# East Anglia ONE North Offshore Windfarm

# Best Practice Protocol for Minimising Disturbance to Red-Throated Diver

**Applicable to East Anglia ONE North**

| Revision Summary | | | | |
|---|---|---|---|---|
| **Rev** | **Date** | **Prepared by** | **Checked by** | **Approved by** |
| 01 | 15/12/2020 | Paolo Pizzolla | Ian Mackay | Rich Morris |
| 02 | 04/03/2021 | Paolo Pizzolla | Lesley Jamieson | Rich Morris |

| Description of Revisions | | | |
|---|---|---|---|
| **Rev** | **Page** | **Section** | **Description** |
| 01 | n/a | n/a | Final for submission at Deadline 3 |
| 02 | n/a | n/a | Final for submission at Deadline 7 |

# Table of Contents

# Glossary of Acronyms

| AEoI | Adverse Effect on Integrity |
|------|------------------------------|
| DML | Deemed Marine Licence |
| MMO | Marine Management Organisation |
| NE | Natural England |
| nm | Nautical Mile |
| PEMP | Project Environmental Management Plan |
| SPA | Special protection Area |

# Glossary of Terminology

| | |
|---|---|
| Applicant | East Anglia ONE North Limited |
| East Anglia ONE North project | The proposed project consisting of up to 67 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 ONE North windfarm site | The offshore area within which wind turbines and offshore platforms will be located. |
| Generation Deemed Marine Licence (DML) | The deemed marine licence in respect of the generation assets set out within Schedule 13 of the draft DCO. |
| Transmission DML | The deemed marine licence in respect of the transmission assets set out within Schedule 14 of the draft DCO. |
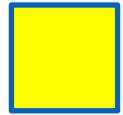
# 1 Introduction

1.  This document provides a best practice protocol to minimise disturbance to non-breeding red-throated diver which is a qualifying feature of the Outer Thames Estuary Special Protection Area (the "SPA~~).~~"). A final best-practice protocol for minimising disturbance to red-throated divers during construction and operation will be adopted and will be provided as part of the project environmental management plan (PEMP) to be approved by the Marine Management Organisation (MMO) and secured under condition 17 of the Generation Deemed Marine Licence (DML) and condition 13 of the Transmission DML.

2.  This document has been updated and submitted into the Examination at Deadline 7 to address the following comments from Natural England in their Deadline 4 submission (REP4-087):

| Natural England comment | Location where addressed |
|---|---|
| How will it be demonstrated that planned works during construction and operation phases are avoiding the sensitive periods between November and March? | Addressed in *Section 2* |
| Where it is not possible to avoid works during the sensitive period how will vessel movements be managed to minimise disturbance to SPA features? | Addressed in *Section 2* |
| Provided details of particular works when vessels will be required to leave existing navigational routes through the SPA | Addressed in *Section 2* |
| Low flying helicopter flights over the SPA are also likely to cause disturbance. If the use of helicopters is likely then we advise that is also covered under a protocol for minimising disturbance | Addressed in *Section 3* |

# 2 Vessel Disturbance Mitigation

3.  ~~Once further information is available about the port(s) that will be used for construction, operations and maintenance then appropriate vessel traffic management measures including~~At this stage, the construction and operation and maintenance ports have not been confirmed but are anticipated to include Great Yarmouth for construction and the existing ScottishPower Operations and Maintenance base at Lowestoft. To address the comments made by Natural England, the Applicant commission Anatec Limited to establish vessel transit routes from both ports to the windfarm site avoiding, as far as possible, the SPA

with a buffer either side of the route of 2km to account for the range over which red-throated diver are known to flush from vessels in transit. The results of that exercise are shown in *Figure 1* where the anticipated 'direct routes' from each port to the windfarm site are shown in 'green' and the 'mitigation routes' in 'red'.

4.      The main component of the SPA overlaps the approaches to both ports and therefore, it is not possible to avoid transiting through this part of the SPA. However, the mitigation routes have been specifically created to follow the navigation approaches to both ports, and thus limit the impact of the Projects' vessel movements to areas of existing navigation routes associated with the ports, where the densities of red-throated diver are typically relatively low.

5.      Once beyond the main components of the SPA, vessel traffic from either port has been routed through the gap between the main component and northern component of the SPA. This gap generally allows for a 4km width, with the exception at its narrowest where the gap is orientated northwest -southeast for a short section. At the point the gap is reduced to between 2.75 and 3.30 km, preventing a full 4km width. It should also be noted that alternative mitigation routes could also be used, but avoidance of the SPA beyond the Approaches to the ports would be maintained.

6.      All vessels associated with the Project will use an automatic identification system (AIS) which broadcasts the location of the vessel and is monitored by the Projects' Marine Co-ordination Centre. The final ***Best Practice Protocol for minimising disturbance to Red-Throated Diver***, submitted post-consent, should consent be grated, will include details of how the mitigation route (or any alternate mitigation routes) will be communicated, enforced and monitored.

7.      The Applicant commits to implementing the measures outlined above and provided in *Figure 1* by all project vessels throughout the construction and operation of the Project through the core winter period of 1ˢᵗ November to 1ˢᵗ March inclusive.

8.      The situations where these measures would not apply are:

- Installation and maintenance of the export cables, which pass through the SPA; and

- Emergencies and reasons of health and safety, for example, due to inclement weather where the most direct route back to port is required.

9.      Such instances would be recorded as part of the monitoring process.

2.10.  Additionally, where relevant, some or all of the following best practice examples, will be included in the PEMP in agreement with the MMO and NE, would still apply to some of the instances outlined above:

- Avoid and minimise vessel traffic, where possible, during the most sensitive time period for red-throated diver between November and March 1st inclusive.

