

East Anglia THREE

# Information for Habitats Regulations Assessment

## Appendix 2: In-combination assessment project screening

Document Reference – 5.4 (2)

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



**This Page is Intentionally Blank**

## Table of Contents

<b>1</b>	<b>In-combination assessment project screening .....</b>	<b>1</b>
<b>1.1</b>	<b>Introduction .....</b>	<b>1</b>
<b>1.2</b>	<b>Screening for in-combination effects.....</b>	<b>1</b>
<b>1.2.1</b>	<b>Screened In Sources of Effect for the Cumulative Assessment.....</b>	<b>3</b>

## 1 IN-COMBINATION ASSESSMENT PROJECT SCREENING

### 1.1 Introduction

1. The in-combination screening assessment methodology applied in this document is based on that described in Chapter 6 Environmental Impact Assessment Methodology of the ES for the cumulative impact assessment , adapted to make it applicable to ornithology receptors.
2. The methodology has also been aligned with the approach to the assessment of in-combination effects that has been applied by Ministers when consenting offshore windfarms and confirmed in recent consent decisions. It also follows the approach set out in recent guidance from the Planning Inspectorate (Planning Inspectorate 2012) and from the renewables industry (RenewableUK 2013).

### 1.2 Screening for in-combination effects

3. The screened in potential effects arising from the proposed East Anglia THREE project alone that have been identified above are presented in *Table 1* below, within which they are assessed for their potential to create an in-combination effect.

**Table 1. Potential IN-combination Effects Arising from the Proposed East Anglia THREE Project**

Effect	Potential for cumulative impact	Comment
1. Construction: Disturbance and displacement	No	The likelihood that there would be an in-combination effect is low because the contribution from the proposed project is small and it is dependent on a temporal and spatial co-occurrence of disturbance / displacement from other plans or projects.
2. Construction: Indirect impacts through effects on habitats and prey species	No	The likelihood that there would be an in-combination effect is low because the contribution from the proposed project is small and it is dependent on a temporal and spatial co-occurrence of disturbance / displacement from other plans or projects.
3. Operation: Disturbance and displacement	Yes	There is a sufficient likelihood of an in-combination effect to justify a detailed, quantitative cumulative impact assessment.
4. Operation: Indirect impacts through effects on habitats and prey species	No	The likelihood that there would be an in-combination effect is low because the contribution from the proposed project is small.
5. Operation: Collision risk	Yes	There is a sufficient likelihood of an in-combination effect to justify a detailed, quantitative an in-combination effect assessment.

Effect	Potential for cumulative impact	Comment
6. Operation: Barrier effect	No	The likelihood that there would be an in-combination effect is low because the contribution from the proposed project is small.
7. Decommissioning: Disturbance and displacement	No	The likelihood that there would be an in-combination effect is low because the contribution from the proposed project is small and it is dependent on a temporal and spatial coincidence of disturbance / displacement from other plans or proposed projects.
8. Decommissioning: Indirect impacts through effects on habitats and prey species	No	The likelihood that there would be an in-combination effect is low because the contribution from the proposed project is small and it is dependent on a temporal and spatial coincidence of disturbance / displacement from other plans or projects.

4. The classes of projects that could potentially be considered for the in-combination assessment of offshore ornithological receptors include:
  - Offshore windfarms;
  - Marine aggregate extraction;
  - Oil and gas exploration and extraction;
  - Sub-sea cables and pipelines; and
  - Commercial shipping.
  
5. The identification of plans and projects to include in the in-combination assessment of offshore ornithological receptors has been based on:
  - Approved plans;
  - Constructed projects;
  - Approved but as yet unconstructed projects; and
  - Projects for which an application has been made, are currently under consideration and may be consented before the proposed East Anglia THREE project.

6. 'Foreseeable' projects, that is those for which an application has not been made but they have been the subject of consultation by the developer, or they are listed in plans that have clear delivery mechanisms, have been included for consideration, but the absence of firm or any relevant data could preclude a quantitative in-combination assessment being carried out.

#### **1.2.1 Screened In Sources of Effect for the Cumulative Assessment**

7. Potential plans and projects have been considered for how they might act cumulatively with the proposed project and a screening process carried out.

