostra avosetta*		N (d)		N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (h)	N (h)	N (h)
Breeding little tern *Sternula albifrons*		N (e)		N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)
Breeding Sandwich tern *Sterna sandvicensis*		N (f)		N (f)	N (f)	N (f)	N (f)	N (f)	N (f)	N (h)	N (h)	N (h)
Nonbreeding ruff *Philomachus pugnax*, avocet, redshank *Tringa totanus*		N (g)		N (g)	N (g)	N (g)	N (g)	N (g)	N (g)	N (h)	N (h)	N (h)
Seabird assemblage of international importance		Y (i)		N (h	N (h	N (h	N (h	N (h	N (h	N (h	Y (i)	N (h

a) Model predictions of collision mortality indicate that LSE cannot be ruled out at screening and so requires further consideration (see paragraph 266 of the HRA Screening Report (APP-044)).

b) Evidence indicates that lesser black-backed gulls are not affected by displacement, disturbance or barrier effects at offshore wind farms (see Table 12.4 Chapter 12 – Offshore Ornithology (APP-060).

c) Marsh harrier is a migrant species. Satellite tracking suggests that marsh harriers migrate overland to the south coast of England and over the Channel to France, rather than across the North Sea.

d) Avocet has not been observed in the East Anglia TWO windfarm site during bird surveys (see section 5.1 of Appendix 12.2 (APP-470)). It is highly unlikely that avocets from this SPA will migrate through the East Anglia TWO windfarm site, and if they did, their flight height is likely not to be at collision risk height.

Site	**6**
Name of European Site:	**Alde-Ore Estuary SPA and Ramsar**
Distance to East Anglia TWO (km)	**37 (windfarm site) and 4 (offshore cable corridor)**

e) Breeding little tern has a maximum foraging range of 11km from colonies, so would have no connectivity with the East Anglia TWO site. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia TWO windfarm site.

f) Breeding Sandwich tern has a maximum foraging range of 54km from colonies, so would have connectivity with the East Anglia TWO windfarm site. However, only very small numbers of terns of any species were observed in the East Anglia TWO site in surveys (see section 5.2 of Appendix 12.2 (APP-470)). Migrating Sandwich terns from this SPA population will form a very small fraction of the very small total numbers of terns passing the site on passage.

g) Ruff, avocet and redshank were not ~~have not been~~ observed during bird surveys at the East Anglia TWO windfarm site (see section 5.1 of Appendix 12.2 (APP-470)). It is highly unlikely that these birds would migrate through the East Anglia TWO site as their migration is likely to take a coastal route and cross sea at narrow points such as The English Channel. If they did migrate through the East Anglia TWO site their flight height is likely not to be at collision risk height.

h) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Alde-Ore Estuary SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

i) Herring gull populations may have connectivity with East Anglia TWO. This SPA holds the closest large colony of these species to East Anglia TWO, and some birds from that SPA may pass through East Anglia TWO during migration (screened in as per paragraph 266 of the HRA Screening Report (APP-044) however 0 collisions assessed for project-alone so no HRA assessment required within the Information to Support Appropriate Assessment Report (APP-043)).

Site	**7**														
Name of European Site:	**Anholt og havet nord for SAC**														
Distance to East Anglia TWO (km)	**904**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 for harbour seal and 190 and 191 for grey seal and Table 7.3 of the HRA Screening Report (APP-044))..															

Site	8														
Name of European Site:	Archipel des Glénan SAC														
Distance to East Anglia TWO (km)	638														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	**9**															
Name of European Site:	**Baie de Canche et couloir des trois estuaires SAC**															
Distance to East Anglia TWO (km)	**168**															
Marine Mammals																
Site Features	Likely effect(s) of East Anglia TWO															
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination			
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	
Harbour porpoise *Phocoena phocoena*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)	
Grey seal *Halichoerus grypus*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)	
Harbour seal *Phoca vitulina*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)	

Fish																					
Site Features	Likely effect(s) of East Anglia TWO																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Salmon *Salmo salar*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

Site	**9**																				
Name of European Site:	**Baie de Canche et couloir des trois estuaires SAC**																				
Distance to East Anglia TWO (km)	**168**																				
Site Features	Likely effect(s) of East Anglia TWO																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	C	O	C	O	C	O	D	C	O	D	C	O	D	C	O	D
Sea lamprey *Petromyzon marinus*	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~
River lamprey *Lampetra fluviatilis*	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~
Allis shad *Alosa alosa*	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

Site	**9**
Name of European Site:	**Baie de Canche et couloir des trois estuaires SAC**
Distance to East Anglia TWO (km)	**168**

~~a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site are negligible and would result in no potential for LSE.~~

b) It was agreed as part of the East Anglia TWO Scoping Report that transboundary impacts on fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA (see Appendix 10.1 (APP-462)).

Site	**10**															
Name of European Site:	**Baie De Morlaix SAC**															
Distance to East Anglia TWO (km)	**552**															
Site Features	Likely effect(s) of East Anglia TWO															
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination			
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	
Grey seal *Halichoerus grypus*	N(b~~a~~)	N(b~~a~~)	N(a)	N(b~~a~~)	N(a)	N(b~~a~~)	N(b~~a~~)	N(b~~a~~)	N(b~~a~~)	N(b~~a~~)		N(b~~a~~)	N(b~~a~~)	N(b~~a~~)	N(b~~a~~)	

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 7.3 of the HRA Screening Report (APP-044)).

Site	**11**

Name of European Site:	**Baie de Seine Occidentale SAC**														
Distance to East Anglia TWO (km)	**350**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 for harbour seal and paragraphs 168 and 169 for harbour porpoise and Table 7.3 of the HRA).Screening Report (APP-044)).

Site	**12**											
Name of European Site:	**Baie de Seine Occidentale SPA**											
Distance to East Anglia TWO (km)	**350**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding, wintering and passage waterbirds		N(a)		N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(b)	N(b)	N(b)

a) Survey data show little or no evidence of Baie de Seine Occidentale SPA features occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site, as most migrant waterfowl moving between northern breeding areas and southern wintering areas and using staging areas such as Baie de Seine Occidentale in France pass along the west European flyway along the continental coast rather than crossing the North Sea to the UK. At a distance of 341km, the chances of birds from this SPA moving through the East Anglia TWO site are extremely small (see section 5.1 of Appendix 12.2 (APP-470), none of SPA features were recorded in the East Anglia TWO windfarm site). Also see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Baie de Seine Occidentale SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**13**														
Name of European Site:	**Baie de Seine Orientale SAC**														
Distance to East Anglia TWO (km)	**324**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 for harbour seal and paragraphs 168 and 169 for harbour porpoise and Table 7.3 of the HRA).

Site	**14**
Name of European Site:	**Baie du Mont Saint-Michel SAC**

Distance to East Anglia TWO (km)	520														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 for harbour seal and paragraphs 190 and 191 for grey seal and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	15														
Name of European Site:	Balgö SAC														
Distance to East Anglia TWO (km)	903														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 for harbour seal and Table 7.3 of the HRA Screening Report (APP-044))..															

Site	**16**
Name of European Site:	**Bancs des Flandres SAC**
Distance to East Anglia TWO (km)	**82 (windfarm site) and 93 (offshore cable corridor)**

Marine Mammals

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal *Halichoerus grypus*	**Y(c)**	**Y(c)**	**Y(c)**	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

Benthic Habitats

Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)

Site	**16**
Name of European Site:	**Bancs des Flandres SAC**
Distance to East Anglia TWO (km)	**82 (windfarm site) and 93 (offshore cable corridor)**

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise and Table 7.3 of the HRA Screening Report (APP-044)).

b) As it has been agreed through the scoping and Evidence Plan ~~p~~Process (EPP) (see Appendix 9.1 (APP-458) that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes

c) The East Anglia TWO windfarm site is within the foraging range of grey seal and therefore the potential for LSE from underwater noise impacts cannot be ruled out.

Site	**17**																	
Name of European Site:	**Bassurelle Sandbank SAC**																	
Distance to East Anglia TWO (km)	**169 (windfarm site) and 172 (offshore cable corridor)**																	
Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D

Site	**17**																
Name of European Site:	**Bassurelle Sandbank SAC**																
Distance to East Anglia TWO (km)	**169 (windfarm site) and 172 (offshore cable corridor)**																
Sandbanks which are slightly covered by sea water all the time	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
a) The distance between the offshore project area and the designated site is beyond the range of any potential LSE.																	

Site	**18**											
Name of European Site:	**Benacre to Easton Bavents SPA**											
Distance to East Anglia TWO (km)	**19 (onshore cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding Great bittern *Botarus stellaris*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Breeding Eurasian marsh harrier *Circus aeruginosus*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Breeding Little tern *Sterna albifrons*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
a) No overlap therefore no direct effect and beyond the range of potential significant indirect effect (see Table 8.2 of the HRA Screening Report (APP-044)).												

Site	**19**											
Name of European Site:	**Benfleet & Southend Marshes SPA and Ramsar**											
Distance to East Anglia TWO (km)	**110 (windfarm site) and 93 (cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features brent goose *Branta bernicla*, dunlin *Calidris alpina*, knot *Calidris canutus*, ringed plover *Charadrius hiaticula*, grey plover *Pluvialis squatarola*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

b) Survey data show little or no evidence of Benfleet & Southend Marshes SPA features occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration (see section 5.1 of Appendix 12.2 (APP-470), none of these species were recorded in the East Anglia TWO windfarm site). Also see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Benfleet & Southend Marshes SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**20**
Name of European Site:	**Berwickshire and North Northumberland Coast SAC**
Distance to East Anglia TWO (km)	**4126 (windfarm site) and 407 (offshore cable corridor)**

Marine Mammals

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

Benthic Habitats

Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Coastal lagoons	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)
Submerged or partially	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)

Site	**20**																	
Name of European Site:	**Berwickshire and North Northumberland Coast SAC**																	
Distance to East Anglia TWO (km)	**4126 (windfarm site) and 407 (offshore cable corridor)**																	
submerged sea caves																		

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 7.3 of the HRA Screening Report (APP-044)).

b) The distance between the offshore project area and the designated site is beyond the range of any potential LSE (see section 5.2.1 of the HRA Screening Report (APP-044)).

~~a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE.~~

~~b) The distance between the offshore project area and the designated site is beyond the range of any potential LSE.~~

Site	**21**											
Name of European Site:	**Blackwater Estuary SPA and Ramsar**											
Distance to East Anglia TWO (km)	**88 (windfarm site) and 64 (offshore cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features brent goose, dunlin, ringed plover, black-		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (f)	N (f)	N (f)

Site	**21**
Name of European Site:	**Blackwater Estuary SPA and Ramsar**
Distance to East Anglia TWO (km)	**88 (windfarm site) and 64 (offshore cable corridor)**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
tailed godwit *Limosa limosa limosa*, grey plover												
Nonbreeding hen harrier *Circus cyaneus*		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (f)	N (f)	N (f)
Breeding pochard		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (f)	N (f)	N (f)
Breeding ringed plover		N (d)		N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (f)	N (f)	N (f)
Breeding little tern		N (e)		N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)

a) Survey data show little or no evidence of Blackwater Estuary SPA features occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration (see section 5.1 of Appendix 12.2 (APP-470), none of these species were recorded in the East Anglia TWO windfarm site).

b) Survey data show no evidence of Blackwater Estuary SPA feature (hen harrier) occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), this species was not recorded in the East Anglia TWO windfarm site).

c) Survey data show no evidence of Blackwater Estuary SPA feature (pochard) occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), this species was not recorded in the East Anglia TWO windfarm site).

d) Survey data show no evidence of Blackwater Estuary SPA feature (ringed plover) occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), this species was not recorded in the East Anglia TWO windfarm site).

Site	**21**											
Name of European Site:	**Blackwater Estuary SPA and Ramsar**											
Distance to East Anglia TWO (km)	**88 (windfarm site) and 64 (offshore cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D

e) e) Breeding little tern has a maximum foraging range of 11km from colonies, so would have no connectivity with the East Anglia TWO site. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), this species was not recorded in the East Anglia TWO windfarm site).

f) f) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Blackwater Estuary SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**22**														
Name of European Site:	**Borkum-Riffgrund (Borkum Reef Ground) SCI**														
Distance to East Anglia TWO (km)	**320**														
Marine Mammals															
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D

Site	**22**														
Name of European Site:	**Borkum-Riffgrund (Borkum Reef Ground) SCI**														
Distance to East Anglia TWO (km)	**320**														
Harbour porpoise *Phocoena phocoena*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Grey seal *Halichoerus grypus*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Harbour seal *Phoca vitulina*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

Fish

Site Features	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Twaite shad *Alosa fallax*	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise of the HRA Screening Report (APP-044)).

b) It was agreed as part of the East Anglia TWO Scoping and Evidence Plan Process (EPP) (see Appendix 10.1 (APP-458) ~~Report~~ that transboundary impacts on fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA .

Site	23											
Name of European Site:	Borkum-Riffgrund SPA											
Distance to East Anglia TWO (km)	320											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding seabird assemblage including as named features black-throated diver *Gavia arctica*, red-throated diver *Gavia stellata*, common gull *Larus canus*, lesser black-backed gull, great black-backed gull *Larus marinus*, little gull *Larus minutus*, kittiwake *Rissa tridactyla*, common tern *Sterna hirundo*, Arctic tern *Sterna paradisaea*, Sandwich tern, gannet *Morus bassanus*, guillemot *Uria aalge*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration relative to the size of Biologically Defined Minimum Population Scale (BDMPS) regional populations. Not only are the sites 320km apart, but much of the seasonal movement of birds avoids crossing of the North Sea so that birds on the continental side of the North Sea are more likely to move along the continental coast rather than crossing to the UK (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Borkum-Riffgrund SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**24**
Name of European Site:	**Braemar Pockmarks SAC**
Distance to East Anglia TWO (km)	**741**

Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Submarine structures made by leaking gases	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

a) The distance between the offshore project area and the designated site is beyond the range of any potential LSE (see section 5.2.1 of the HRA Screening Report (APP-044)).~~As it has been agreed through the scoping process that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes.~~

Site	25											
Name of European Site:	Breydon Water SPA and Ramsar											
Distance to East Anglia TWO (km)	44 (windfarm site) and 33 (offshore cable corridor)											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features Bewick's swan *Cygnus columbianus bewickii*, ruff, golden plover *Pluvialis apricaria*, avocet, lapwing *Vanellus vanellus*		**Y (a)**		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	**Y (a)**	N (b)
Breeding common tern *Sterna hirundo*		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (d)	N (d)	N (d)

a) Band model estimates of collision mortality indicate that LSE cannot be ruled out at the Screening stage (see Appendix 12.2 Annex 4 (APP-470)).

b) Survey data show little or no evidence of SPA features occurring in East Anglia TWO and migrations of birds from this SPA are likely to result in negligible numbers passing through the site during migration (see section 5.1 of Appendix 12.2 (APP-470), none of these species were recorded in the East Anglia TWO windfarm site).

c) SPA is far beyond the maximum foraging range of common tern (30km) so has no breeding season connectivity. Numbers of SPA common tern migrating through the East Anglia TWO windfarm site are likely to be extremely small relative to BDMPS (see section 5.1 of Appendix 12.2 (APP-470), common terns recorded in very low numbers within the East Anglia TWO windfarm site).

d) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Breydon Water SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**26**
Name of European Site:	**Broadland SPA and Ramsar**
Distance to East Anglia TWO (km)	**34 (windfarm site) and 21 (offshore cable corridor)**

Site Features	Likely effect(s) of East Anglia TWO offshore project area											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features shoveler, wigeon, gadwall, Bewick's swan, whooper swan, ruff	N (b)	**Y (a)**	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (c)	**Y (a)**	N (c)

a) Band model estimates of collision mortality indicate that LSE cannot be ruled out at the Screening stage (see Appendix 12.2 Annex 4 (APP-470)).

b) Survey data show little or no evidence of SPA features occurring in East Anglia TWO and migrations of birds from this SPA are likely to result in negligible numbers passing through the site during migration (see section 5.1 of Appendix 12.2 (APP-470), none of these species were recorded in the East Anglia TWO windfarm site).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features (see Table 8.2 of the HRA Screening Report (APP-044)) ~~at Breydon Water SPA and Ramsar~~

Site	**27**											
Name of European Site:	**Bruine Bank (Brown Ridge) pSPA**											
Distance to East Anglia TWO (km)	**82 (offshore cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding common guillemots *Uria aalge* and razorbills *Alca torda*		N (a)~~N (b)~~		N (b)~~N (c)~~	N (b)~~N (c)~~	N (b)~~N (c)~~	N (b)~~N (c)~~	N (b)~~N (c)~~	N (b)~~N (c)~~	N (c)~~N (d)~~	N (c)~~N (d)~~	N (c)~~N (d)~~

a) The designated features of Bruine Bank pSPA are likely to be common guillemot and razorbill, species for which low flight height results in low risk of collision with offshore wind turbines. Furthermore, birds wintering on Bruine Bank are likely to remain at the pSPA because it is a high-quality feeding habitat (i.e. the reason why this concentration of birds is being proposed for SPA status), and so these birds are unlikely to be at risk of collision at the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Bruine Bank is high quality feeding habitat for nonbreeding piscivorous seabirds from breeding areas further north, so the birds in that pSPA are unlikely to pass through the East Anglia TWO site on migration as it lies west rather than north of the pSPA. Therefore, displacement, disturbance and barrier effect at the East Anglia TWO site will not be likely to affect birds on Bruine Bank pSPA (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Bruine Bank pSPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**28**
Name of European Site:	**Buchan Ness to Collieston Coast SPA**
Distance to East Anglia TWO (km)	**615**
Site Features	Likely effect(s) of East Anglia TWO

Site	**28**											
Name of European Site:	**Buchan Ness to Collieston Coast SPA**											
Distance to East Anglia TWO (km)	**615**											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage, including as named features kittiwake, shag *Phalacrocorax aristotelis*, fulmar, guillemot, herring gull *Larus argentatus*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Buchan Ness to Collieston Coast SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be very small relative to BDMPS see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Buchan Ness to Collieston Coast SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**29**											
Name of European Site:	**Calf of Eday SPA**											
Distance to East Anglia TWO (km)	**825**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D

Site	**29**											
Name of European Site:	**Calf of Eday SPA**											
Distance to East Anglia TWO (km)	**825**											
Breeding seabird assemblage including as named features cormorant, fulmar *Fulmarus glacialis*, guillemot, kittiwake and great black-backed gull		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Calf of Eday SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Calf of Eday SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	30														
Name of European Site:	Cap Sizun SAC														
Distance to East Anglia TWO (km)	639														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	31														
Name of European Site:	Chausey SAC														
Distance to East Anglia TWO (km)	430														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	**32**
Name of European Site:	**Chaussée de Sein SAC**
Distance to East Anglia TWO (km)	**700**

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 7.3 of the HRA Screening Report (APP-044)).

