

# REPORT on the IMPLICATIONS for EUROPEAN SITES

# Proposed Immingham Eastern Ro-Ro Terminal

An Examining Authority report prepared with the support of the Environmental Services Team

Planning Inspectorate Reference: TR030007

15 November 2023

# **TABLE OF CONTENTS**

1	INT	RODUCTION	1
	1.1	BACKGROUND	1
	1.2	DOCUMENTS USED TO INFORM THIS RIES	2
	1.3	CHANGE REQUESTS	2
	1.4	RIES QUESTIONS	3
	1.5	HRA MATTERS CONSIDERED DURING THE EXAMINATION	3
2	LIK	ELY SIGNIFICANT EFFECTS	4
	2.1	EUROPEAN SITES CONSIDERED	
	2.2	POTENTIAL IMPACT PATHWAYS	5
	2.3	IN-COMBINATION EFFECTS	
	2.4	THE APPLICANT'S ASSESSMENT	
	2.5	EXAMINATION MATTERS	7
	2.6	SUMMARY OF EXAMINATION OUTCOMES IN RELATION TO	
		SCREENING	16
3	AD\	/ERSE EFFECTS ON INTEGRITY	17
		CONSERVATION OBJECTIVES	
		THE APPLICANT'S ASSESSMENT	
	3.3	EXAMINATION MATTERS	18
4	CON	NCLUDING REMARKS	40

# 1 INTRODUCTION

# 1.1 Background

- 1.1.1 Associated British Ports (the Applicant) has applied to the Secretary of State for a development consent order (DCO) under section 37 of the Planning Act 2008 (PA2008) for the proposed Immingham Eastern Ro-Ro Terminal (the application). The Secretary of State has appointed an Examining Authority (ExA) to conduct an Examination of the application, to report its findings and conclusions, and to make a recommendation to the Secretary of State as to the decision to be made on the application.
- 1.1.2 The relevant Secretary of State is the competent authority for the purposes of the Habitats Directive¹ and the Habitats Regulations² for applications submitted under the PA2008 regime. The findings and conclusions on nature conservation issues reported by the ExA will assist the Secretary of State in performing their duties under the Habitats Regulations.
- 1.1.3 This Report on the Implications for European sites (RIES) documents and signposts the information in relation to potential effects to European Sites<sup>3</sup> that was provided within the DCO application and submitted throughout the Examination by the Applicant and Interested Parties (IPs), up to Deadline 5 (DL5) (23 October 2023). It is not a standalone document and should be read in conjunction with the Examination documents referred to. Where document references are presented in square brackets [] in the text of this report, that reference can be found in the Examination library published on the National Infrastructure Planning website at the following link:

https://national-infrastructureconsenting.planninginspectorate.gov.uk/projects/TR030007/documents

- 1.1.4 This RIES is issued to ensure that IPs including the Appropriate Nature Conservation Body (ANCB) Natural England (NE), is consulted formally on Habitats Regulations matters. This process may be relied on by the Secretary of State for the purposes of Regulation 63(3) of the Habitats Regulations.
- 1.1.5 It also aims to identify and close any gaps in the ExA's understanding of IPs' positions on Habitats Regulations matters, in relation to all sites and

<sup>&</sup>lt;sup>1</sup> Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (as codified) (the 'Habitats Directive').

<sup>&</sup>lt;sup>2</sup> The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations).

<sup>&</sup>lt;sup>3</sup> For the purposes of this RIES, in line with the Habitats Regulations and relevant Government policy, the term "European sites" includes Special Areas of Conservation (SAC), candidate SACs, possible SACs, Special Protection Areas (SPA), potential SPAs, Sites of Community Importance, listed and proposed Ramsar sites and sites identified or required as compensatory measures for adverse effects on any of these sites. For ease of reading, this RIES also collectively uses the term "European site" for 'European sites' defined in the Habitats Regulations 2017 and 'European Marine Sites' defined in the Conservation of Offshore Marine Habitats and Species Regulations 2017, unless otherwise stated. "UK National Site Network" refers to SACs and SPAs belonging to the United Kingdom already designated under the Directives and any further sites designated under the Habitats Regulations.

- features of interest as far as possible, in order to support a robust and thorough recommendation to the Secretary of State.
- 1.1.6 Following consultation, the responses will be considered by the ExA in making their recommendation to the Secretary of State and made available to the Secretary of State along with this report. The RIES will not be revised following consultation.