##### **1.2.1.1 Benthic Habitats**

8. The potential for in-combination indirect impacts acting through adverse effects on benthic habitats and consequently on bird prey species was considered as part of Chapter 10 Benthic Ecology, section 10.7.1 (as part of that chapters cumulative impact assessment). This identified that the potential cumulative impacts to the benthos caused by interactions of the proposed East Anglia THREE project and other activities are:

- Physical disturbance and habitat loss;
- Increased suspended sediment concentrations;
- Re-mobilisation of contaminated sediments;
- Underwater noise and vibration; and
- Colonisation of foundations and cable protection.

9. The cumulative assessment identified that these impacts would mostly be temporary, small scale and localised. Given the distances to other activities in the region (e.g. other offshore windfarms and aggregate extraction) and the highly localised nature of the impacts above, it concluded that there is no pathway for interaction between impacts cumulatively. Whilst it is recognised that across the East Anglia Zone and wider southern North Sea there would be additive impacts, the combined magnitude of these would be negligible relative to the scale of the habitats affected.

10. Accordingly, the in-combination effects on birds through these effects could be no more than negligible and these are screened out from further assessment.

##### **1.2.1.2 Shipping and Navigation**

11. Wide ranging species such as gannet and fulmar have low sensitivity to human activity disturbance and are relatively flexible in their habitat choice (Garthe &

Hüppop 2004). These species are therefore unlikely to be subject to in-combination effects of disturbance from the proposed East Anglia THREE project and existing ship traffic.

12. Gulls are undisturbed by the close proximity of boats, and therefore no potential adverse in-combination effects are expected for kittiwake, common gull, lesser black-backed gull, herring gull or great black-backed gull.
13. Divers, particularly red-throated divers, are known to be sensitive to disturbance from shipping. Consequently, they usually occur in areas with light sea traffic (Mitschke et al. 2001). It has been noted from aerial survey data that while red-throated divers avoid shipping lanes (tending to prefer areas 1km or more away), they do not display complete absence, and activity in these shipping lanes is considerably higher than any proposed windfarm service boat activity (DTI 2006). The high shipping activity in the Thames Strategic Area due to bulk carriers, tankers and passenger ferries, does not seem to affect the overwintering population of red-throated divers inside and outside of the SPA. Auks also tend to move away from vessels, although their responses are less marked than for divers. While it can be expected that red-throated divers, guillemots and razorbills will be displaced from shipping lanes, it is reasonable to assume that such effects are accounted for in the baseline data which underpins this assessment.
14. In conclusion, it is likely that the seabirds present in the vicinity of the proposed East Anglia THREE project have already adapted to shipping operations in the area. The increase in shipping activities associated with construction of the East Anglia THREE site would be short-term and temporary. Therefore, no significant in-combination disturbance and displacement effects are predicted for any seabird species and shipping and navigation is screened out of further in-combination assessment.

#### 1.2.1.3 Offshore windfarms

15. In the offshore environment other windfarms that were operational, under construction, consented but not constructed, subject to current applications, subject to consultation or listed in the future plans by developers were screened in. This list of windfarms with their status is provided in *Table 2*
16. The windfarms listed in *Table 2* have been assigned to Tiers following the approach proposed by Natural England and JNCC (Natural England 2013) as follows:
  1. Built and operational projects;
  2. Projects that are under construction;

3. Consented application(s) not yet implemented;
4. Submitted application(s) not yet determined; and
5. Future projects (e.g. pre-scoping stage).