Site	**33**
Name of European Site:	**Chesil Beach and The Fleet SPA & Ramsar**
Distance to East Anglia TWO (km)	**360 (windfarm site) and 336 (offshore cable corridor)**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding brent goose		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of Chesil Beach & The Fleet SPA feature (brent goose) occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site.

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Chesil Beach & The Fleet SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**34**											
Name of European Site:	**Chichester and Langstone Harbours SPA & Ramsar**											
Distance to East Anglia TWO (km)	**245 (windfarm site) and 225 (offshore cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Migratory waterbird assemblage including as named features pintail *Anas acuta*, shoveler, teal, wigeon, turnstone *Arenaria interpres*, brent goose, sanderling *Calidris alba*, dunlin, ringed plover, bar-tailed godwit *Limosa lapponica*, red-breasted merganser *Mergus serrator*, curlew *Numenius arquata*, grey plover, shelduck *Tadorna tadorna*, redshank		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding little tern, common tern, Sandwich tern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of Chichester & Langstone Harbour SPA features occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site).

Site	**34**											
Name of European Site:	**Chichester and Langstone Harbours SPA & Ramsar**											
Distance to East Anglia TWO (km)	**245 (windfarm site) and 225 (offshore cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
b) Little tern, common tern and Sandwich tern have maximum foraging ranges from colonies of 11km, 30km and 54km respectively, so there is no connectivity between the SPA and East Anglia TWO site. Furthermore, these species tend to forage in coastal waters rather than offshore. Therefore, collision risk, displacement and barrier effects can be excluded (see Table 8.2 of the HRA Screening Report (APP-044)). c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Chichester & Langstone Harbour SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).												

Site	**35**											
Name of European Site:	**Colne Estuary SPA and Ramsar**											
Distance to East Anglia TWO (km)	**77 (windfarm site) and 55 (offshore cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding brent goose		N (a)~~N (a)~~		N (a)~~N (a)~~	N (a)~~N (a)~~	N (a)~~N (a)~~	N (a)~~N (a)~~	N (a)~~N (a)~~	N (a)~~N (a)~~	N (c)~~N (g)~~	N (c)~~N (g)~~	N (c)~~N (g)~~

Site	35											
Name of European Site:	Colne Estuary SPA and Ramsar											
Distance to East Anglia TWO (km)	77 (windfarm site) and 55 (offshore cable corridor)											
Nonbreeding redshank		N (a)~~N (b)~~		N (a)~~N (b)~~	N (a)~~N (b)~~	N (a)~~N (b)~~	N (a)~~N (b)~~	N (a)~~N (b)~~	N (a)~~N (b)~~	N (c)~~N (g)~~	N (c)~~N (g)~~	N (c)~~N (g)~~
Nonbreeding hen harrier		N (a)~~N (c)~~		N (a)~~N (c)~~	N (a)~~N (c)~~	N (a)~~N (c)~~	N (a)~~N (c)~~	N (a)~~N (c)~~	N (a)~~N (c)~~	N (c)~~N (g)~~	N (c)~~N (g)~~	N (c)~~N (g)~~
Breeding pochard		N (a)~~N (d)~~		N (a)~~N (d)~~	N (a)~~N (d)~~	N (a)~~N (d)~~	N (a)~~N (d)~~	N (a)~~N (d)~~	N (a)~~N (d)~~	N (c)~~N (g)~~	N (c)~~N (g)~~	N (c)~~N (g)~~
Breeding ringed plover		N (a)~~N (e)~~		N (a)~~N (e)~~	N (a)~~N (e)~~	N (a)~~N (e)~~	N (a)~~N (e)~~	N (a)~~N (e)~~	N (a)~~N (e)~~	N (c)~~N (g)~~	N (c)~~N (g)~~	N (c)~~N (g)~~
Breeding little tern		N (b)~~N (f)~~		N (b)~~N (f)~~	N (b)~~N (f)~~	N (b)~~N (f)~~	N (b)~~N (f)~~	N (b)~~N (f)~~	N (b)~~N (f)~~	N (b)~~N (f)~~	N (b)~~N (f)~~	N (b)~~N (f)~~

a) Survey data show no evidence of ~~Colne Estuary SPA feature (brent goose)~~ the feature occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site).

~~b) Survey data show no evidence of Colne Estuary SPA feature (redshank) occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site.~~

~~c) Survey data show no evidence of Colne Estuary SPA feature (hen harrier) occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site.~~

~~d) Survey data show no evidence of Colne Estuary SPA feature (pochard) occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site.~~

~~e) Survey data show no evidence of Colne Estuary SPA feature (ringed plover) occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site.~~

Site	**35**
Name of European Site:	**Colne Estuary SPA and Ramsar**
Distance to East Anglia TWO (km)	**77 (windfarm site) and 55 (offshore cable corridor)**

~~f)~~b) Breeding little tern has a maximum foraging range of 11km from colonies, so would have no connectivity with the East Anglia TWO site. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044).

~~g)~~c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Colne Estuary SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**36**
Name of European Site:	**Copinsay SPA**
Distance to East Anglia TWO (km)	**789**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features fulmar, guillemot, kittiwake and great black-backed gull		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Copinsay SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be very small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**36**
Name of European Site:	**Copinsay SPA**
Distance to East Anglia TWO (km)	**789**

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Copinsay SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**37**
Name of European Site:	**Coquet Island SPA**
Distance to East Anglia TWO (km)	**414**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding roseate tern *Sterna dougallii*, Arctic tern, common tern, Sandwich tern		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Coquet Island SPA is far beyond the maximum foraging range of designated seabird species (all less than 55km) so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be very small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**37**
Name of European Site:	**Coquet Island SPA**
Distance to East Anglia TWO (km)	**414**

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Coquet Island SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**38**
Name of European Site:	**Côte De Granit Rose-Sept-Iles SAC**
Distance to East Anglia TWO (km)	**512**

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 7.3 of the HRA Screening Report (APP-044)).

Site	39											
Name of European Site:	Cromarty Firth SPA & Ramsar											
Distance to East Anglia TWO (km)	716 (windfarm site) and (offshore cable corridor)											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features curlew, dunlin, grey-lag goose *Anser anser*, pintail, red-breasted merganser, whooper swan, bar-tailed godwit, oystercatcher *Haematopus ostralegus*, wigeon, scaup *Aythya marila*, knot and redshank		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (d)	N (d)	N (d)
Breeding common tern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (d)	N (d)	N (d)
Breeding osprey *Pandion haliaetus*		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)

a) Survey data show little or no evidence of Cromarty Firth SPA features occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site).

b) SPA is beyond maximum foraging range of common tern (30km), and so has no breeding season connectivity. Numbers of SPA common tern migrating through the East Anglia TWO site are likely to be extremely small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**39**
Name of European Site:	**Cromarty Firth SPA & Ramsar**
Distance to East Anglia TWO (km)	**716 (windfarm site) and (offshore cable corridor)**

c) Osprey has not been observed in the East Anglia TWO site, and it is improbable than any ospreys from the SPA migrate through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site).

d) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Cromarty Firth SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**40**											
Name of European Site:	**Crouch and Roach Estuaries SPA & Ramsar**											
Distance to East Anglia TWO (km)	**96 (windfarm site) and 78 (offshore cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding brent goose		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Nonbreeding hen harrier		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (c)	N (c)	N (c)

Site	**40**
Name of European Site:	**Crouch and Roach Estuaries SPA & Ramsar**
Distance to East Anglia TWO (km)	**96 (windfarm site) and 78 (offshore cable corridor)**

a) Survey data show little or no evidence of Crouch & Roach Estuary SPA feature (brent goose) occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site).

b) Survey data show no evidence of Crouch & Roach Estuary SPA feature (hen harrier) occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Crouch & Roach Estuary SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**41**
Name of European Site:	**Deben Estuary SPA & Ramsar**
Distance to East Anglia TWO (km)	**250 (windfarm site) and 20 (offshore cable corridor)**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding dark-bellied brent goose *Branta bernicla bernicla*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Nonbreeding avocet		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (c)	N (c)	N (c)

Site	**41**
Name of European Site:	**Deben Estuary SPA & Ramsar**
Distance to East Anglia TWO (km)	**250 (windfarm site) and 20 (offshore cable corridor)**

a) Survey data show little or no evidence of Deben Estuary SPA features (brent goose) occurring in the East Anglia TWO site, and migrations of birds from the SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), this species was not recorded in the East Anglia TWO windfarm site).

b) Survey data show no evidence of avocets occurring within the East Anglia TWO site, and numbers migrating through the site are likely to be negligible (see section 5.1 of Appendix 12.2 (APP-470), this species was not recorded in the East Anglia TWO windfarm site)..

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Deben Estuary SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**42**
Name of European Site:	**Dengie SPA & Ramsar**
Distance to East Anglia TWO (km)	**87 (windfarm site) and 66 (offshore cable corridor)**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding brent goose		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)
Nonbreeding knot		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)
Nonbreeding grey plover		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

Nonbreeding hen harrier		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of Dengie SPA features (brent goose, knot, grey plover, hen harrier) occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Dengie SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**43**														
Name of European Site:	**Doggerbank SCI**														
Distance to East Anglia TWO (km)	**365**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 for harbour seal and paragraphs 168 and 169 for harbour porpoise of the HRA Screening Report. (APP-044)).

Site	**44**
Name of European Site:	**Doggersbank SAC**

Distance to East Anglia TWO (km)	232														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise of the HRA Screening Report (APP-044))..															

Site	45											
Name of European Site:	Dornoch Firth and Loch Fleet SPA & Ramsar											
Distance to East Anglia TWO (km)	722 (windfarm site) and 714 (offshore cable corridor)											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D

Wintering and passage waterbird assemblage including as named features curlew, dunlin, greylag goose, wigeon, bar-tailed godwit, teal, oystercatcher		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding osprey		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of ~~Dornoch Firth & Loch Fleet SPA~~these features occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site).

b) Osprey has not been observed in the East Anglia TWO site, and it is improbable than any ospreys from the SPA migrate through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features (see Table 8.2 of the HRA Screening Report (APP-044~~at Dornoch Firth & Loch Fleet SPA & Ramsar~~).

Site	**46**														
Name of European Site:	**Dornoch Firth and Morrich More SAC**														
Distance to East Anglia TWO (km)	**766**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see Table 8.2 of the HRA Screening Report (APP-044).

Site	47														
Name of European Site:	Dråby Vig SAC														
Distance to East Anglia TWO (km)	642														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraph 219 and 220 of the HRA Screening Report (APP-044).															

Site	48														
Name of European Site:	Dünenlandschaft Süd-Sylt SAC														
Distance to East Anglia TWO (km)	486														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 7.3 of the HRA Screening Report (APP-044).

Site	**49**																	
Name of European Site:	**Dunes De La Plaine Maritime Flamande SAC**																	
Distance to East Anglia TWO (km)	**106 (windfarm site) and 118 (offshore cable corridor)**																	
Marine Mammals																		
Site Features	Likely effect(s) of East Anglia TWO																	
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination					
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D			
Harbour seal	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)			
Benthic Habitats																		
Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)

Site	**49**																	
Name of European Site:	**Dunes De La Plaine Maritime Flamande SAC**																	
Distance to East Anglia TWO (km)	**106 (windfarm site) and 118 (offshore cable corridor)**																	
Mudflats and sandflats not covered by seawater at low tide	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)

a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see paragraph 219 and 220 of the HRA Screening Report (APP-044).

b) As it has been agreed through the scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458) that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes. ~~As it has been agreed through the scoping process that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes.~~

Site	**50**											
Name of European Site:	**East Caithness Cliffs SPA**											
Distance to East Anglia TWO (km)	**741**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)

Site	**50**											
Name of European Site:	**East Caithness Cliffs SPA**											
Distance to East Anglia TWO (km)	**741**											
cormorant, guillemot, herring gull, puffin *Fratercula arctica*, razorbill, shag, fulmar and great black-backed gull												
Breeding peregrine *Falco peregrinus*		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) East Caithness Cliffs SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044).).

b) Peregrines breeding in the UK normally remain close to their breeding areas throughout the year, and are therefore very unlikely to migrate offshore (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at East Caithness Cliffs SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**51**					
Name of European Site:	**Essex Estuaries SAC**					
Distance to East Anglia TWO (km)	**77 (windfarm site) 55 (offshore cable corridor)**					
Benthic Features						
Site Features	Likely effect(s) of East Anglia TWO					
	Permanent loss	Temporary physical	Smothering due to increased	Re- mobilisation of contaminated	Underwater noise and vibration	In-combination

Site	**51**
Name of European Site:	**Essex Estuaries SAC**
Distance to East Anglia TWO (km)	**77 (windfarm site) 55 (offshore cable corridor)**

				disturbance			suspended sediment			sediments								
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Estuaries	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Mudflats and sandflats not covered by seawater at low tide	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

a) The distance between the offshore project area and the designated site is beyond the range of any potential LSE. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044).

Site	**51**
Name of European Site:	**Essex Estuaries SAC**
Distance to East Anglia TWO (km)	**77 (windfarm site) 55 (offshore cable corridor)**

Marine Mammals					
Site Features	Likely effect(s) of East Anglia TWO				
	Underwater noise	Vessel Interactions	Indirect effects on prey	Changes to water quality	In-combination

	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 and Table 7.3 of the HRA Screening Report (APP-044)).

Site	**52**
Name of European Site:	**Estuaire De La Canche, Dunes Picardes Plaquees Sur L'ancienne Falaise, Foret D'hardelot Et Falaise D'equihen SAC**
Distance to East Anglia TWO (km)	**155**

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 and Table 7.3 of the HRA Screening Report (APP-044)).

Site	**53**
Name of European Site:	**Estuaire de la Seine SCI**
Distance to East Anglia TWO (km)	**309**

Site Features	Likely effect(s) of East Anglia TWO

Site	**53**														
Name of European Site:	**Estuaire de la Seine SCI**														
Distance to East Anglia TWO (km)	**309**														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	**54**														
Name of European Site:	**Estuaires et littoral picards (baies de Somme et d'Authie) SAC**														
Distance to East Anglia TWO (km)	**189 (windfarm site) and 199 (offshore cable corridor)**														
Marine Mammals															
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Harbour seal *Phoca vitulina*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

Site	**54**																			
Name of European Site:	**Estuaires et littoral picards (baies de Somme et d'Authie) SAC**																			
Distance to East Anglia TWO (km)	**189 (windfarm site) and 199 (offshore cable corridor)**																			
Fish																				
Site Features	Likely effect(s) of East Anglia TWO																			
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
River lamprey	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~	N (b)~~N (b)~~

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191, paragraphs 219 and 220 and Table 7.3 of the HRA Screening Report (APP-044)).

~~a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE.~~

b) It was agreed as part of the East Anglia TWO Scoping Report that transboundary impacts on fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA and Evidence Plan Process (EPP) Appendix 10.1 (APP-462).