#### 1.2 Documents used to inform this RIES

- 1.2.1 The Applicant provided a Habitats Regulations Assessment Report ('the HRA Report') [APP-115] as part of the suite of application documents. At DL5, a revised HRA Report was submitted [REP5-020], addressing questions from the ExA [PD-010] and issues raised by IPs.
- 1.2.2 In addition to the HRA Report, the RIES refers to representations submitted to the Examination by IPs, Issue Specific Hearing (ISH) documents, draft Statements of Common Ground (SoCG) and other Examination documents as relevant. All documents can be found in the Examination Library.
- 1.2.3 The related submissions that have been used to inform this RIES are as follows:
  - NE:
    - Relevant Representation [RR-015], as amended by [AS-011], [AS-015] and [AS-016]. AS-015 incorporates both RR-015 and AS-011 so AS-015 is referenced throughout this document. As AS-016 updates only a selected number of issues raised in AS-015, this will be referred to as relevant.
    - Deadline 1 submission Principal Areas of Disagreement Summary Statement (PADSS) [REP1-022].
    - Deadline 2 Submission written representation [REP2-019].
    - Deadline 4 submission response to Examination Questions 2 [REP4-016].
  - Marine Management Organisation (MMO):
    - Deadline 1 submission further information requested by the ExA under Rule 17 of The Infrastructure Planning (Examination Procedure) Rules 2010 [REP1-020].
    - Deadline 2 submission written submission [REP2-016].
    - Deadline 4 submission [REP4-015].

# 1.3 Change Requests

1.3.1 On 19 October 2023, the Applicant submitted a formal change request notification stating that it will undertake non-statutory consultation between 20 October and 19 November 2023 [AS-026]. The proposed four

changes are listed below, and the submission of the formal change request is planned for week commencing 27 November 2023 [AS-027]:

- Change 1: The Realignment of the Approach Jetty and Related Works.
- Change 2: A Realignment of the Internal Link Bridge and Consequential Works.
- Change 3: The Rearrangement of the UKBF Facilities.
- Change 4: Enhanced Management Controls and Options for the Potential Provision of Additional Impact Protection Measures.
- 1.3.2 As part of Appendix 1 to Proposed Changes Notification Report, the Applicant submitted an Environmental Statement (ES) Addendum where section 9.6 sets out the updates required to the HRA Report [AS-028].
- 1.3.3 As the formal change request is expected after the publication of this RIES, this RIES cannot consider these proposed changes any further.

# 1.4 RIES questions

- 1.4.1 This RIES contains questions predominantly targeted at the Applicant and IPs, which are drafted in <u>blue</u>, <u>underlined italic text</u>.
- 1.4.2 The responses to the questions posed within the RIES and comments received on it will assist the ExA's in understanding IPs' positions on Habitats Regulations matters. However, it is stressed that responses to other matters discussed in the RIES are equally welcomed.
- 1.4.3 In responding to the questions in Tables 2.2 and 3.1, please refer to the ID number in the first column. In the event of a question having been answered in a written submission made at DL6 (Monday 13 November 2023), then the Applicant and/or IPs are requested to identify where in their DL6 submission(s) any such answer can be found.
- 1.4.4 Comments on the RIES are timetabled for submission by DL7 (Monday 11 December 2023).

# 1.5 HRA Matters Considered During the Examination

- 1.5.1 The Examination to date has focussed on the following matters:
  - inclusion of an additional European site in the assessment;
  - assessment of in-combination effects;
  - inclusion of additional pathways to the screening assessment;
  - robustness of assessment methodologies;
  - conclusions of the screening assessment;
  - effectiveness of mitigation measures; and
  - conclusions of the consideration of adverse effects on integrity (AEoI).

# 2 LIKELY SIGNIFICANT EFFECTS

# 2.1 European Sites Considered

#### Introduction

- 2.1.1 The Proposed Development is not connected with or necessary to the management for nature conservation of any European site.
- 2.1.2 Section 3.1 explains that the Applicant scoped sites for consideration in consultation with NE, but the rationale for how sites have been identified is unclear.

#### **Sites within the UK National Site Network**

2.1.3 The Applicant's original HRA Report [APP-115] identified four European site(s) within the UK National Site Network for inclusion within the assessment. These are listed in Table 2 of the original HRA Report and set out in Table 2.1 below.