**Table 2 Summary of Projects included in the In-combination Assessment in Relation to the Ornithology Receptors**

Project	Tier	Status	Key Date	Rationale for inclusion
Greater Gabbard	1	Built and operational	Fully commissioned Aug 2013	Included as an operational project that does not yet form part of the baseline.
Gunfleet Sands	1	Built and operational	Fully commissioned Jun 2010	Included as an operational project that does not yet form part of the baseline.
Kentish Flats	1	Built and operational	Fully commissioned Dec 2005	Operational for a sufficiently long time that its effects will have been incorporated in surveys but not yet in population responses
Lincs	1	Built and operational	Fully commissioned Sep 2013	Included as an operational project that does not yet form part of the baseline.
London Array (Phase 1)	1	Built and operational	Fully commissioned Apr 2013	Included as an operational project that does not yet form part of the baseline.
Lynn and Inner Dowsing	1	Built and operational	Fully commissioned Mar 2009	Included as an operational project that does not yet form part of the baseline.
Scroby Sands	1	Built and operational	Fully commissioned Dec 2004	Operational for a sufficiently long time that its effects will have been incorporated in surveys but not yet in population responses
Sheringham Shoal	1	Built and operational	Fully commissioned Sep 2012	Included as an operational project that does not yet form part of the baseline.
Beatrice (demonstrator)	1	Built and operational	Fully commissioned Sep 2007	Included as an operational project that does not yet form part of the baseline.
Thanet	1	Built and operational	Fully commissioned Sep 2010	Included as an operational project that does not yet form part of the baseline.
Teesside	1	Built and operational	Fully commissioned Aug 2013	Included as an operational project that does not yet form part of the baseline.

Project	Tier	Status	Key Date	Rationale for inclusion
Westermost Rough	1	Built and operational	Full power output May 2015 currently being commissioned.	Included as a consented project that does not yet form part of the baseline.
Humber Gateway	1	Built and operational	Final turbine installed April 2015, currently being commissioned.	Included as a consented project that does not yet form part of the baseline.
Dogger Bank Creyke Beck A & B	3	Consented but not constructed	Consent Feb 2015, no construction start date	Included as a consented project that does not yet form part of the baseline.
Dudgeon	3	Consented but not constructed	Consent Jul 2012, no construction start date	Included as a consented project that does not yet form part of the baseline.
EOWDC (Aberdeen OWF)	3	Consented but not constructed	Consent August 2014, no construction start date	Included as a consented project that does not yet form part of the baseline.
Galloper	3	Consented but not constructed	Consent May 2013, no construction start date	Included as a consented project that does not yet form part of the baseline.
Hornsea Project 1	3	Consented but not constructed	Consent Dec 2014, no construction start date	Included as a consented project that does not yet form part of the baseline.
Inch Cape	3	Consented but not constructed	Consent Sep 2014, no construction start date	Included as a consented project that does not yet form part of the baseline.
Neart ne Goithe	3	Consented but not constructed	Consent Oct 2014, no construction start date	Included as a consented project that does not yet form part of the baseline.
Race Bank	3	Consented but not constructed	Consent Jul 2012, no construction start date	Included as a consented project that does not yet form part of the baseline.
Rampion	3	Consented but not constructed	Consent Aug 2014, no construction start date	Included as a consented project that does not yet form part of the baseline.

Project	Tier	Status	Key Date	Rationale for inclusion
Beatrice	3	Consented but not constructed	Consent Mar 2014, no construction start date	Included as a consented project that does not yet form part of the baseline.
Blyth (NaREC Demonstration)	3	Consented but not constructed	Consent Nov 2013, no construction start date	Included as a consented project that does not yet form part of the baseline.
East Anglia ONE	3	Consented but not constructed	Consent Jun 2014, no construction start date	Included as a consented project that does not yet form part of the baseline.
Firth of Forth Alpha and Bravo	3	Consented but not constructed	Consent Oct 2014, no construction start date	Included as a consented project that does not yet form part of the baseline.
Moray Firth (EDA)	3	Consented but not constructed	Consent Mar 2014, no construction start date	Included as a consented project that does not yet form part of the baseline.
Dogger Bank Teesside A & B	3	Consented but not constructed	Consent Aug 2015, no construction start date	Included as a consented project that does not yet form part of the baseline.
Hornsea Project 2	4	Application submitted, Examination in progress	Submission 2015	Included as a foreseeable project.
Triton Knoll	4	Partial consent (windfarm consented, cable consent submitted)	Windfarm consent Jul 2013, export cable not consented (Oct 2015). No construction start date.	Included as a foreseeable project.
East Anglia THREE	4	Application submitted	Consent decision 2016	The project that is the subject of this assessment.
East Anglia Future Projects	5	Identified in Round 3 programme	n/a	In the absence of data, the inclusion of this project is only on a qualitative basis.
Hornsea Future Projects	5	Identified in Round 3 programme	n/a	In the absence of data, the inclusion of this project is only on a qualitative basis.

## Document 5.4 (2) Ends Here