Site	55											
Name of European Site:	Exe Estuary SPA & Ramsar											
Distance to East Anglia TWO (km)	416 (windfarm site) and 390 (offshore cable corridor)											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Migratory waterbird assemblage including as named features brent goose, dunlin, oystercatcher, black-tailed godwit, grey plover, Slavonian grebe *Podiceps auritus*, avocet		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of Exe Estuary SPA features occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site) (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Exe Estuary SPA & Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	56										
Name of European Site:	Fair Isle SPA										
Distance to East Anglia TWO (km)	830										
Site Features	Likely effect(s) of East Anglia TWO										
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features Arctic skua *Stercorarius parasiticus*, fulmar, gannet, great skua *Stercorarius skua*, puffin, razorbill, Arctic tern, guillemot, kittiwake, shag		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Fair Isle wren		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Fair Isle SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be very small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Fair Isle wren is a resident Shetland subspecies that is thought never to leave the island (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Fair Isle SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	57										
Name of European Site:	Falaise du Bessin Occidental SPA										
Distance to East Anglia TWO (km)	365										
Site Features	Likely effect(s) of East Anglia TWO										
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding kittiwake, herring gull, lesser black-backed gull, fulmar		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (g)	N (g)	N (g)
Nonbreeding red-throated diver		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (g)	N (g)	N (g)
Nonbreeding cormorant, shag, red-breasted merganser		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (g)	N (g)	N (g)
Nonbreeding guillemot, razorbill		N (d)		N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (g)	N (g)	N (g)
Nonbreeding peregrine, short-eared owl *Asio flammeus*		N (e)		N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (g)	N (g)	N (g)
Breeding Dartford warbler *Sylvia undata*		N (f)		N (f)	N (f)	N (f)	N (f)	N (f)	N (f)	N (f)	N (f)	N (f)

a) The ~~Falaise du Bessin Occidental~~ SPA is far beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be extremely small relative to BDMPS, as these species are likely to migrate into the Atlantic rather than northwards into the North Sea in autumn, and are unlikely to pass through the North Sea in spring (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Nonbreeding red-throated divers at this SPA are likely to include birds from Scandinavia and the UK, especially juveniles which winter further south than adults. Their migrations between breeding grounds and the SPA probably take most individuals along the continental coast of Europe rather than across the North Sea. Small numbers may cross the North Sea towards the UK or Icelandic breeding grounds. However, red-throated divers tend to fly low over the sea so will be at very low risk of collision. Red-throated divers strongly avoid disturbance and offshore wind farms and so may have to fly further by flying around the East Anglia TWO site rather than through the wind farm. However, in the context of a migration of over

Site	57											
Name of European Site:	Falaise du Bessin Occidental SPA											
Distance to East Anglia TWO (km)	365											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D

1000km, the extra distance flown to pass an offshore wind farm represents a negligible increase in energy expenditure for the very few individuals that might be affected (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Cormorants, shags and red-breasted mergansers do not normally occur at the East Anglia TWO site based on bird survey data (see section 5.1 of Appendix 12.2 (APP-470)). Furthermore, these species tend to fly low over the sea and so would be at negligible risk of collision, and do not show displacement or barrier effects. Indeed, cormorants seem to benefit from offshore wind farm structures permitting them to extend foraging range offshore, and the same may be true for shag and red-breasted merganser which may also benefit from foraging opportunities around turbine bases.

d) Nonbreeding guillemots and razorbills fly low over the sea and so are at very low risk of collision. However, they are partially displaced from offshore wind farms and may fly around rather than through offshore wind farms. A very small proportion of the guillemots and razorbills from this SPA might migrate through the East Anglia TWO site towards breeding areas further north, but the area of foraging habitat lost to these birds if they avoid the East Anglia TWO site would be negligible in relation to the wider area of the North Sea and Channel over which they forage, and the increase in migration distance to fly around rather than through the wind farm would be negligible in relation to a migration distance of hundreds of kilometres (see Table 8.2 of the HRA Screening Report (APP-044)).

e) Peregrines in western Europe do not normally migrate, so would be extremely unlikely to move between this SPA and the East Anglia TWO site. Short-eared owls are more migratory, and sometimes cross the North Sea, but since this SPA is 445km from the East Anglia TWO site, the chances of a short-eared owl from the SPA passing through the East Anglia TWO site are extremely small (see Table 8.2 of the HRA Screening Report (APP-044)).

f) Dartford warbler is a resident species that is unlikely to move from this SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

g) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Falaise du Bessin Occidental SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	58																
Name of European Site: Distance to East Anglia TWO (km)	Falaises du Cran aux Oeufs et du Cap Gris-Nez, Dunes du Chatelet, Marais de Tardinghen et Dunes de Wissant SAC 131 (windfarm site) and 141 (offshore cable corridor)																
Marine Mammals																	
Site Features	Likely effect(s) of East Anglia TWO																
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination				
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D		
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)		
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)		
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)		
Benthic Habitats																	
Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	**D**
Sandbanks which are slightly covered by sea water all the time	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)

Site	58																	
Name of European Site:	Falaises du Cran aux Oeufs et du Cap Gris-Nez, Dunes du Chatelet, Marais de Tardinghen et Dunes de Wissant SAC																	
Distance to East Anglia TWO (km)	131 (windfarm site) and 141 (offshore cable corridor)																	
Mudflats and sandflats not covered by seawater at low tide	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)
Reefs	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise of the HRA Screening Report (APP-044)).

b) As it has been agreed through the scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458) process that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes..

Site	59														
Name of European Site:	Faray and Holm of Faray SAC														
Distance to East Anglia TWO (km)	826														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 7.3 of the HRA Screening Report (APP-044)).

Site	**60**											
Name of European Site:	**Farne Islands SPA**											
Distance to East Anglia TWO (km)	**442**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding Arctic tern, common tern, Sandwich tern		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Farne Islands SPA is beyond maximum foraging range of these designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be very small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Farne Islands SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**61**			
Name of European Site:	**Fetlar SPA**			
Distance to East Anglia TWO (km)	**932**			
Site Features	Likely effect(s) of East Anglia TWO			
	Collision mortality	Displacement/Disturbance	Barrier Effect	Cumulative/In-combination

Site	61											
Name of European Site:	Fetlar SPA											
Distance to East Anglia TWO (km)	932											
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features Arctic skua, fulmar, great skua, Arctic tern		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding dunlin, whimbrel *Numenius phaeopus*, red-necked phalarope *Phalaropus lobatus*		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Fetlar SPA is beyond the maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Dunlin, whimbrel and red-necked phalarope have not been observed migrating through the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470)). Red-necked phalaropes from Fetlar SPA have been tracked by geolocator and migrate from Shetland to the Pacific Ocean via Iceland, Greenland and Canada, and so would not pass near to East Anglia TWO (see Table 8.2 of the HRA Screening Report (APP-044)). Dunlin and whimbrel from Fetlar SPA migrate south, but are unlikely to pass through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Fetlar SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	62											
Name of European Site:	Firth of Forth SPA & Ramsar											
Distance to East Anglia TWO (km)	511 (windfarm site) and 501 (offshore cable corridor)											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features curlew, dunlin, goldeneye, great crested grebe, knot, lapwing, mallard *Anas platyrhynchos,* pink-footed goose *Anser brachyrhynchus*, red-breasted merganser, ringed plover, Sandwich tern, Slavonian grebe, turnstone, wigeon, common scoter *Melanitta nigra*, golden plover, long-tailed duck *Clangula hyemalis*, redshank, shelduck, bar-tailed godwit, cormorant, eider *Somateria mollissima*, grey plover, oystercatcher, red-throated diver, scaup, velvet scoter *Melanitta fusca*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration. Therefore, proportions of these populations migrating through the East Anglia TWO site are likely to be extremely small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Firth of Forth SPA & Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	63										
Name of European Site:	Firth of Tay & Eden Estuary SPA & Ramsar										
Distance to East Anglia TWO (km)	551 (windfarm site) and 542 (offshore cable corridor)										
Site Features	Likely effect(s) of East Anglia TWO										
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features common scoter, cormorant, eider, goosander *Mergus merganser*, grey plover, long-tailed duck, red-breasted merganser, sanderling, velvet scoter, dunlin, greylag goose, redshank, oystercatcher, bar-tailed godwit, goldeneye, Icelandic black-tailed godwit *Limosa limosa islandica*, pink-footed goose		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (d)	N (d)	N (d)
Breeding marsh harrier		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Breeding little tern		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)

a) Survey data show little or no evidence of Firth of Tay & Eden Estuary SPA features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470)), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Marsh harrier is a migrant species. Satellite tracking suggests that marsh harriers from Scotland migrate overland to the south coast of England and over the Channel to France, rather than across the North Sea, and so are unlikely to pass through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Breeding little tern has a maximum foraging range of 11km from colonies, so would have no connectivity with the East Anglia TWO site. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

d) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Firth of Tay & Eden Estuary SPA & Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).).

Site	**64**
Name of European Site:	**Firth of Tay & Eden Estuary SAC**
Distance to East Anglia TWO (km)	**548**

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 of the HRA Screening Report (APP-044)).

Site	**65**
Name of European Site:	**Flamborough and Filey Coast SPA**
Distance to East Anglia TWO (km)	**248**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding kittiwake		**Y (a)**		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (c)	**Y (a)**	N (c)
Breeding gannet		**Y (a)**		N (d)	**Y (d)**	N (d)	N (e)	N (e)	N (e)	N (c)	**Y (a)**	N (c)
Breeding common guillemot		N (f)		N (g)	**Y (h)**	N (g)	N (g)	N (i)	N (g)	N (c)	**Y (h)**	N (c)
Breeding razorbill		N (f)		N (g)	**Y (h)**	N (g)	N (g)	N (i)	N (g)	N (c)	**Y (h)**	N (c)
Breeding puffin		N (f)		N (g)	**Y (h)**	N (g)	N (g)	N (i)	N (g)	N (c)	**Y (h)**	N (c)

a) Band model estimates of collision mortality indicate that LSE cannot be ruled out at the Screening stage (see Appendix 12.1 Annex 4 (APP-470)).

b) Kittiwakes are not considered to be at risk of disturbance and displacement or barrier effects at offshore wind farms therefore LSE can be ruled out.

c) The predicted effect attributable to the proposed East Anglia TWO project is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Flamborough and Filey Coast SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

d) Flamborough and Filey Coast SPA is 239km from East Anglia TWO. Thaxter et al. (2012) report a mean foraging range of breeding gannets as 92.5km, and a maximum recorded distance of 590km. East Anglia TWO is therefore considerably beyond the mean foraging range of breeding gannets, but within their maximum range (see paragraph 269 of the HRA Screening Report (APP-044)). Breeding gannets from Flamborough & Filey Coast SPA may therefore be affected by displacement (see Table 8.2 of the HRA Screening Report (APP-044)). Searle et al. (2014) found that even for offshore wind farms considerably closer to a gannet breeding colony than under consideration here, impacts of displacement were negligible for this species because of its very long foraging range and large area used for foraging. Similarly, impacts of displacement during migration are considered likely to be negligible. Nonetheless, Natural England consider that an LSE cannot be ruled out at the Screening stage.

Site	**65**
Name of European Site:	**Flamborough and Filey Coast SPA**
Distance to East Anglia TWO (km)	**248**

e) Gannets are not considered at risk of barrier effects due to their wide ranging habits (see (d)), and migrating gannets cover very large distances, extending from the North Sea to West Africa, so that slight local effects would be negligible in the context of their large migrations and area use, therefore LSE can be ruled out.

f) Common guillemots, razorbills and puffins tend to fly low over the sea so have a very low risk of collision mortality, therefore LSE can be ruled out (see Table 8.2 of the HRA Screening Report (APP-044).

g) Construction and decommissioning impacts are temporary and localised therefore LSE can be ruled out.

h) Flamborough and Filey Coast SPA is 216km from East Anglia TWO. Thaxter et al. (2012) report a mean foraging range of breeding common guillemots as 37.8km, and a maximum recorded distance of 135km. Thaxter et al. (2012) report a mean foraging range of breeding razorbills as 23.7km, and a maximum recorded distance of 95km. Thaxter et al. (2012) report a mean foraging range of breeding puffin as 4km, and a maximum recorded distance of 200km. East Anglia TWO is therefore considerably beyond the normal foraging range of these species from Flamborough and Filey Coast SPA. It is therefore unlikely that any breeding adults from Flamborough and Filey Coast SPA will be present at East Anglia TWO during the breeding season. During the nonbreeding season, birds from Flamborough and Filey Coast SPA are likely to be mixed with the large BDMPS populations of these species so that apportioning of the impact of the low level of displacement mortality generates a negligible impact to Flamborough and Filey Coast SPA. Nonetheless, Natural England consider that an LSE cannot be ruled out at the Screening stage (see paragraph 271 of the HRA Screening Report (APP-044).

i) Since East Anglia TWO is beyond the normal foraging range of breeding common guillemots, razorbills and puffins from Flamborough and Filey Coast SPA, there will be no breeding season barrier impact for those populations. During the nonbreeding period birds from Flamborough and Filey Coast SPA are likely to be mixed with the large BDMPS populations of these species so that apportioning of the impact of the low level of displacement to this very large BDMPS population apportions a negligible impact to Flamborough and Filey Coast SPA (see paragraph 269 of the HRA Screening Report (APP-044)..

Site	**66**																	
Name of European Site:	**Flamborough Head SAC**																	
Distance to East Anglia TWO (km)	**233 (offshore cable corridor)**																	
Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Submerged or partially submerged sea caves	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

a) The distance between the offshore project area and the designated site is beyond the range of any potential LSE. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of the HRA Screening Report (APP-044))

Site	**67**											
Name of European Site:	**Forth Islands SPA**											
Distance to East Anglia TWO (km)	**519**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features gannet, kittiwake, lesser black-backed gull, roseate tern, Sandwich tern, guillemot, razorbill, fulmar, common tern, Arctic tern, cormorant, herring gull, puffin, shag		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Forth Islands SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Forth Islands SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**68**											
Name of European Site:	**Foula SPA**											
Distance to East Anglia TWO (km)	**902**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D

Site	**68**											
Name of European Site:	**Foula SPA**											
Distance to East Anglia TWO (km)	**902**											
Breeding seabird assemblage including as named features Arctic tern, fulmar, guillemot, razorbill, red-throated diver, Arctic skua, kittiwake, shag, Leach's storm-petrel *Oceanodroma leucorhoa*, great skua, puffin		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)
a) Foula SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)). b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Foula SPA (see Table 8.2 of the HRA Screening Report (APP-044)).												

Site	**69**											
Name of European Site:	**Foulness SPA and Ramsar**											
Distance to East Anglia TWO (km)	**85 (windfarm site) and 69 (offshore cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features brent goose, knot, oystercatcher, bar-tailed godwit, grey plover, avocet, redshank		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (e)	N (e)	N (e)

Site	69											
Name of European Site:	Foulness SPA and Ramsar											
Distance to East Anglia TWO (km)	85 (windfarm site) and 69 (offshore cable corridor)											
Nonbreeding hen harrier		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (e)	N (e)	N (e)
Breeding ringed plover, avocet		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)
Breeding little tern, common tern, Sandwich tern		N (d)		N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)

a) Survey data show little or no evidence of Foulness SPA features occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration (see section 5.1 of Appendix 12.2 (APP-470)).

b) Survey data show no evidence of hen harrier occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration, as the species is likely to migrate overland rather than over sea where the option is available (see section 5.1 of Appendix 12.2 (APP-470), none of these species/SPA features were recorded in the East Anglia TWO windfarm site) (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Ringed plover and avocet have not been observed during bird site-specific surveys. It is highly unlikely that these birds would migrate through the East Anglia TWO site as their migration is likely to take a coastal route and cross sea at narrow points such as The English Channel. If they did migrate through the East Anglia TWO site their flight height is likely not to be at collision risk height (see Table 8.2 of the HRA Screening Report (APP-044)).

d) Little tern, common tern and Sandwich tern have maximum foraging ranges from colonies of 11km, 30km and 54km respectively, so there is no connectivity between the SPA and East Anglia TWO site. Furthermore, these species tend to forage in coastal waters rather than offshore. Therefore, collision risk, displacement and barrier effects can be excluded (see Table 8.2 of the HRA Screening Report (APP-044)).

e) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Foulness SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**70**											
Name of European Site:	**Fowlsheugh SPA**											
Distance to East Anglia TWO (km)	**580**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features fulmar, guillemot, kittiwake, razorbill, herring gull		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Fowlsheugh SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be very small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Fowlsheugh SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**71**											
Name of European Site:	**Frisian Front SPA**											
Distance to East Anglia TWO (km)	**183**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D

Nonbreeding common guillemot, great skua, great black-backed gull, lesser black-backed gull		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Migrations of birds from this pSPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration relative to the size of BDMPS regional populations (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Frisian Front pSPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**72**											
Name of European Site:	**Gibraltar Point SPA and Ramsar**											
Distance to East Anglia TWO (km)	**149**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding sanderling, bar-tailed godwit, grey plover		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding little tern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Survey data show no evidence of Gibraltar Point SPA features (sanderling, bar-tailed godwit, grey plover) occurring in the East Anglia TWO site, (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Breeding little tern has a maximum foraging range of 11km (Thaxter et al. 2012) from colonies, so would have no connectivity with the East Anglia TWO site. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**72**
Name of European Site:	**Gibraltar Point SPA and Ramsar**
Distance to East Anglia TWO (km)	**149**

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Gibraltar Point SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**73**
Name of European Site:	**Great Yarmouth and North Denes SPA**
Distance to East Anglia TWO (km)	**43 (windfarm site) and 34 (offshore cable corridor)**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding little tern		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Great Yarmouth & North Denes SPA is beyond the maximum foraging range of little tern (11km) and foraging tends to be coastal so has no breeding season connectivity. Proportions of this population migrating through the East Anglia TWO site are likely to be small as the species is thought to remain close to shore during much of its migration through UK waters (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Great Yarmouth & North Denes SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	74											
Name of European Site:	Greater Wash SPA											
Distance to East Anglia TWO (km)	38 (windfarm site) and 24 (offshore cable corridor)											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabirds (little tern, common tern, Sandwich tern)		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Nonbreeding red-throated diver		N (b)		**Y (c)**	**Y (i)**	N (d)	N (b)	N (b)	N (b)	**Y (c)**	**Y (i)**	N (h)
Nonbreeding little gull		**Y (e)**		N (f)	N (f)	N (f)	N (f)	N (f)	N (f)	N (h)	**Y (e)**	N (h)
Nonbreeding common scoter		N (g)		N (g)	N (g)	N (g)	N (g)	N (g)	N (g)	N (h)	N (h)	N (h)

a) Little tern, common tern and Sandwich tern have maximum foraging ranges from colonies of 11km, 30km and 54km respectively, which suggests potential connectivity between the SPA and the East Anglia TWO site. However, the tern colonies are at locations along the Norfolk coast which are beyond these foraging distances from the East Anglia TWO site. Therefore, connectivity between the SPA and East Anglia TWO site is ruled out on the basis of distance. Furthermore, these species tend to forage in coastal waters rather than offshore. Hence, collision risk, displacement and barrier effects can be excluded (see paragraph 273 of the HRA Screening Report (APP-044)).

b) Red-throated divers fly close to the sea surface and are therefore at extremely low risk of collisions or barrier effects.

c) LSE cannot be ruled out at screening for impacts of Displacement/Disturbance to nonbreeding red-throated divers as a result of construction work (specifically for export cable laying operations through part of the Greater Wash SPA) (see paragraph 274 of the HRA Screening Report (APP-044)).

d) Displacement/Disturbance of red-throated diver during operation and decommissioning is considered negligible as the increase in vessel traffic within the SPA due to East Anglia TWO will be negligible compared to the current baseline (see paragraph 274 of the HRA Screening Report (APP-044)).

e) There is potential for little gull connectivity between the SPA and the East Anglia TWO site, therefore LSE cannot be ruled out at screening for collision risk impacts to nonbreeding little gull.