- Restrict vessel movements where possible to existing navigation routes (where the densities of divers are typically relatively low).

- Where it is necessary to go outside of established navigational routes, avoid rafting birds either en-route to the windfarm sites from port and/or within the windfarm sites (dependent on location) and where possible avoid disturbance to areas with consistently high diver density.

- Avoid over-revving of engines (to minimise noise disturbance).

- Briefing of vessel crew on the purpose and implications of these vessel management practices (through, for example, tool-box talks).

# 3 Helicopter disturbance

11.   If used, helicopters are a potential source of disturbance to red throated diver in the Outer Thames estuary SPA. The minimum safe altitude for helicopters operating offshore is 1000 feet above the highest known obstacle within 5nm. It is considered that at these altitudes that any disturbance caused by the visual presence or noise of helicopters will be minimal and will not result in significant disturbance of red-throated diver.
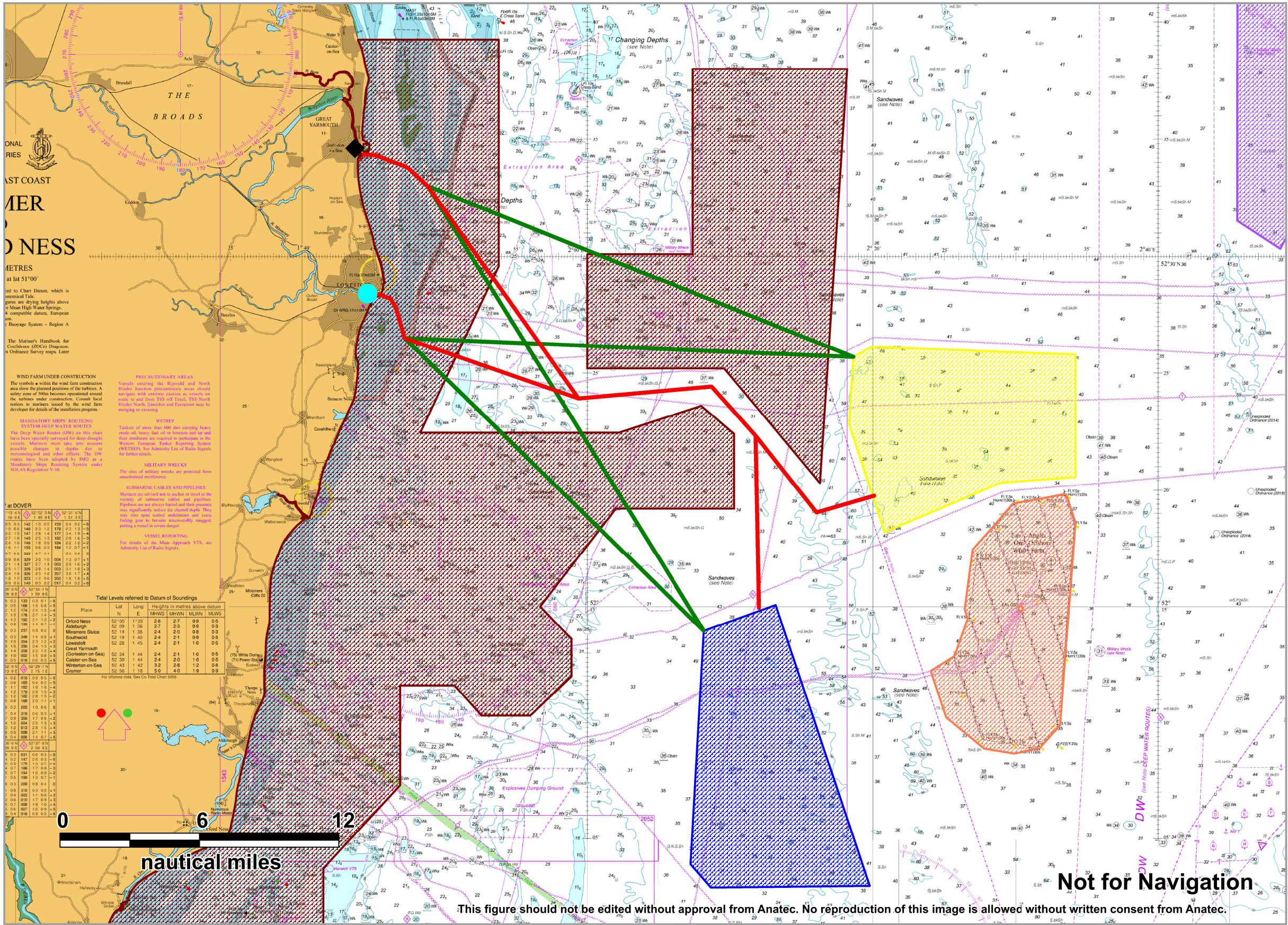
**Port**

◆ Great Yarmouth

● Lowestoft

**Route Legend**

—— Direct

—— Mitigation

**Legend**

Outer Thames Estuary SPA

EA1 Windfarm Site

EA1N Windfarm Site

EA2 Windfarm Site

EA3 Windfarm Site

**PROJECT NAME**

East Anglia ONE North and East Anglia TWO

**FIGURE TITLE**

Outer Thames Estuary SPA Routeing
- EA1N and EA2

**REVISION:** REV 01      **DATE:** 04/03/2021

anatec

**CO-ORDINATE SYSTEM**

Mercator WGS84

**DRAWN:** JC      **CHECKED:** SW

Not for Navigation

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0      6      12

nautical miles