Site	**74**
Name of European Site:	**Greater Wash SPA**
Distance to East Anglia TWO (km)	**38 (windfarm site) and 24 (offshore cable corridor)**

f) Displacement of little gulls by offshore wind farms appears to be negligible**, indicating no LSE for this SPA feature as a consequence of displacement or barrier effects (see paragraph 264 of the Information to Support Appropriate Assessment Report (APP-043)).

g) Surveys found no common scoters in the East Anglia TWO site since this species favours waters <20m in depth (see section 5.1 of Appendix 12.2 (APP-470). Common scoter was also only present at very low densities along the export cable route, therefore no LSE for this SPA feature is predicted.

h) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Greater Wash SPA (see Table 8.2 of the HRA Screening Report (APP-044).

i) Following advice from Natural England it is considered that Operations and Maintenance vessels may disturb red-throated divers whilst transiting through the SPA therefore an LSE cannot be screened out (see Appendix 12.1 (APP-469)).

Site	**75**														
Name of European Site:	**Gule Rev SCI**														
Distance to East Anglia TWO (km)	**659**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 168 and 169 of the HRA Screening Report (APP-044)).

Site	**76**														
Name of European Site:	**Gullmarsfjorden SAC**														
Distance to East Anglia TWO (km)	**877**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour porpoise of the HRA Screening Report (APP-044)).

Site	**77**																
Name of European Site:	**Haisborough, Hammond and Winterton SAC**																
Distance to East Anglia TWO (km)	**37 (windfarm site) and 30 (offshore cable corridor)**																
Site Features	Likely effect(s) of East Anglia TWO																
	Permanent loss/Introduction of new sediment			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**		**Y (a)**	**Y (a)**		**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**
Reefs	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**		**Y (a)**	**Y (a)**		**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**

a) Within range of theoretical indirect effect (sediment deposition) but effect negligible. Features are primarily sedimentary. For the purposes of HRA screening indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044).

Site	**78**														
Name of European Site:	**Hamburgisches Wattenmeer SCI**														
Distance to East Anglia TWO (km)	**444**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise of the HRA Screening Report (APP-044)).

Site	**79**														
Name of European Site:	**Hamford Water SPA and Ramsar**														
Distance to East Anglia ONE North (km)	**38 (cable corridor)**														
Site Features	Likely effect(s) of East Anglia ONE North														
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination					
	C	O	D	C	O	D	C	O	D	C	O	D			

Site	79											
Name of European Site:	Hamford Water SPA and Ramsar											
Distance to East Anglia ONE North (km)	38 (cable corridor)											
Wintering and passage waterbird assemblage including as named features teal, brent goose, ringed plover, black-tailed godwit, grey plover, avocet, shelduck, redshank		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding little tern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of Hamford Water SPA features occurring in the East Anglia ONE North site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia ONE North site during migration (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Breeding little tern has a maximum foraging range of 11km from colonies, so would have no connectivity with the East Anglia ONE North site. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia ONE North site (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia ONE North is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Hamford Water SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	~~79~~80														
Name of European Site:	Havet omkring Nordre Rønner SAC														
Distance to East Anglia TWO (km)	835														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater Noise			Vessel interactions			Indirect effects on prey			Changes to water quality			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D			
Grey seal	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Harbour seal	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

a) The distance between the potential impact range of Norfolk Boreas and the extent of any effect on individuals from this site would result in no potential for LSE ((see paragraphs 218 and 219 for harbour seal and paragraphs 189 and 190 for grey seal, of the HRA Screening Report (APP-044))

Site	81~~079~~														
Name of European Site:	Helgoland mit Helgolander Felssockel SAC														
Distance to East Anglia TWO (km)	428														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D

Site	**81~~079~~**														
Name of European Site:	**Helgoland mit Helgolander Felssockel SAC**														
Distance to East Anglia TWO (km)	**428**														
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise of the HRA Screening Report (APP-044)).															

Site	**81~~280~~**											
Name of European Site:	**Hermaness, Saxa Vord and Valla Field SPA**											
Distance to East Anglia TWO (km)	**954**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features gannet, guillemot, red-throated diver, puffin, fulmar, kittiwake, great skua, shag		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Hermaness, Saxa Vord & Valla Field SPA is beyond the maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be very small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Hermaness, Saxa Vord & Valla Field SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**8231**														
Name of European Site:	**Hesselø med omliggende stenrev SAC**														
Distance to East Anglia TWO (km)	**976**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal and paragraphs 190 and 191 for grey seal of the HRA Screening Report (APP-044)).

Site	**8342**
Name of European Site:	**Hirsholmene, havet vest herfor og Ellinge Å's udløb SAC**

Distance to East Anglia TWO (km)	813														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal and paragraphs 190 and 191 for grey seal of the HRA Screening Report (APP-044)).

Site	8453											
Name of European Site:	Hornsea Mere SPA											
Distance to East Anglia TWO (km)	235											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding gadwall, mute swan		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Survey data show no evidence of Hornsea Mere SPA features (gadwall, mute swan) occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470)), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site.

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Hornsea Mere SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**8564**											
Name of European Site:	**Hoy SPA**											
Distance to East Anglia TWO (km)	**793**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features Arctic skua, great black-backed gull, guillemot, kittiwake, red-throated diver, fulmar, puffin, great skua		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding peregrine		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Hoy SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Peregrines breeding in the UK normally remain close to their breeding areas throughout the year, and are very unlikely to migrate offshore in the UK.

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Hoy SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**8675**																			
Name of European Site:	**Humber Estuary SAC**																			
Distance to East Anglia TWO (km)	**178 (windfarm site) and 164 (cable corridor)**																			
Marine Mammals																				
Site Features	Likely effect(s) of East Anglia TWO																			
	Underwater noise			Vessel Interactions and disturbance at seal haul outs			Indirect effects on prey			Changes to water quality			In-combination							
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D					
Grey seal *Halichoerus grypus*	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**		**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**					
Fish																				
Site Features	Likely effect(s) of East Anglia TWO																			
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sea Lamprey *Petromyzon marinus*	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)
River lamprey *Lampetra fluvialitis*	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)

Site	8675																	
Name of European Site:	Humber Estuary SAC																	
Distance to East Anglia TWO (km)	178 (windfarm site) and 164 (cable corridor)																	
Benthic habitats																		
Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Estuaries	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)
Mudflats and sandflats not covered by seawater at low tide	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)
Sandbanks which are slightly covered by sea water all the time	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)
Coastal lagoons	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)

a) Potential effects from underwater noise; vessel interactions; changes to water quality; changes to prey resources; and disturbance at seal haul-out sites cannot be ruled out (see Table 7.3 of the HRA Screening Report (APP-044).

b) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see Table 6.2 of the HRA Screening Report (APP-044).

c) The distance between the offshore project area and the designated site is beyond the range of any potential LSE. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044).

Site	8376										
Name of European Site:	Humber Estuary SPA and Ramsar										
Distance to East Anglia TWO (km)	178 (windfarm site) and 164 (offshore cable corridor)										
Site Features	Likely effect(s) of East Anglia TWO										
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features teal, wigeon, mallard, turnstone, pochard, scaup, bittern, brent goose, goldeneye, sanderling, dunlin, knot, ringed plover, oystercatcher, bar-tailed godwit, black-tailed godwit, curlew, golden plover, grey plover, avocet, shelduck, redshank, lapwing, whimbrel, ruff, greenshank *Tringa nebularia*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (g)	N (g)	N (g)
Nonbreeding hen harrier		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (g)	N (g)	N (g)
Breeding bittern		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (g)	N (g)	N (g)
Breeding marsh harrier		N (d)		N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)
Breeding avocet		N (e)		N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (g)	N (g)	N (g)
Breeding little tern		N (f)		N (f)	N (f)	N (f)	N (f)	N (f)	N (f)	N (f)	N (f)	N (f)

Site	**8376**
Name of European Site:	**Humber Estuary SPA and Ramsar**
Distance to East Anglia TWO (km)	**178 (windfarm site) and 164 (offshore cable corridor)**

a) Survey data show little or no evidence of Humber Estuary SPA features occurring in the East Anglia TWO sites (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Survey data show no evidence of Humber Estuary SPA feature hen harrier occurring in the East Anglia TWO sites, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration as UK birds are likely to migrate overland rather than over the sea where possible (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Bittern has not been observed during bird surveys at East Anglia TWO (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration (see Table 8.2 of the HRA Screening Report (APP-044)).

d) Marsh harrier is a migrant species. Satellite tracking suggests that marsh harriers migrate overland to the south coast of England and over the Channel to France, rather than across the North Sea.

e) Avocet has not been observed during bird site specific surveys. It is highly unlikely that these birds would migrate through the East Anglia TWO site as their migration is likely to take a coastal route and cross sea at narrow points such as The English Channel. If they did migrate through the East Anglia TWO site their flight height is likely not to be at collision risk height (see Table 8.2 of the HRA Screening Report (APP-044)).

f) Breeding little tern has a maximum foraging range of 11km from colonies, so would have no connectivity with East Anglia TWO. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

g) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Humber Estuary SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**8987**														
Name of European Site:	**Hund und Paapsand SCI**														
Distance to East Anglia TWO (km)	**339**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of the proposed project and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 and Table 8.2 of the HRA Screening Report (APP-044)).

Site	**89908**											
Name of European Site:	**Imperial Dock Lock, Leith SPA**											
Distance to East Anglia TWO (km)	**535**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding common tern		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) SPA is far beyond maximum foraging range of designated seabird species (common tern) so has no breeding season connectivity. Proportions of these populations migrating through East Anglia TWO are small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	~~89~~908
b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Imperial Dock Lock SPA (see Table 8.2 of the HRA Screening Report (APP-044)).	

Site	90189																	
Name of European Site:	Inner Dowsing, Race Bank and North Ridge SAC~~CI~~																	
Distance to East Anglia TWO (km)	118 (windfarm site) and 109 (cable corridor)																	
Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Reefs	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
a) The distance between the offshore project area and the designated site is beyond the range of any potential LSE. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044).																		

Site	**9~~1~~20**
Name of European Site:	**Inner Moray Firth SPA & Ramsar**
Distance to East Anglia TWO (km)	**703 (windfarm site) and 694 (cable corridor)**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features bar-tailed godwit, curlew, goldeneye, greylag goose, redshank, wigeon, goosander, teal, red-breasted merganser, cormorant, oystercatcher, scaup		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (d)	N (d)	N (d)
Breeding osprey		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Breeding common tern		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (d)	N (d)	N (d)

a) Survey data show little or no evidence of Inner Moray Firth SPA features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470)), and migrations of birds from this SPA and Ramsar are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Osprey has not been observed in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470)), and it is extremely unlikely that any ospreys from the Inner Moray Firth SPA migrate through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Inner Moray Firth SPA is far beyond maximum foraging range of common tern so has no breeding season connectivity. The proportion of the population migrating through the East Anglia TWO site is likely to be extremely small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

d) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Inner Moray Firth SPA & Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**9231**
Name of European Site:	**Isle of May SAC**
Distance to East Anglia TWO (km)	**527**

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 8.2 of the HRA Screening Report (APP-044)).

Site	**9342**
Name of European Site:	**Klaverbank SCI**
Distance to East Anglia TWO (km)	**177**

Site Features	Likely effect(s) of East Anglia TWO				
	Underwater noise	Vessel Interactions	Indirect effects on prey	Changes to water quality	In-combination

Site	**9342**														
Name of European Site:	**Klaverbank SCI**														
Distance to East Anglia TWO (km)	**177**														
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise of the HRA Screening Report (APP-044)).															

~~**Site**~~	~~**94**~~
~~**Name of European Site:**~~	

~~Distance to East Anglia TWO (km)~~	~~765~~														
~~Site Features~~	~~Likely effect(s) of East Anglia TWO~~														
	~~Underwater noise~~			~~Vessel Interactions~~			~~Indirect effects on prey~~			~~Changes to water quality~~			~~In-combination~~		
	~~C~~	~~O~~	~~D~~	~~C~~	~~O~~	~~D~~	~~C~~	~~O~~	~~D~~	~~C~~	~~O~~	~~D~~	~~C~~	~~O~~	~~D~~

Site	95
Name of European Site:	Knudegrund SAC
Distance to East Anglia TWO (km)	746km

Site Features	Likely effect(s) of East Anglia ONE North														
	Underwater Noise			Vessel interactions			Indirect effects on prey			Changes to water quality			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Harbour seal	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE ((see paragraphs 218 and 219 for harbour seal and paragraphs 189 and 190 for grey seal, of the HRA Screening Report (APP-044))

Site	**9563**														
Name of European Site:	**Kosterfjorden-Väderöfjorden SAC**														
Distance to East Anglia TWO (km)	**889**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of the proposed project and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 for harbour seal and paragraphs 168 and 169 for harbour porpoise of the HRA Screening Report (APP-044)).															

Site	**9674**														
Name of European Site:	**Kungsbackafjorden SAC**														
Distance to East Anglia TWO (km)	**877**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of the proposed project and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 of the HRA Screening Report (APP-044)).

Site	**9785**														
Name of European Site:	**Küsten- und Dünenlandschaften Amrums SAC**														
Distance to East Anglia TWO (km)	**482**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

Site	**9785**
Name of European Site:	**Küsten- und Dünenlandschaften Amrums SAC**
Distance to East Anglia TWO (km)	**482**

a) The distance between the potential impact range of the proposed project and the site is beyond that of potential for direct or indirect effects (see paragraphs 190 and 191 of the HRA Screening Report (APP-044)).

Site	**9896**
Name of European Site:	**Lindisfarne SPA and Ramsar**
Distance to East Anglia TWO (km)	**446 (windfarm site) and 437 (offshore cable corridor)**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features wigeon, greylag goose, brent goose, sanderling, dunlin, ringed plover, goldeneye, whooper swan, black-tailed godwit, common scoter, red-breasted merganser, golden plover, grey plover, eider, shelduck, redshank		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding little tern, roseate tern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

Site	**9896**
Name of European Site:	**Lindisfarne SPA and Ramsar**
Distance to East Anglia TWO (km)	**446 (windfarm site) and 437 (offshore cable corridor)**

a) Survey data show little or no evidence of SPA features occurring in East Anglia TWO (see section 5.1 of Appendix 12.2 (APP-470)) and migrations of birds from this SPA are likely to result in negligible numbers passing through the site during migration (see Table 8.2 of the HRA Screening Report (APP-044).

b) Breeding little tern has a maximum foraging range of 11km from colonies, so would have no connectivity with East Anglia TWO. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia TWO site. Breeding roseate tern has a maximum foraging range of 30km from colonies, so would have no connectivity with East Anglia TWO. Migrating roseate terns are unlikely to pass through the East Anglia TWO site as their migration tends to be coastal (see Table 8.2 of the HRA Screening Report (APP-044).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Lindisfarne SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**9900100**
Name of European Site:	**Littoral Cauchois SAC**
Distance to East Anglia TWO (km)	**236 (cable corridor)**

Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Reefs	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Perennial vegetation of stony banks	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

Site	~~99~~100																	
Name of European Site:	Littoral Cauchois SAC																	
Distance to East Anglia TWO (km)	236 (cable corridor)																	
Vegetated sea cliffs of the Atlantic and Baltic coasts	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

a) As it has been agreed through the scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458)) that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes.

Site	100~~197~~
Name of European Site:	**Littoral Seino-Marin SPA**
Distance to East Anglia TWO (km)	**229**
Site Features	Likely effect(s) of East Anglia TWO

Site	**100197**											
Name of European Site:	**Littoral Seino-Marin SPA**											
Distance to East Anglia TWO (km)	**229**											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabirds including fulmar, shag, gannet, herring gull, great black-backed gull, kittiwake		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (f)	N (f)	N (f)
Nonbreeding winter and passage seabird assemblage including as named features red-throated diver, black-throated diver, great crested grebe, fulmar, gannet, cormorant, shag, pomarine skua *Stercorarius pomarinus*, great skua, Mediterranean gull *Larus melanocephalus*, little gull, lesser black-backed gull, herring gull, great black-backed gull, kittiwake, Sandwich tern, common tern, guillemot, razorbill		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (f)	N (f)	N (f)
Nonbreeding little egret, spoonbill *Platalea leucorodia*, honey buzzard *Pernis apivorus*, hen harrier, merlin *Falco columbarius*, peregrine, avocet		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)
Breeding peregrine		N (d)		N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)
Nonbreeding woodlark *Lullula arborea*		N (e)		N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)

Site	**100197**
Name of European Site:	**Littoral Seino-Marin SPA**
Distance to East Anglia TWO (km)	**229**

a) East Anglia TWO is within the theoretical maximum foraging range of breeding gannets from this SPA but tracking data show that breeding gannets from the SPA do not reach East Anglia TWO. The SPA is far beyond maximum foraging range of other designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through East Anglia TWO are likely to be extremely small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Proportions of these populations migrating through the East Anglia TWO site are likely to be extremely small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

c) None of these species has been recorded during bird surveys at the East Anglia TWO site. It is unlikely that birds from the SPA will migrate through the East Anglia TWO site, as these species are generally scarce migrants in the UK, and their migrations tend to be coastal rather than over open sea (see Table 8.2 of the HRA Screening Report (APP-044)).

d) Breeding peregrines in western Europe tend to remain close to their breeding site throughout the year so it is extremely unlikely that any from the SPA would reach East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

e) Woodlark is a very scarce migrant to the UK, so it is very unlikely that individuals from the SPA would reach the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

f) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Littoral Seino-Marin SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**101298**
Name of European Site:	**Loch of Strathbeg SPA & Ramsar**
Distance to East Anglia TWO (km)	**642**
Site Features	Likely effect(s) of East Anglia TWO

Site	**101298**											
Name of European Site:	**Loch of Strathbeg SPA & Ramsar**											
Distance to East Anglia TWO (km)	**642**											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features greylag goose, pink-footed goose, teal, Svalbard barnacle goose *Branta leucopsis*, whooper swan		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding Sandwich tern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (c)	N (c)	N (c)

a) Survey data show little or no evidence of Loch of Strathbeg SPA features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Loch of Strathbeg SPA is far beyond maximum foraging range of Sandwich tern (54km, Thaxter et al. 2012) so has no breeding season connectivity. Proportion of the population migrating through the East Anglia TWO site is likely to be extremely small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Loch of Strathbeg SPA & Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	1023														
Name of European Site:	LØnstrup RØdgrund SAC														
Distance to East Anglia TWO (km)	738														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour Porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 167 and 168 and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	103499
Name of European Site:	Løgstør Bredning, Vejlerne og Bulbjerg SAC
Distance to East Anglia TWO (km)	679
Site Features	Likely effect(s) of East Anglia TWO

	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 of the HRA Screening Report (APP-044)).

Site	**10450**														
Name of European Site:	**Lovns Bredning, Hjarbæk Fjord og Skals, Simested og Nørre Ådal, Skravad Bæk SAC**														
Distance to East Anglia TWO (km)	**676**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 of the HRA Screening Report (APP-044)).															

Site	**10561**														
Name of European Site:	**Malmöfjord SAC**														
Distance to East Anglia TWO (km)	**882**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

Site	**10561**
Name of European Site:	**Malmöfjord SAC**
Distance to East Anglia TWO (km)	**882**

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 of the HRA Screening Report (APP-044)).

Site	**10672**
Name of European Site:	**Marais du Cotentin et du Bessin - Baie des Veys SAC**
Distance to East Anglia TWO (km)	**378**

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal and paragraphs 190 and 191 for grey seal, of the HRA Screening Report (APP-044)).

Site	**10783**																	
Name of European Site:	**Margate and Long Sands SCI**																	
Distance to East Anglia TWO (km)	**39 (windfarm site) and 37 (cable corridor)**																	
Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
a) The distance between the offshore project area and the designated site is beyond the range of any potential LSE. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044)																		

Site	**10894**											
Name of European Site:	**Marwick Head SPA**											
Distance to East Anglia TWO (km)	**829**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D

Site	**10894**											
Name of European Site:	**Marwick Head SPA**											
Distance to East Anglia TWO (km)	**829**											
Breeding seabird assemblage including as named features guillemot and kittiwake		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Marwick Head SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Marwick Head SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**1091105**														
Name of European Site:	**Måseskär SAC**														
Distance to East Anglia TWO (km)	**871**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 of the HRA Screening Report (APP-044)).

Site	110106										
Name of European Site:	Medway Estuary & Marshes SPA and Ramsar										
Distance to East Anglia TWO (km)	118 (windfarm site) and 101 (offshore cable corridor)										
Site Features	Likely effect(s) of East Anglia TWO										
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features pintail, shoveler, teal, wigeon, turnstone, brent goose, dunlin, knot, ringed plover Bewick's swan, oystercatcher, black-tailed godwit, curlew, grey plover, great crested grebe, avocet, shelduck, greenshank, redshank		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (d)	N (d)	N (d)
Breeding avocet		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Breeding little tern, common tern		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)

a) Survey data show little or no evidence of Medway Estuary & Marshes SPA features occurring in the East Anglia TWO site site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Avocet has not been observed during bird site-specific surveys site (see section 5.1 of Appendix 12.2 (APP-470). It is highly unlikely that these birds would migrate through the East Anglia TWO site as their migration is likely to take a coastal route and cross sea at narrow points such as The English Channel. If they did migrate through the East Anglia TWO site their flight height is likely not to be at collision risk height (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Breeding little tern has a maximum foraging range of 11km from colonies (Thaxter et al. 2012), so would have no connectivity with East Anglia TWO. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so

Site	110106
Name of European Site:	Medway Estuary & Marshes SPA and Ramsar

are unlikely to pass through the East Anglia TWO site. Breeding common tern has a maximum foraging range of 30km from colonies (Thaxter et al. 2012), so would have no connectivity with East Anglia TWO. Migrating common terns are unlikely to pass through the East Anglia TWO site as their migration tends to be coastal where that is an option (see Table 8.2 of the HRA Screening Report (APP-044)).

d) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Medway Estuary & Marshes SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	112
Name of European Site	Minsmere to Walberswick Heaths and Marshes SAC
Distance to East Anglia TWO (km)	1.8km (offshore cable corridor)

Fish

Site Features	Likely effect(s) of East Anglia ONE North																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sea Lamprey	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
River lamprey	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Twaite shad	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

Site	**112**																	
Name of European Site	**Minsmere to Walberswick Heaths and Marshes SAC**																	
Distance to East Anglia TWO (km)	**1.8km (offshore cable corridor)**																	
Benthic Habitats																		
Site Features	Likely effect(s) of East Anglia ONE North																	
		Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
		C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Estuaries		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Mudflats and sandflats not covered by seawater at low tide		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Reefs		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see section 6.2.1, of the HRA Screening Report (APP-044)).

b) The distance between the offshore project area and the designated site is beyond the range of any potential LSE. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044).

Site	**111307**											
Name of European Site:	**Minsmere - Walberswick SPA and Ramsar**											
Distance to East Anglia TWO (km)	**34 (windfarm site) and 2 (cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering shoveler, gadwall, white-fronted goose		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (g)	N (g)	N (g)
Nonbreeding hen harrier		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (g)	N (g)	N (g)
Breeding shoveler, teal, gadwall, bittern, avocet		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (g)	N (g)	N (g)
Breeding nightjar *Caprimulgus europaeus*		N (d)		N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (g)	N (g)	N (g)
Breeding marsh harrier		N (e)		N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (e)
Breeding little tern		N (f)		N (f)	N (f)	N (f)	N (f)	N (f)	N (f)	N (f)	N (f)	N (f)

Site	**111307**
Name of European Site:	**Minsmere - Walberswick SPA and Ramsar**
Distance to East Anglia TWO (km)	**34 (windfarm site) and 2 (cable corridor)**

a) Survey data show no evidence of Minsmere-Walberswick SPA features shoveler, gadwall or white-fronted goose occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site.

b) Survey data show no evidence of hen harrier occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site as UK birds are likely to migrate overland rather than over the sea where possible (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Survey data show no evidence of Minsmere-Walberswick SPA features shoveler, teal, gadwall, bittern or avocet occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

d) Survey data show no evidence of nightjar occurring in the East Anglia TWO OWF site~~s~~ (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site as UK birds are likely to migrate overland rather than over the sea where possible and make short sea crossings from southern England to France (see Table 8.2 of the HRA Screening Report (APP-044)).

e) Marsh harrier is a migrant species. Satellite tracking suggests that marsh harriers migrate overland to the south coast of England and over the Channel to France, rather than across the North Sea (see Table 8.2 of the HRA Screening Report (APP-044)).

f) Breeding little tern has a maximum foraging range of 11km from colonies (Thaxter et al. 2012), so would have no connectivity with East Anglia TWO. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

g) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Minsmere-Walberswick SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	112408											
Name of European Site:	Montrose Basin SPA & Ramsar											
Distance to East Anglia TWO (km)	572											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features dunlin, eider, knot, shelduck, wigeon, pink-footed goose, greylag goose, redshank, oystercatcher		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of Montrose Basin SPA features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Montrose Basin SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	113509											
Name of European Site:	Moray and Nairn Coast SPA & Ramsar											
Distance to East Anglia TWO (km)	679											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features common scoter, long-tailed duck, oystercatcher, bar-tailed godwit, wigeon, pink-footed goose, red-breasted merganser, redshank, velvet scoter, greylag goose, dunlin		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding osprey		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of Moray & Nairn Coast SPA features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470)), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Osprey has not been observed in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470)), and it is improbable that any ospreys from the SPA migrate through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Moray & Nairn Coast SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**11460**
Name of European Site:	**Mousa SPA**
Distance to East Anglia TWO (km)	**883**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding Arctic tern		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding European storm-petrel *Hydrobates pelagicus*		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Mousa SPA is beyond maximum foraging range of Arctic tern (30km, Thaxter et al. 2012) so has no breeding season connectivity. The proportion of the population migrating through the East Anglia TWO site is likely to be extremely small relative to BDMPS(see Table 8.2 of the HRA Screening Report (APP-044)).

b) European storm-petrels were not observed in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and are rarely seen anywhere in the southern North Sea, so evidence suggests that this species migrates from its breeding site on Mousa into the North Atlantic and not normally through the North Sea (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Mousa SPA(see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**11571**														
Name of European Site:	**Mousa SAC**														
Distance to East Anglia TWO (km)	**878**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 of the HRA Screening Report (APP-044)).

Site	**118**														
Name of European Site	**Mühlenberger Loch SPA**														
Distance to East Anglia ONE North (km)	**526km**														
Marine Mammals															
Site Features	Likely effect(s) of East Anglia ONE North														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Harbour seal *Phoca vitulina*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Fish															

Site	**118**																			
Name of European Site	**Mühlenberger Loch SPA**																			
Distance to East Anglia ONE North (km)	**526km**																			
Site Features	Likely effect(s) of East Anglia ONE North																			
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Houting	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Twaite shad	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Lampern	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Great sea lamprey	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Salmon	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

Benthic Habitats						
Site Features	Likely effect(s) of East Anglia ONE North					
	Permanent loss	Temporary physical disturbance	Smothering due to increased suspended sediment	Re- mobilisation of contaminate d sediments	Underwater noise and vibration	In-combination

Site		**118**																
Name of European Site		**Mühlenberger Loch SPA**																
Distance to East Anglia ONE North (km)		**526km**																
		C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Estuaries		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) The distance between the potential impact range of East Anglia ONE North and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 218 and 219 for harbour seal and paragraphs 167 and 168 for harbour porpoise, of the HRA Screening Report (APP-044)).

b) It was agreed as part of the East Anglia ONE North Scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458) and Appendix 10.1 (APP-462) that transboundary impacts on fish and benthic habitats would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA

Site	**11~~7~~92~~2~~**														
Name of European Site:	**Nationalpark Niedersächsisched Wattenmeer SAC**														
Distance to East Anglia TWO (km)	**329**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

Site **Name of European Site:** **Distance to East Anglia TWO (km)**	**~~118~~1203~~3~~** **Nibe Bredning, Halkær Ådal og Sønderup Ådal SAC** **682**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 of the HRA Screening Report (APP-044)).

Site **Name of European Site:** **Distance to East Anglia TWO (km)**	**~~119~~1214~~4~~** **Nidingen SAC** **883**				
Site Features	Likely effect(s) of East Anglia TWO				
	Underwater noise	Vessel Interactions	Indirect effects on prey	Changes to water quality	In-combination

	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 of the HRA Screening Report (APP-044)).

Site	**120215**
Name of European Site:	**Noordzeekustzone SAC**
Distance to East Anglia TWO (km)	**163**

Marine Mammals

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions and disturbance at seal haul outs			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Grey seal	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Harbour seal	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

Fish

Site Features	Likely effect(s) of East Anglia TWO																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D

Site Name of European Site: Distance to East Anglia TWO (km)	120215 Noordzeekustzone SAC 163																				
Sea Lamprey	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)
Allis Shad	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)
Twaite Shad	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)	N(b)
Benthic Habitats																					
Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D			
Sandbanks which are slightly covered by sea water all the time	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)			
Mudflats and sandflats not covered by seawater at low tide	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)			

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

~~a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE.~~

b) It was agreed as part of the East Anglia TWO Scoping and Evidence Plan Process (EPP) (see Appendix 10.1 (APP-462)~~Report~~ that transboundary impacts on fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA

Site	**120215**
Name of European Site:	**Noordzeekustzone SAC**
Distance to East Anglia TWO (km)	**163**

c) As it has been agreed through the scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458)process that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes.

Site	**121316**
Name of European Site:	**Nordre älvs estuarium SAC**
Distance to East Anglia TWO (km)	**850**

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 and Table 8.2 of the HRA Screening Report (APP-044)).

Site **Name of European Site:** **Distance to East Anglia TWO (km)**	**122417** **Nordvästra Skånes havsområde SAC** **975**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal Phoca vitulina	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal and paragraphs 190 and 191 for harbour porpoise, of the HRA Screening Report (APP-044)).

Site	123518											
Name of European Site:	North Caithness Cliffs SPA											
Distance to East Anglia TWO (km)	769											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features fulmar, guillemot, kittiwake, razorbill, puffin		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding peregrine		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) North Caithness Cliffs SPA is far beyond the maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Peregrines breeding in the UK normally remain close to their breeding areas throughout the year, and are very unlikely to migrate offshore from the UK (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at North Caithness Cliffs SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	124619			
Name of European Site:	North Norfolk Coast SPA and Ramsar			
Distance to East Anglia TWO (km)	99 (windfarm site) and 87 (cable corridor)			
Site Features	Likely effect(s) of East Anglia TWO			
	Collision mortality	Displacement/Disturbance	Barrier Effect	Cumulative/In-combination

Site	**124619**											
Name of European Site:	**North Norfolk Coast SPA and Ramsar**											
Distance to East Anglia TWO (km)	**99 (windfarm site) and 87 (cable corridor)**											
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features wigeon, pink-footed goose, brent goose, knot, avocet		**Y (a)**		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (f)	**Y (a)**	N (f)
Breeding bittern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (f)	N (f)	N (f)
Breeding marsh harrier		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (f)	N (f)	N (f)
Breeding avocet		N (d)		N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (f)	N (f)	N (f)
Breeding little tern, common tern, Sandwich tern		N (e)		N (e)	N (e)	N (e)	N (e)	N (e)	N (e)	N (f)	N (f)	N (f)

a) Survey data show little or no evidence of North Norfolk Coast SPA features wigeon, pink-footed goose, brent goose, knot, avocet occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470)), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Survey data show no evidence of North Norfolk Coast SPA feature bittern occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Marsh harrier is a migrant species. Satellite tracking suggests that marsh harriers migrate overland to the south coast of England and over the Channel to France, rather than across the North Sea (see Table 8.2 of the HRA Screening Report (APP-044)).

d) Survey data show no evidence of North Norfolk Coast SPA feature avocet occurring in the East Anglia TWO site, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

e) Little tern, common tern and Sandwich tern have maximum foraging ranges from colonies of 11km, 30km and 54km respectively (Thaxter et al. 2012), so there is no connectivity between the SPA and East Anglia TWO site. Furthermore, these species tend to forage in coastal waters rather than offshore. Therefore, collision risk, displacement and barrier effects can be excluded (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**124619**
Name of European Site:	**North Norfolk Coast SPA and Ramsar**
Distance to East Anglia TWO (km)	**99 (windfarm site) and 87 (cable corridor)**

f) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at North Norfolk Coast SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**12570**
Name of European Site:	**North Norfolk Sandbanks and Saturn Reef SAC**
Distance to East Anglia TWO (km)	**75 (windfarm site) and 73 (cable corridor)**

Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Reefs	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

a) Beyond the range of potential impact. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044).

Site	12~~681~~											
Name of European Site:	Northumbria Coast SPA and Ramsar											
Distance to East Anglia TWO (km)	350 (windfarm site) and 339 (cable corridor)											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding turnstone, purple sandpiper *Calidris maritima*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding little tern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of SPA features occurring in East Anglia TWO (see section 5.1 of Appendix 12.2 (APP-470) and migrations of birds from this SPA are likely to result in negligible numbers passing through the site during migration (see Table 8.2 of the HRA Screening Report (APP-044).

b) Breeding little tern has a maximum foraging range of 11km from colonies (Thaxter et al. 2012), so would have no connectivity with East Anglia TWO. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Northumbria Coast SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	12~~792~~											
Name of European Site:	**Noss SPA**											
Distance to East Anglia TWO (km)	**889**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features gannet, fulmar, guillemot, kittiwake, puffin, great skua		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) SPA is far beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through East Anglia TWO are small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Noss SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**~~128~~1303~~3~~**														
Name of European Site:	**NTP S-H Wattenmeer und angrenzende Kustengebiete SAC**														
Distance to East Anglia TWO (km)	**448**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of the proposed project and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).															

Site	**~~129~~1314~~4~~**														
Name of European Site:	**Oosterschelde SAC**														
Distance to East Anglia TWO (km)	**104**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

Site	~~129~~1314~~4~~													
Name of European Site:	**Oosterschelde SAC**													
Distance to East Anglia TWO (km)	**104**													
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of the proposed project and the extent of any impact on individuals from this site result are negligible and would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

Site	1~~3~~0~~2~~2~~5~~																	
Name of European Site:	**Orfordness - Shingle Street SAC**																	
Distance to East Anglia TWO (km)	**37 (windfarm site) and 5 (cable corridor)**																	
Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Coastal lagoons	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

a) The primary feature of the SAC is a series of percolation lagoons which are separated from the marine environment by the Orford shingle beach. These features are described as non-marine as they occur landward of highest astronomical tide. Therefore, due to a physical barrier there is no pathway between the source of any effects in the marine environment and the receptor (see Table 5.2 of HRA Screening Report (APP-470)).

Site	**13~~1~~3~~26~~**											
Name of European Site:	**Östliche Deutsche Bucht SPA**											
Distance to East Anglia TWO (km)	**434**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Ornithology												
Nonbreeding seabirds (razorbill, fulmar, black-throated diver, red-throated diver, herring gull, common gull, lesser black-backed gull, great black-backed gull, little gull, black-headed gull *Chroicocephalus ridibundus*, common scoter, great crested grebe, kittiwake, common tern, Arctic tern, sandwich tern, gannet, guillemot)		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Migrations of birds from this SPA are likely to result in negligible numbers passing through East Anglia TWO during migration relative to the size of BDMPS regional populations (see Table 5.2 of HRA Screening Report (APP-470)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at östliche Deutsche Bucht SPA (see Table 5.2 of HRA Screening Report (APP-470)).

Site Features	Likely effect(s) of East Anglia TWO				
	Underwater noise	Vessel Interactions	Indirect effects on prey	Changes to water quality	In-combination

Site	**131326**														
Name of European Site:	**Östliche Deutsche Bucht SPA**														
Distance to East Anglia TWO (km)	**434**														
	C	O	D	C	O	~~C~~D	~~O~~C	~~D~~O	~~C~~D	~~O~~C	~~C~~O	~~O~~D	~~D~~C	~~C~~O	~~O~~D
Marine Mammals															
Harbour porpoise *Phocoena phocoena*	N(c)	N(c)	N(c)				N(c)	N(c)	N(c)	N(c)	~~N(c)~~	N(c)	N(c)	N(c)	N(c)
Grey seal *Halichoerus grypus*	N(c)	N(c)	N(c)				N(c)	N(c)	N(c)	N(c)	~~N(c)~~	N(c)	N(c)	N(c)	N(c)
Harbour seal *Phoca vitulina*	N(c)	N(c)	N(c)				N(c)	N(c)	N(c)	N(c)	~~N(c)~~	N(c)	N(c)	N(c)	N(c)
c) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE. (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).															

Site	**132427**														
Name of European Site:	**Ouessant-Molene SAC**														
Distance to East Anglia TWO (km)	**630**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any impact on individuals from this site result are negligible and would result in no potential for LSE (see paragraphs 190 and 191 and Table 8.2 of the HRA Screening Report (APP-044)).

Site	**1~~33528~~**											
Name of European Site:	**Outer Thames Estuary SPA and pSPA extension**											
Distance to East Anglia TWO (km)	**Within cable corridor**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding red-throated divers		**Y (a)**		**Y (b)**	**Y (c)**	**Y (b)**	**Y (b)**	**Y (a)**	**Y (b)**	**Y (a)**	**Y (a)**	N (e)
Breeding little tern and common tern		N (d)		N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)

a) Given the overlap of the East Anglia TWO cable corridor with this SPA ~~and pSPA~~, collision risk cannot be ruled out at this stage and further assessment is required (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Given the overlap of the East Anglia TWO cable corridor with this SPA ~~and pSPA~~, further detailed assessment is appropriate. Disturbance to red-throated diver is possible, especially during export cable installation.Great Yarmouth may be used as a port for construction vessels for the East Anglia TWO site; this port is located very close to the northern extent of the SPA however is outside the main concentrations of red-throated divers. This, together with the extent of existing vessel movements in the area means the addition of construction traffic as a result of the Project ~~Norolk Boreas~~ will make little difference to the existing baseline and therefore the potential for LSE is considered to be negligible (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Following advice from Natural England it is considered that Operations and Maintenance vessels may disturb red-throated divers whilst transiting through the SPA therefore an LSE cannot be screened out (see Appendix 12.1 (APP-469)).

d) SPA is beyond maximum foraging range of designated breeding seabird species (terns) and tern foraging tends to be coastal so has no breeding season connectivity. Proportions of these populations migrating through East Anglia TWO are likely to be small as these species are thought to remain close to shore during much of their migration through UK waters (see Table 8.2 of the HRA Screening Report (APP-044)).

e) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Outer Thames Estuary SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**134629**											
Name of European Site:	**Papa Stour SPA**											
Distance to East Anglia TWO (km)	**922**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding Arctic tern		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding ringed plover		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Papa Stour SPA is beyond maximum foraging range of Arctic tern so has no breeding season connectivity. The proportion of the population migrating through the East Anglia TWO site is very small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Ringed plovers breeding in Scotland 'tend to winter locally or move only short distances' (Forrester et al. 2007) so birds from Papa Stour are extremely unlikely to reach the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Papa Stour SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site				**1357**															
Name of European Site				**Panache De La Gironde Et Plateau Rocheux De Cordouan (Système Pertuis Gironde) SAC**															
Distance to East Anglia TWO (km)				**753 (cable corridor)**															
Marine Mammals																			
Site Features	Likely effect(s) of East Anglia TWO																		
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination						
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D				
Harbour porpoise *Phocoena phocoena*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	~~N (a)~~	N (a)	N (a)	N (a)	N (a)				
Grey seal *Halichoerus grypus*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	~~N (a)~~	N (a)	N (a)	N (a)	N (a)				
Fish																			
Site Features	Likely effect(s) of East Anglia TWO																		
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Atlantic sturgeon	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
River lamprey	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Allis shad	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

Site	1357																			
Name of European Site	Panache De La Gironde Et Plateau Rocheux De Cordouan (Système Pertuis Gironde) SAC																			
Distance to East Anglia TWO (km)	753 (cable corridor)																			
Twaite shad	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Lampern	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Great sea lamprey	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Salmon	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Benthic Habitats																				
Site Features	Likely effect(s) of East Anglia TWO																			
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re-mobilisation of contaminated sediments			Underwater noise and vibration			In-combination			
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D		
Sandbanks which are slightly covered by sea water all the time	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		
Estuaries	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		

Site	1357																	
Name of European Site	Panache De La Gironde Et Plateau Rocheux De Cordouan (Système Pertuis Gironde) SAC																	
Distance to East Anglia TWO (km)	753 (cable corridor)																	
Mudflats and sandflats not covered by seawater at low tide	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Reefs	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 189 and 190 for grey seal and paragraphs 167 and 168 for harbour porpoise, of the HRA Screening Report (APP-044)).

b) It was agreed as part of the East Anglia TWO Scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458) and Appendix 10.1 (APP-462) that transboundary impacts on benthic habitats fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA

Site	13689											
Name of European Site:	Papa Westray (North Hill and Holm) SPA											
Distance to East Anglia TWO (km)	842											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding Arctic tern		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)
Breeding Arctic skua		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

Site	**13680**
Name of European Site:	**Papa Westray (North Hill and Holm) SPA**
Distance to East Anglia TWO (km)	**842**

a) Papa Westray SPA is beyond the maximum foraging range of Arctic tern or Arctic skua so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be extremely small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Papa Westray SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**13791**
Name of European Site:	**Pater Noster-skärgården SAC**
Distance to East Anglia TWO (km)	**867**

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**1381402**
Name of European Site:	**Pentland Firth Islands SPA**
Distance to East Anglia TWO (km)	**777**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding Arctic tern		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Pentland Firth Islands SPA is beyond maximum foraging range of Arctic tern so has no breeding season connectivity. The proportion of the population migrating through the East Anglia TWO site is likely to be extremely small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Pentland Firth Islands SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**1~~39~~41**
Name of European Site	**Pertuis Charentais SAC**
Distance to East Anglia TWO (km)	**682**

Marine Mammals

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	~~N (a)~~	N (a)	N (a)	N (a)	N (a)
Grey seal *Halichoerus grypus*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	~~N (a)~~	N (a)	N (a)	N (a)	N (a)

Fish

Site Features	Likely effect(s) of East Anglia TWO																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Atlantic sturgeon	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
River lamprey	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Allis shad	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

Site					**13941**															
Name of European Site					**Pertuis Charentais SAC**															
Distance to East Anglia TWO (km)					**682**															
Twaite shad	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Lamper n	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Great sea lamprey	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Salmon	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Benthic Habitats																				
Site Features	Likely effect(s) of East Anglia TWO																			
		Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
		C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

Site	13941																
Name of European Site	Pertuis Charentais SAC																
Distance to East Anglia TWO (km)	682																
Estuaries	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Mudflats and sandflats not covered by seawater at low tide	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Reefs	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Large shallow inlets and bays	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Submerged or partially submerged sea caves	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Salicornia and other annuals colonizing mud and sand	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Annual vegetation of drift lines	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

Site	**13941**
Name of European Site	**Pertuis Charentais SAC**
Distance to East Anglia TWO (km)	**682**

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 189 and 190 for grey seal and paragraphs 167 and 168 for harbour porpoise, of the HRA Screening Report (APP-044)).

b) It was agreed as part of the East Anglia TWO Scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458) and Appendix 10.1 (APP-462) that transboundary impacts on benthic habitats fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA

Site	**1402**
Name of European Site	**Plymouth Sound and Estuaries SAC**
Distance to East Anglia TWO (km)	**477 (shortest distance overland)**

Fish																					
Site Features	Likely effect(s) of East Anglia TWO																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Allis shad	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Benthic Habitats																					
	Likely effect(s) of East Anglia TWO																				

Site	1402																	
Name of European Site	Plymouth Sound and Estuaries SAC																	
Distance to East Anglia TWO (km)	477 (shortest distance overland)																	
Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Estuaries	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Large shallow inlets and bays	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Reefs	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Atlantic salt meadows	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see section 6.2.1, of the HRA Screening Report (APP-044)).

b) The distance between the offshore project area and the designated site is beyond the range of any potential LSE. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044).

Site	**141333**
Name of European Site:	**Portsmouth Harbour SPA**
Distance to East Anglia TWO (km)	**261**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding brent goose, dunlin, black-tailed godwit, red-breasted merganser		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of Portsmouth Harbour SPA features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470)), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Portsmouth Harbour SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**142434**
Name of European Site:	**Presqu'ile De Crozon SAC**
Distance to East Anglia TWO (km)	**630**

Site Features	Likely effect(s) of East Anglia TWO				
	Underwater noise	Vessel Interactions	Indirect effects on prey	Changes to water quality	In-combination

	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 8.2 of the HRA Screening Report (APP-044)).

Site	**143535**											
Name of European Site:	**Ramsar-Gebiet S-H Wattenmeer und angrenzende Küstengebiete SPA**											
Distance to East Anglia TWO (km)	**448**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabirds including common gull, lesser black-backed gull, great black-backed gull, Mediterranean gull, black-headed gull, little tern, common tern, Arctic tern, Sandwich tern, black tern, gull-billed tern *Gelochelidon nilotica*		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (e)	N (e)	N (e)
Nonbreeding seabirds including razorbill, black-throated diver, red-throated diver, common gull, lesser		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (e)	N (e)	N (e)

Site	143535											
Name of European Site:	Ramsar-Gebiet S-H Wattenmeer und angrenzende Küstengebiete SPA											
Distance to East Anglia TWO (km)	448											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
black-backed gull, great black-backed gull, Mediterranean gull, black-headed gull, little gull, kittiwake, little tern, common tern, Arctic tern, Sandwich tern, cormorant, guillemot												
Waterbirds including pintail, shoveler, teal, wigeon, mallard, garganey *Anas querquedula*, grey heron *Ardea cinerea*, turnstone, bittern, brent goose, barnacle goose, sanderling, dunlin, curlew sandpiper, ringed plover, Kentish plover *Charadrius alexandrinus*, Bewick's swan, whooper swan, snipe *Gallinago gallinago*, oystercatcher, black-winged stilt *Himantopus himantopus*, bar-tailed godwit, black-tailed godwit, common scoter, red-breasted merganser, curlew, whimbrel, ruff, spoonbill, golden plover, grey plover, red-necked grebe *Podiceps grisegena*, black-necked grebe *Podiceps nigricollis*, avocet, eider, shelduck, greenshank, redshank,		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (e)	N (e)	N (e)

Site	**143535**											
Name of European Site:	**Ramsar-Gebiet S-H Wattenmeer und angrenzende Küstengebiete SPA**											
Distance to East Anglia TWO (km)	**448**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
lapwing												
Terrestrial birds (various species)		N (d)		N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)	N (d)

a) The East Anglia TWO site is beyond maximum foraging range of designated breeding seabird species from this SPA, so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be extremely small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site relative to the size of BDMPS regional populations, not only because of the distance, but also because seabirds and waterbirds from this SPA are likely to migrate predominantly along the continental coast of the North Sea towards northern breeding grounds rather than across the southern North Sea (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Survey data show little or no evidence of these waterbird features occurring in the East Anglia TWO OWF site (see section 5.1 of Appendix 12.2 (APP-470))~~s~~, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site, as most of these birds are likely to remain on the continental side of the North Sea (see Table 8.2 of the HRA Screening Report (APP-044)).

d) Terrestrial birds from this SPA are very unlikely to migrate to the UK; those that do migrate are more likely to follow the west European flyway along the continental coast (see Table 8.2 of the HRA Screening Report (APP-044)).

e) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at this SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**144636**														
Name of European Site:	**Récifs et marais arrière-littoraux du Cap Lévi à la Pointe de Saire SAC**														
Distance to East Anglia TWO (km)	**355**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 for harbour seal and paragraphs 190 and 191 for grey seal, of the HRA Screening Report (APP-044)).															

Site	**145737**														
Name of European Site:	**Recifs Gris-Nez Blanc-Nez SAC**														
Distance to East Anglia TWO (km)	**123 (windfarm site) and 131 (offshore cable corridor)**														
Marine Mammals															
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

Site Name of European Site: Distance to East Anglia TWO (km)	145737 Recifs Gris-Nez Blanc-Nez SAC 123 (windfarm site) and 131 (offshore cable corridor)																	
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)			
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)			
Benthic Habitats																		
Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)
Reefs	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

b) As it has been agreed through the scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458) ~~process~~ that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes

Site	**146838**																	
Name of European Site:	**Ridens et dunes hydrauliques du detroit du Pas-de-Calais SAC**																	
Distance to East Anglia TWO (km)	**132**																	
Marine Mammals																		
Site Features	Likely effect(s) of East Anglia TWO																	
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination					
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D			
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)			
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)			
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)			
Benthic Habitats																		
Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)
Reefs	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)

Site	**146838**
Name of European Site:	**Ridens et dunes hydrauliques du detroit du Pas-de-Calais SAC**
Distance to East Anglia TWO (km)	**132**

a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

b) As it has been agreed through the scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458)) process that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes.

Site	**1479**
Name of European Site	**River Avon SAC**
Distance to East Anglia TWO (km)	**300 (shortest distance overland)**

Fish

Site Features	Likely effect(s) of East Anglia TWO																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sea lamprey	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Salmon	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

Site	1479
Name of European Site	River Avon SAC
Distance to East Anglia TWO (km)	300 (shortest distance overland)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see section 6.2.1, of the HRA Screening Report (APP-044)).

Site	1485039
Name of European Site:	River Derwent SAC
Distance to East Anglia TWO (km)	261

Site features	Likely effect(s) of East Anglia TWO																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
River lamprey	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

a) River lamprey are restricted to rivers and coasts so there can be no direct interaction with the proposed East Anglia TWO project. Sea lamprey could in theory be present in the vicinity of the proposed East Anglia TWO project, but given their life history interaction would be limited. The distance between the proposed project and the site precludes direct impact upon the site and its supporting habitats (see Table 5.2 of the HRA Screening Report (APP-470)).

Site	~~149~~1510~~0~~											
Name of European Site:	Ronas Hill - North Roe and Tingon SPA											
Distance to East Anglia TWO (km)	938											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding great skua		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (d)	N (d)	N (d)
Breeding red-throated diver		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (d)	N (d)	N (d)
Breeding merlin		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (d)	N (d)	N (d)

a) Ronas Hill, North Roe & Tingon SPA is beyond maximum foraging range of great skua so has no breeding season connectivity. The proportion of the population migrating through the East Anglia TWO site is likely to be extremely small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Ronas Hill, North Roe & Tingon SPA is beyond maximum foraging range of red-throated diver so has no breeding season connectivity. The proportion of the population migrating through the East Anglia TWO site is likely to be extremely small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Merlins from this population are likely to migrate to wintering areas that are predominantly within the UK. A few, mostly young birds, may winter on the European continent so could possibly pass through the East Anglia TWO site. However, no merlins have been seen during site specific surveys, and the chances of any from this SPA passing through the site are likely to be extremely low (see Table 8.2 of the HRA Screening Report (APP-044)).

d) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Ronas Hill, North Roe & Tingon SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**150241**											
Name of European Site:	**Rousay SPA**											
Distance to East Anglia TWO (km)	**826**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features guillemot, Arctic skua, Arctic tern, kittiwake, fulmar		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Rousay SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Rousay SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**151342**				
Name of European Site:	**Sälöfjorden SAC**				
Distance to East Anglia TWO (km)	**858**				
Site Features	Likely effect(s) of East Anglia TWO				
	Underwater noise	Vessel Interactions	Indirect effects on prey	Changes to water quality	In-combination

Site	151342														
Name of European Site:	Sälöfjorden SAC														
Distance to East Anglia TWO (km)	858														
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 and Table 8.2 of the HRA Screening Report (APP-044)).

Site	**152443**														
Name of European Site:	**Sanday SAC**														
Distance to East Anglia TWO (km)	**745**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 and Table 8.2 of the HRA Screening Report (APP-044)).															

Site	**1535**														
Name of European Site:	**Sandbanker ud for Thyboron SAC**														
Distance to East Anglia TWO (km)	**582**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour Porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 167 and 168 and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	1546														
Name of European Site:	Sandbanker ud for Thorsminde SAC														
Distance to East Anglia TWO (km)	582														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour Porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 167 and 168 and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	**155744**								
Name of European Site:	**Sandlings SPA**								
Distance to East Anglia TWO (km)	**Within onshore cable corridor**								
Site Features	Likely effect(s) of East Anglia TWO								
	Habitat Loss			Displacement/Disturbance			In combination		
	C	O	D	C	O	D	C	O	D
Breeding nightjar *Caprimulgus europaeus*	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**
Breeding woodlark *Lullula arborea*	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**
a) Potential for direct and indirect effects (LSE) during all phases of development and therefore screened in (see Table 4.2 of the HRA Screening Report (APP-470).									

Site	**15845**														
Name of European Site:	**SBZ 1 / ZPS 1 ~~SPA~~SAC**														
Distance to East Anglia TWO (km)	**94 (windfarm site) and 107 (offshore cable corridor)**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal *Halichoerus grypus*	**Y(b)**	**Y(b)**	**Y(b)**	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal and paragraphs 190 and 191 for harbour porpoise, of the HRA Screening Report (APP-044)).

b) The East Anglia TWO windfarm site is within the foraging range of grey seal and therefore the potential for LSE from underwater noise impacts cannot be ruled out.

Site	**15946**
Name of European Site:	**SBZ 2 / ZPS ~~SPA~~SAC**
Distance to East Anglia TWO (km)	**84 (windfarm site) and 100 (offshore cable corridor)**
Site Features	Likely effect(s) of East Anglia TWO

Site	**15946**
Name of European Site:	**SBZ 2 / ZPS ~~SPA~~SAC**
Distance to East Anglia TWO (km)	**84 (windfarm site) and 100 (offshore cable corridor)**

	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	**Y(b)**	**Y(b)**	**Y(b)**	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 8.2 of the HRA Screening Report (APP-044)).

b) The East Anglia TWO windfarm site is within the foraging range of grey seal and therefore the potential for LSE from underwater noise impacts cannot be ruled out.

Site	**16047**
Name of European Site:	**SBZ 3 / ZPS 3 ~~SPA~~SAC**
Distance to East Anglia TWO (km)	**92 (windfarm site) and 108 (offshore cable corridor)**

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	**Y(b)**	**Y(b)**	**Y(b)**	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 8.2 of the HRA Screening Report (APP-044)).

b) The East Anglia TWO windfarm site is within the foraging range of grey seal and therefore the potential for LSE from underwater noise impacts cannot be ruled out.

Site	**16148**																	
Name of European Site:	**Scanner Pockmark SAC**																	
Distance to East Anglia TWO (km)	**667**																	
Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Submarine structures made by leaking gases	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

a) The distance between the offshore project area and the designated site is beyond the range of any potential LSE. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044).

Site	**162**																	
Name of European Site	**SchleswigHolsteinisches Elbastuar und angrenzende Flachen SAC**																	
Distance to East Anglia TWO (km)	**470**																	
Marine Mammals																		
Site Features	Likely effect(s) of East Anglia TWO																	
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination					
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D			

Site	**162**																			
Name of European Site	**SchleswigHolsteinisches Elbastuar und angrenzende Flachen SAC**																			
Distance to East Anglia TWO (km)	**470**																			
Harbour seal *Phoca vitulina*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	~~N (a)~~	N (a)	N (a)	N (a)	N (a)					
Fish																				
Site Features	Likely effect(s) of East Anglia TWO																			
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Houting	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Twaite shad	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Lampern	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Great sea lamprey	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Salmon	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Benthic Habitats																				
	Likely effect(s) of East Anglia TWO																			

Site	162																	
Name of European Site	SchleswigHolsteinisches Elbastuar und angrenzende Flachen SAC																	
Distance to East Anglia TWO (km)	470																	
Site Features		Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
		C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Estuaries		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Mudflats and sandflats not covered by seawater at low tide		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Large shallow inlets and bays		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Salicornia and other annuals colonizing mud and sand		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Atlantic salt meadows (Glauco-Puccinellietalia maritimae)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 218 and 219, of the HRA Screening Report (APP-044)).

b) It was agreed as part of the East Anglia TWO Scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458) and Appendix 10.1 (APP-462) that transboundary impacts on benthic habitats fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA

Site	**16349**
Name of European Site:	**Seevogelschutzgebiet Helgoland SPA**
Distance to East Anglia TWO (km)	**428**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features razorbill, fulmar, herring gull, lesser black-backed gull, kittiwake, gannet, guillemot		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Nonbreeding seabird assemblage including razorbill, black-throated diver, red-throated diver, common gull, lesser black-backed gull, little gull, kittiwake, common scoter, red-necked grebe, eider, common tern, Arctic tern, Sandwich tern, gannet, guillemot		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (c)	N (c)	N (c)

a) Tracking data from gannets breeding on Helgoland show these birds do not travel in the direction of or as far as the East Anglia TWO site despite this site being within theoretical maximum foraging range of gannet. East Anglia TWO is beyond the maximum foraging range of other seabird species at Seevogelschutzgebeit Helgoland SPA. Proportions of these populations migrating through East Anglia TWO are likely to be very small relative to BDMPS regional populations (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site during migration relative to the size of BDMPS regional populations, not only because the sites are 428km apart, but also because nonbreeding seabirds from this SPA are likely to migrate predominantly along the continental coast of the North Sea towards northern breeding grounds rather than across the southern North Sea.

Site	**16349**
Name of European Site:	**Seevogelschutzgebiet Helgoland SPA**
Distance to East Anglia TWO (km)	**428**

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Seevogelschutzgebeit Helgoland SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**164**
Name of European Site	**Severn Estuary SAC**
Distance to East Anglia TWO (km)	**312 (shortest distance overland)**

Fish

Site Features	Likely effect(s) of East Anglia TWO																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sea Lamprey	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
River lamprey	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Twaite shad	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

Benthic Habitats

Site	**164**																	
Name of European Site	**Severn Estuary SAC**																	
Distance to East Anglia TWO (km)	**312 (shortest distance overland)**																	
Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Estuaries	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Mudflats and sandflats not covered by seawater at low tide	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)
Atlantic salt meadows	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see section 6.2.1, of the HRA Screening Report (APP-044)).

b) The distance between the offshore project area and the designated site is beyond the range of any potential LSE. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044).

Site	16550														
Name of European Site:	Skagens Gren og Skagerrak SAC														
Distance to East Anglia TWO (km)	770														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see paragraphs 168 and 169, of the HRA Screening Report (APP-044)).

Site	16651											
Name of European Site:	Solent & Southampton Water SPA & Ramsar (offshore cable corridor)											
Distance to East Anglia TWO (km)	267											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding teal, brent goose, ringed plover, black-tailed godwit		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (d)	N (d)	N (d)
Breeding Mediterranean gull		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

Site	**16651**											
Name of European Site:	**Solent & Southampton Water SPA & Ramsar (offshore cable corridor)**											
Distance to East Anglia TWO (km)	**267**											
Breeding little tern, common tern, roseate tern, Sandwich tern		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)

a) Survey data show little or no evidence of Solent & Southampton Water SPA and Ramsar features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this site are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

b) No Mediterranean gulls were recorded in the East Anglia TWO site during bird surveys. This species is scarce in England, although increasing. Birds from the SPA are unlikely to migrate through the East Anglia TWO site. Thaxter et al. (2012) report the maximum foraging range of breeding Mediterranean gulls as 20km, so birds from this SPA will not have connectivity with the East Anglia TWO site during breeding (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Little tern, common tern, roseate tern and Sandwich tern have maximum foraging ranges from colonies of 11km, 30km, 30km and 54km respectively (Thaxter et al. 2012), so there is no connectivity between the SPA and the East Anglia TWO site which are 244km apart. Furthermore, these species tend to forage in coastal waters rather than offshore. Therefore, collision risk, displacement and barrier effects can be excluded (see Table 8.2 of the HRA Screening Report (APP-044)).

d) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Solent & Southampton Water SPA and Ramsar(see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**16752**
Name of European Site:	**Soteskär SAC**
Distance to East Anglia TWO (km)	**885**
Site Features	Likely effect(s) of East Anglia TWO

Site	16752														
Name of European Site:	Soteskär SAC														
Distance to East Anglia TWO (km)	885														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	~~N(a)~~	N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 of the HRA Screening Report (APP-044)).~~.~~															

Site	16853														
Name of European Site:	Southern North Sea SAC														
Distance to East Anglia TWO (km)	0 (cable corridor and windfarm site)														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	Y(a)	Y(a)	Y(a)	Y(a)	Y(a)	Y(a)	Y(a)	Y(a)	Y(a)	Y(a)		Y(a)	Y(a)	Y(a)	Y(a)
a) The offshore project area is within the SAC and therefore LSE cannot be ruled out at the screening stage. It is assumed that all harbour porpoise in this area are associated with this SAC (see paragraphs 168 and 169, of the HRA Screening Report (APP-044)).															

Site	**16954**											
Name of European Site:	**St Abb's Head to Fast Castle SPA**											
Distance to East Anglia TWO (km)	**487**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features herring gull, kittiwake, razorbill, guillemot, shag		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) St Abbs Head to Fast Castle SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be very small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at St Abbs Head to Fast Castle SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	**17055**		
Name of European Site:	**Staverton Park and the Thicks Wantisden SAC**		
Distance to East Anglia TWO (km)	**6 (onshore cable corridor)**		
Site Features	Likely effect(s) of East Anglia TWO		
	Habitat Loss		
	C	O	D
Old acidophilous oak woods with *Euercus robur* on sandy	N(a)	N(a)	N(a)

plains			

a) No overlap therefore no direct effect and beyond the range of potential significant indirect effect (see Table 3.2 of the HRA Screening Report (APP-470).

Site	**17156**														
Name of European Site:	**Steingrund SAC**														
Distance to East Anglia TWO (km)	**438**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

Site	**17257**														
Name of European Site:	**Store Rev SCI**														
Distance to East Anglia TWO (km)	**743**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects(see paragraphs 168 and 169, of the HRA Screening Report (APP-044)).

Site	**17358**											
Name of European Site:	**Stour & Orwell Estuaries SPA and Ramsar**											
Distance to East Anglia TWO (km)	**57 (windfarm site) and 31 (cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features pintail, wigeon, gadwall, turnstone, brent goose, goldeneye,		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)

Site	17358											
Name of European Site:	Stour & Orwell Estuaries SPA and Ramsar											
Distance to East Anglia TWO (km)	57 (windfarm site) and 31 (cable corridor)											
dunlin, knot, ringed plover, black-tailed godwit, curlew, cormorant, grey plover, great crested grebe, shelduck, redshank, lapwing												
Breeding avocet		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (c)	N (c)	N (c)

a) Survey data show little or no evidence of Stour & Orwell Estuaries SPA features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470)), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site.

b) Survey data show no evidence of Stour & Orwell Estuaries SPA feature avocet occurring in the East Anglia TWO OWF site(see section 5.1 of Appendix 12.2 (APP-470)~~s~~, and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).~~-~~

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Stour & Orwell Estuaries SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044)).~~-~~

Site	17459														
Name of European Site:	Strandenge på Læsø og havet syd herfor SAC														
Distance to East Anglia TWO (km)	843														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 for harbour seal and paragraphs 190 and 191 for grey seal, of the HRA Screening Report (APP-044)).															

Site	17560											
Name of European Site:	Sumburgh Head SPA											
Distance to East Anglia TWO (km)	862											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features kittiwake, fulmar, guillemot, Arctic tern		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

Site	17560
a) Sumburgh Head SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be very small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)). b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Sumburgh Head SPA (see Table 8.2 of the HRA Screening Report (APP-044)).	

Site	17661
Name of European Site:	Sydlige Nordsø SAC
Distance to East Anglia TWO (km)	456

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 2120 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).															

Site	17762
Name of European Site:	Sylter Außenriff SCI
Distance to East Anglia TWO (km)	400

Ornithology

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding seabird assemblage including black-throated diver, red-throated diver, common gull, lesser black-backed gull, great black-backed gull, little gull, gannet, kittiwake, common tern, Arctic tern, Sandwich tern, guillemot		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

Marine mammals

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)		N (c)	N (c)	N (c)	N (c)
Grey seal *Halichoerus grypus*	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)		N (c)	N (c)	N (c)	N (c)
Harbour seal *Phoca vitulina*	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)		N (c)	N (c)	N (c)	N (c)

Fish

Site Features	Likely effect(s) of East Anglia TWO						
	Permanent habitat loss	Temporary physical disturbance	Smothering due to increased	Re- mobilisation of contaminated sediments	Underwater noise and vibration	Electromagnetic fields (EMF)	In-combination

Site	17762																				
Name of European Site:	Sylter Außenriff SCI																				
Distance to East Anglia TWO (km)	400																				
							suspended sediment														
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
River lamprey	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)
Twaite shad	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)

a) Migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site relative to the size of BDMPS regional populations, not only because the sites are 400km apart, but also because nonbreeding seabirds from this SPA are likely to migrate predominantly along the continental coast of the North Sea towards northern breeding grounds rather than across the southern North Sea (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Sylter Außenriff SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

c) It was agreed as part of the East Anglia TWO Scoping and Evidence Plan Process (EPP) (see Appendix 10.1 (APP-462) ~~Report~~ that transboundary impacts on fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA.

Site	**17863**
Name of European Site:	**Teesmouth and Cleveland Coast SPA and Ramsar**
Distance to East Anglia TWO (km)	**332**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding knot, redshank		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (d)	N (d)	N (d)
Nonbreeding Sandwich tern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (d)	N (d)	N (d)
Breeding little tern		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)

a) Survey data show little or no evidence of Teesmouth & Cleveland Coast SPA features knot or redshank occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site.

b) Nonbreeding Sandwich terns at Teesmouth & Cleveland Coast SPA may migrate between the SPA and wintering areas off west Africa. This could take them near to East Anglia TWO. However, very few terns of any species were seen in the East Anglia TWO site during bird surveys, and the Sandwich tern tends to migrate close to the coast where that is possible, so there are unlikely to be significant numbers reaching the East Anglia TWO site. The few that do will have a very low collision risk due to their generally low flight height and displacement/barrier effects will be negligible in the context of a migration of thousands of kilometres. (see Table 8.2 of the HRA Screening Report (APP-044).

c) Breeding little tern has a maximum foraging range of 11km from colonies (Thaxter et al. 2012), so would have no connectivity with East Anglia TWO. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044).

d) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Teesmouth & Cleveland Coast SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**17964**											
Name of European Site:	**Thames Estuary and Marshes SPA and Ramsar**											
Distance to East Anglia TWO (km)	**116 (windfarm site) and 99 (offshore cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features dunlin, knot, ringed plover, black-tailed godwit, grey plover, avocet, redshank		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Nonbreeding hen harrier		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (c)	N (c)	N (c)

a) Survey data show little or no evidence of Thames Estuary & Marshes SPA features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044).

b) Survey data show no evidence of hen harrier occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site, as the species is likely to migrate overland rather than over sea where the option is available (see Table 8.2 of the HRA Screening Report (APP-044).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Thames Estuary & Marshes SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**18065**
Name of European Site:	**Thanet Coast and Sandwich Bay SPA and Ramsar**
Distance to East Anglia TWO (km)	**87 (windfarm site and 88 (offshore cable corridor))**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Nonbreeding turnstone, golden plover		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding little tern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of Thanet Coast & Sandwich Bay SPA features turnstone or golden plover occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470)), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site.

b) Breeding little tern has a maximum foraging range of 11km from colonies (Thaxter et al. 2012), so would have no connectivity with the East Anglia TWO site. Migrating little terns are considered to be 'extremely coastal on passage with very few sightings in open ocean or inland' (Forrester et al. 2007), so are unlikely to pass through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Thanet Coast & Sandwich Bay SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**181~~66~~**																	
Name of European Site:	**Thanet Coast SAC**																	
Distance to East Anglia TWO (km)	**86**																	
Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Mudflats and sandflats not covered by seawater at low tide	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Reefs	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

a) The distance between the offshore project area and the designated site is beyond the range of any potential LSE. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044)).

Site	18267											
Name of European Site:	The Swale SPA & Ramsar											
Distance to East Anglia TWO (km)	109 (windfarm site) and 98 (cable corridor)											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features brent goose, dunlin, redshank		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of The Swale SPA and Ramsar features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this site are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at The Swale SPA and Ramsar (see Table 8.2 of the HRA Screening Report (APP-044).

Site	18368
Name of European Site:	The Wash and North Norfolk Coast SAC
Distance to East Anglia TWO (km)	99 (windfarm site) and 90 (cable corridor)

Marine Mammals

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions/ disturbance at seal haul out sites			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**		**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**
Grey seal *Halichoerus grypus*	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**		**Y (a)**	**Y (a)**	**Y (a)**	**Y (a)**

Benthic Habitats

Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)
Mudflats and sandflats not covered by seawater at low tide	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)
Large shallow inlets and bays	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)

Site	**18368**
Name of European Site:	**The Wash and North Norfolk Coast SAC**
Distance to East Anglia TWO (km)	**99 (windfarm site) and 90 (cable corridor)**

a) Potential effects from underwater noise; vessel interactions; changes to water quality; changes to prey resources; and disturbance at seal haul-out sites for foraging grey and harbour seal cannot be ruled out. Nearest SAC for harbour seal to East Anglia TWO. Assumed that all harbour seal in the East Anglia TWO area are associated with this SAC. Potential for vessel interactions and disturbance at seal haul-out sites depending on vessel route and therefore LSE cannot be ruled out see Table 7.2 of the HRA Screening Report (APP-044).

b) The distance between East Anglia TWO and the designated site is beyond the range of any potential LSE. Indirect far-field effects are limited to 1km of the works and for the duration of 1 tidal cycle (see paragraph 118 of APP-044)

Site	**18469**											
Name of European Site:	**The Wash SPA and Ramsar**											
Distance to East Anglia TWO (km)	**128 (windfarm site) and 106 (cable corridor)**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbird assemblage including as named features pintail, wigeon, gadwall, pink-footed goose, turnstone, brent goose, goldeneye, sanderling, dunlin, knot, Bewick's swan, oystercatcher, bar-tailed godwit, black-tailed godwit, common scoter, curlew, grey plover, shelduck, redshank		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding little tern, common tern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

Site	**18469**
Name of European Site:	**The Wash SPA and Ramsar**
Distance to East Anglia TWO (km)	**128 (windfarm site) and 106 (cable corridor)**

a) Survey data show little or no evidence of The Wash SPA features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Little tern and common tern have maximum foraging ranges from colonies of 11km and 30km respectively (Thaxter et al. 2012), so there is no connectivity between the SPA and East Anglia TWO site which are 106km apart. Furthermore, these species tend to forage in coastal waters rather than offshore. Therefore, collision risk, displacement and barrier effects can be excluded (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at The Wash SPA and Ramsar(see Table 8.2 of the HRA Screening Report (APP-044)).

Site	185														
Name of European Site:	Thyboron Stenvolde SCI														
Distance to East Anglia TWO (km)	595														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour Porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 167 and 168 and Table 7.3 of the HRA Screening Report (APP-044)).

Site	**18670**														
Name of European Site:	**Tregor Goëlo SAC**														
Distance to East Anglia TWO (km)	**498**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE. (see paragraphs 190 and 191 and Table 8.2 of the HRA Screening Report (APP-044)).

Site	**18771**														
Name of European Site:	**Troup, Pennan and Lion`s Heads SPA**														
Distance to East Anglia TWO (km)	**657**														
Site Features	Likely effect(s) of East Anglia TWO														
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination					
	C	O	D	C	O	D	C	O	D	C	O	D			
Breeding seabird assemblage including as named features razorbill, fulmar, guillemot, kittiwake, herring gull		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)			

Site	**18771**
Name of European Site:	**Troup, Pennan and Lion`s Heads SPA**
Distance to East Anglia TWO (km)	**657**

a) Troup, Pennan & Lion's Heads SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be very small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044)).

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Troup, Pennan & Lion's Heads SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	188																			
Name of European Site	Unterelbe SCI																			
Distance to East Anglia TWO (km)	470																			
Fish																				
Site Features	Likely effect(s) of East Anglia TWO																			
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Houting	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Twaite shad	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

Site	188																			
Name of European Site	Unterelbe SCI																			
Distance to East Anglia TWO (km)	470																			
Lampern	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Great sea lamprey	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Salmon	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

a) It was agreed as part of the East Anglia TWO Scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458) and Appendix 10.1 (APP-462) that transboundary impacts on benthic habitats fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA

Site	**1897~~2~~**														
Name of European Site:	**Unterems und Außenems SCI**														
Distance to East Anglia TWO (km)	**343**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 190 and 191 and Table 8.2 of the HRA Screening Report (APP-044)).

Site	**19073**														
Name of European Site:	**Vadehavet med Ribe Å, Tved Å og Varde Å vest for Varde SAC**														
Distance to East Anglia TWO (km)	**507**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

Site	**19174**														
Name of European Site:	**Venø, Venø Sund SAC**														
Distance to East Anglia TWO (km)	**626**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	**19275**														
Name of European Site:	**Vlaamse Banken SAC**														
Distance to East Anglia TWO (km)	**59 (windfarm site) and 72 (offshore cable corridor)**														
Marine Mammals															
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions and disturbance at seal haul outs			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D

Site			19275												
Name of European Site:			**Vlaamse Banken SAC**												
Harbour porpoise *Phocoena phocoena*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Grey seal *Halichoerus grypus*	**Y (b)**	**Y (b)**	**Y (b)**	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Harbour seal *Phoca vitulina*	**Y (b)**	**Y (b)**	**Y (b)**	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

Fish

Site Features	Likely effect(s) of East Anglia TWO																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sea Lamprey	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)
Twaite Shad	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)	N(c)

Benthic habitats

Site Features	Permanent loss	Temporary physical disturbance	Smothering due to increased suspended sediment	Re- mobilisation of contaminate d sediments	Underwater noise and vibration	In-combination

Site	19275																	
Name of European Site:	Vlaamse Banken SAC																	
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Reefs	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)
Sandbanks which are slightly covered by sea water all the time	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

b) The East Anglia TWO windfarm site is within the foraging range of grey and harbour seal and therefore the potential for LSE from underwater noise impacts cannot be ruled out (see paragraphs 219 and 220 and Table 7.3 of the HRA Screening Report (APP-044)).

c) It was agreed as part of the East Anglia TWO Scoping Report that transboundary impacts on fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA

d) As it has been agreed through the scoping ~~process~~ and Evidence Plan Process (EPP) Appendix 10.1 (APP-462) that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes.

Site	19376														
Name of European Site:	Vlakte van de Raan SCI/SAC														
Distance to East Anglia TWO (km)	82 (windfarm site) and 99 (cable corridor)														
Marine Mammals															
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D

Site			**19376**												
Name of European Site:			**Vlakte van de Raan SCI/SAC**												
Distance to East Anglia TWO (km)			**82 (windfarm site) and 99 (cable corridor)**												
Harbour porpoise *Phocoena phocoena*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Grey seal *Halichoerus grypus*	**Y (b)**	**Y (b)**	**Y (b)**	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)
Harbour seal *Phoca vitulina*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

Fish

Site Features	Likely effect(s) of East Anglia TWO																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sea Lamprey	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)
River lamprey	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)
Twaite Shad	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

Site	**19376**
Name of European Site:	**Vlakte van de Raan SCI/SAC**
Distance to East Anglia TWO (km)	**82 (windfarm site) and 99 (cable corridor)**

b) The East Anglia TWO windfarm site is within the foraging range of grey seal and therefore the potential for LSE from underwater noise impacts cannot be ruled out.

c) It was agreed as part of the East Anglia TWO Scoping ~~Report~~and the Evidence Plan Process (EPP) (see Appendix 10.1 (APP-462) that transboundary impacts on fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA

Site	**19477**												
Name of European Site	**Voordelta SPA and SAC**												
Distance to East Anglia TWO (km)	**84 (windfarm site) and 101 (offshore cable corridor)**												
Ornithology													
Site Features	Likely effect(s) of East Anglia TWO												
		Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
		C	O	D	C	O	D	C	O	D	C	O	D
Wintering and passage waterbirds including cormorant, shelduck, ringed plover, dunlin, goldeneye, sanderling, little gull, eider, great crested grebe, greylag goose, Sandwich tern, avocet, gadwall, Slavonian grebe, spoonbill, red-breasted merganser, pintail, red-throated diver, bar-tailed godwit, oystercatcher, shoveler, wigeon, turnstone, scaup, redshank, common tern, teal, curlew, grey plover, common scoter			N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N(a)	N (b)	N (b)	N (b)
Marine Mammals													
Site Features	Likely effect(s) of East Anglia TWO												

Site	**19477**														
Name of European Site	**Voordelta SPA and SAC**														
Distance to East Anglia TWO (km)	**84 (windfarm site) and 101 (offshore cable corridor)**														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour porpoise *Phocoena phocoena*	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)		N (c)	N (c)	N (c)	N (c)
Grey seal *Halichoerus grypus*	**Y (e)**	**Y (e)**	**Y (e)**	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)		N (c)	N (c)	N (c)	N (c)
Harbour seal *Phoca vitulina*	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (c)		N (c)	N (c)	N (c)	N (c)
Fish															

Site Features	Likely effect(s) of East Anglia TWO																				
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sea lamprey	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)
River lamprey	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)
Allis shad	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)
Twaite shad	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)	N(d)
Benthic Habitats																					

Site	**19477**																	
Name of European Site	**Voordelta SPA and SAC**																	
Distance to East Anglia TWO (km)	**84 (windfarm site) and 101 (offshore cable corridor)**																	
Site Features	Likely effect(s) of East Anglia TWO																	
	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)	N(e)

a) Survey data show little or no evidence of Voordelta SPA features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).~~.~~

b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Voordelta SPA (see Table 8.2 of the HRA Screening Report (APP-044)).~~.~~

c) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE~~.~~ (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

d) It was agreed as part of the East Anglia TWO Scoping and Evidence Plan Process (EPP) (see Appendix 10.1 (APP-462)~~Report~~ that transboundary impacts on fish would be scoped out of the EIA. We have therefore screened them out from consideration in the HRA.

e) As it has been agreed through the scoping and Evidence Plan Process (EPP) (see Appendix 10.1 (APP-462)~~process~~ that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes.

Site	**19477**
Name of European Site	**Voordelta SPA and SAC**
Distance to East Anglia TWO (km)	**84 (windfarm site) and 101 (offshore cable corridor)**

f) The East Anglia TWO windfarm site is within the foraging range of grey seal and therefore the potential for LSE from underwater noise impacts cannot be ruled out (see Table 7.3 of the HRA Screening Report (APP-044)).

Site	**19578**
Name of European Site:	**Vrångöskärgården SAC**
Distance to East Anglia TWO (km)	**862**

Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)

a) The distance between the potential impact range of East Anglia TWO and the site is beyond that of potential for direct or indirect effects (see paragraphs 219 and 220 and Table 7.3 of the HRA Screening Report (APP-044)).

Site	**19679**
Name of European Site:	**Waddenzee (Wadden Sea) SPA**
Distance to East Anglia TWO (km)	**186**

Site Features	Likely effect(s) of East Anglia TWO

Site	**19679**											
Name of European Site:	**Waddenzee (Wadden Sea) SPA**											
Distance to East Anglia TWO (km)	**186**											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features lesser black-backed gull, little tern, common tern, Arctic tern, Sandwich tern		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (d)	N (d)	N (d)
Breeding waterbirds including Kentish plover, ringed plover, marsh harrier, spoonbill, avocet		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (d)	N (d)	N (d)
Wintering and passage waterbirds including pintail, shoveler, teal, wigeon, mallard, gadwall, greylag goose, bean goose *Anser fabalis*, turnstone, scaup, brent goose, barnacle goose, goldeneye, sanderling, dunlin, knot, curlew sandpiper, ringed plover, black tern *Chlidonias niger*, hen harrier, Bewick's swan, oystercatcher, bar-tailed godwit, black-tailed godwit, red-breasted merganser, goosander, curlew, cormorant, spoonbill, golden plover, grey plover, great crested grebe, avocet, eider, shelduck, greenshank, redshank, lapwing		N (c)		N (c)	N (c)	N (c)	N (c)	N (c)	N (c)	N (d)	N (d)	N (d)

Site	**19679**
Name of European Site:	**Waddenzee (Wadden Sea) SPA**
Distance to East Anglia TWO (km)	**186**

a) The East Anglia TWO site is far beyond the mean maximum foraging range of designated breeding seabird species from this SPA, so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be extremely small relative to BDMPS, not only because of the distance, but also because birds from this SPA are likely to use the west European flyway along the continental coast rather than crossing the southern North Sea. Lesser black-backed gull tracking has shown breeding birds do not cross the North Sea therefore no connectivity is expected for this species (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Survey data show little or no evidence of Waddenzee SPA breeding waterbird features occurring in the East Anglia TWO site see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

c) Survey data show little or no evidence of Waddenzee SPA nonbreeding waterbird features occurring in the East Anglia TWO site see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

d) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Waddenzee SPA (see Table 8.2 of the HRA Screening Report (APP-044)).

Site	19780																
Name of European Site:	Waddenzee SAC																
Distance to East Anglia TWO (km)	186																
Marine Mammals																	
Site Features	Likely effect(s) of East Anglia TWO																
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination				
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D		
Harbour porpoise *Phocoena phocoena*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)		
Grey seal *Halichoerus grypus*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)		
Harbour seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)		
Benthic Habitats																	
Site Features	Permanent loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminate d sediments			Underwater noise and vibration			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Sandbanks which are slightly covered by sea water all the time	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)
Estuaries	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)
Mudflats and sandflats not covered by seawater at low tide	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)		N (b)	N (b)		N (b)	N (b)	N (b)	N (b)

Site	**19780**
Name of European Site:	**Waddenzee SAC**
Distance to East Anglia TWO (km)	**186**

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 for harbour seal, paragraphs 190 and 191 for grey seal and paragraphs 168 and 169 for harbour porpoise, of the HRA Screening Report (APP-044)).

b) As it has been agreed through the scoping and Evidence Plan Process (EPP) (see Appendix 9.1 (APP-458))process that transboundary effects are scoped out for EIA (given the distance to sites in other Members States jurisdictions) these have also been screened out from consideration for HRA purposes.

Site	**19881**
Name of European Site:	**West Westray SPA**
Distance to East Anglia TWO (km)	**837**

Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D
Breeding seabird assemblage including as named features kittiwake, Arctic tern, fulmar, razorbill, Arctic skua, guillemot		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (b)	N (b)	N (b)

a) West Westray SPA is beyond maximum foraging range of designated seabird species so has no breeding season connectivity. Proportions of these populations migrating through the East Anglia TWO site are likely to be very small relative to BDMPS (see Table 8.2 of the HRA Screening Report (APP-044).

Site	**19881**																					
Name of European Site:	**West Westray SPA**																					
Distance to East Anglia TWO (km)	**837**																					
Site Features	Likely effect(s) of East Anglia TWO																					
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination												
	C	O	D	C	O	D	C	O	D	C	O	D										
b) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at West Westray SPA (see Table 8.2 of the HRA Screening Report (APP-044).																						

Site	**19982**																					
Name of European Site:	**Westerschelde & Saeftinghe SAC**																					
Distance to East Anglia TWO (km)	**106 (windfarm site) and 128 (offshore cable corridor)**																					
Site Features	Likely effect(s) of East Anglia TWO																					
	Permanent habitat loss			Temporary physical disturbance			Smothering due to increased suspended sediment			Re- mobilisation of contaminated sediments			Underwater noise and vibration			Electromagnetic fields (EMF)			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D	

Site	**19982**																			
Name of European Site:	**Westerschelde & Saeftinghe SAC**																			
Distance to East Anglia TWO (km)	**106 (windfarm site) and 128 (offshore cable corridor)**																			
River lamprey	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)
Twaite Shad	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)

a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE.

Site	**200183**														
Name of European Site:	**Winterton – Horsey Dunes SAC**														
Distance to East Anglia TWO (km)	**60 (cable corridor)**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Grey seal *Halichoerus grypus*	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (a)		N (a)	N (a)	N (a)	N (a)

a) There is no potential for any direct disturbance as a result of activities within the East Anglia TWO windfarm site due to the distance between the site and the closest point onshore (31km). There is also no potential for any direct disturbance as a result of activities within the East Anglia TWO offshore cable corridor due to the distance between the nearest major haul-out site at Winterton-Horsey and the cable landfall at Sizewell, which is located over 60km along the coast (Table 7.3 of the HRA Screening Report (APP-044)).

Site	201~~184~~														
Name of European Site:	**Yell Sound Coast SAC**														
Distance to East Anglia TWO (km)	**938**														
Site Features	Likely effect(s) of East Anglia TWO														
	Underwater noise			Vessel Interactions			Indirect effects on prey			Changes to water quality			In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Harbour Seal *Phoca vitulina*	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)	N(a)		N(a)	N(a)	N(a)	N(a)
a) The distance between the potential impact range of East Anglia TWO and the extent of any effect on individuals from this site would result in no potential for LSE (see paragraphs 219 and 220 and Table 7.3 of the HRA Screening Report (APP-044)).															

Site	202~~185~~											
Name of European Site:	**Ythan Estuary, Sands of Forvie and Meikle Loch SPA**											
Distance to East Anglia TWO (km)	**615**											
Site Features	Likely effect(s) of East Anglia TWO											
	Collision mortality			Displacement/Disturbance			Barrier Effect			Cumulative/In-combination		
	C	O	D	C	O	D	C	O	D	C	O	D

Site	202~~185~~											
Name of European Site:	**Ythan Estuary, Sands of Forvie and Meikle Loch SPA**											
Distance to East Anglia TWO (km)	**615**											
Wintering and passage waterbird assemblage including as named features lapwing, eider, pink-footed goose, redshank		N (a)		N (a)	N (a)	N (a)	N (a)	N (a)	N (a)	N (c)	N (c)	N (c)
Breeding little tern, common tern, Sandwich tern		N (b)		N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)	N (b)

a) Survey data show little or no evidence of Ythan Estuary, Sands of Forvie & Meikle Loch SPA features occurring in the East Anglia TWO site (see section 5.1 of Appendix 12.2 (APP-470), and migrations of birds from this SPA are likely to result in negligible numbers passing through the East Anglia TWO site (see Table 8.2 of the HRA Screening Report (APP-044)).

b) Little tern, common tern and Sandwich tern have maximum foraging ranges from colonies of 11km, 30km and 54km respectively, so there is no connectivity between the SPA and East Anglia TWO site which are 608km apart. Furthermore, these species tend to forage in coastal waters rather than offshore. Therefore, collision risk, displacement and barrier effects can be excluded (see Table 8.2 of the HRA Screening Report (APP-044)).

c) The predicted effect attributable to East Anglia TWO is so small that it would not significantly contribute to or alter the overall in-combination assessment for these features at Ythan Estuary, Sands of Forvie & Meikle Loch SPA (see Table 8.2 of the HRA Screening Report (APP-044)).