Table 2.1: UK National Site Network European sites identified in the Applicant's original HRA Report [APP-115]

Name of European Site	Distance from Proposed Development (km)
Humber Estuary SAC	Within the Order Limits
Humber Estuary SPA	Within the Order Limits
Humber Estuary Ramsar	Within the Order Limits
Greater Wash SPA	20

- 2.1.4 The locations of these sites relative to the Proposed Development are depicted on Figure 2 of the HRA Report [APP-115]. Table 2 of the HRA Report lists the qualifying features of the European sites and identifies which are relevant to the screening for likely significant effects (LSE).
- 2.1.5 In ID34 of its RR [AS-015], NE advised that the harbour seal feature of the Wash and North Norfolk Coast SAC should be screened for LSE and taken forward to Stage 2, as explained in Table 2.2 of this RIES. The HRA Report was revised at DL5 to include the SAC (see further discussion in Table 2.2 below).

RIES Q1 (to NE): Following the addition at DL5 of the harbour seal feature of the Wash and North Norfolk Coast SAC to the assessment, can NE confirm that all relevant European sites and or European site features that could be affected by the project have been identified by the Applicant?

#### Non-UK European sites

2.1.6 The Applicant has not identified any potential impacts on European sites in European Economic Area (EEA) States. However, Section 3.2

Transboundary Screening observes that the EEA States of Iceland and Denmark were notified by the Inspectorate in relation to species within the Humber Estuary SPA and Humber Estuary Ramsar. The following species are of interest in the Humber Estuary SPA:

- red knot (*Calidris canutus*) comprising 6.3 % of the north eastern Canada/Greenland/Iceland/north western Europe populations; and
- black-tailed godwit (*Limosa limosa*) comprising 2.6 to 3.2 % of the Icelandic breeding population.
- 2.1.7 The following species are of interest in the Humber Estuary Ramsar site:
  - golden plover representing 2.2 % of the Iceland and Faroes/East Atlantic population; and
  - black-tailed godwit comprising 2.6 to 3.2 % of the Iceland/West Europe populations.
- 2.1.8 Paragraph 3.2.7 explains that the black-tailed godwit and red knot have been addressed within the stage 2 assessment of the HRA whereas paragraph 3.2.8 sets out why golden plover is considered to have no potential for a LSE either alone or in-combination with other plans and projects.
- 2.1.9 Only Ramsar sites and sites which form part of the UK National Site Network are addressed in this RIES.

# 2.2 Potential impact pathways

- 2.2.1 Tables 3, 4 and 5 of the HRA Report [APP-115] describe the potential impacts from the Proposed Development, along with the potential geographical extent of effect. The potential impact pathways assessed by the Applicant include:
  - direct loss of habitat;
  - direct changes to habitats and species;
  - indirect loss or changes to seabed habitats and species as a result of changes to hydrodynamic and sedimentary processes;
  - changes in water and sediment quality;
  - introduction and spread of non-native species;
  - physical change to habitats resulting from the deposition of airborne pollutants;
  - underwater noise effects;
  - collision risk to marine mammals; and
  - noise and visual disturbance.
- 2.2.2 The HRA Report assesses the potential impacts during construction and operation and maintenance. In response to Question BNE.1.2 from the ExA [PD-010], paragraph 1.2.8 of [REP5-020] explains that it does not assess

impacts during the decommissioning phase as the IERRT dDCO does not make provision for the decommissioning or demolition of the Proposed Development, because the infrastructure is intended to become part of the fabric of the Port of Immingham and will continue to be maintained in the long-term (see also ES Chapter 3: Details of Project Construction and Operation [APP-039]).

2.2.3 During the Examination, IPs raised concerns about additional pathways as discussed in Table 2.2 of this RIES.

#### 2.3 In-combination effects

- 2.3.1 Information relating to the in-combination assessment is provided for the 'appropriate assessment stage', in section 4.14 of the HRA Report [APP-115].
- 2.3.2 Table 36 of the updated HRA Report [REP5-020] identifies the projects and impact pathways relevant to the in-combination assessment and their locations are depicted on Figure 5.
- 2.3.3 Paragraph 4.14.3 explains that these projects are based on the cumulative assessment provided in ES Chapter 20: Cumulative and In-combination Effects [APP-056]. The plans or projects identified within the ES which also overlap with the zone of influence of potential effects on marine ecology receptors are set out in Table 35 of the HRA Report [APP-115]. No additional plans or projects have been highlighted by IPs in the Examination to date.
- 2.3.4 Consideration of in-combination effects at the screening stage was not explicit in the original HRA Report. This was raised by NE (ID11 [AS-015]) who requested that consideration of in-combination effects should be presented at the screening stage and the list of projects considered should also be included. The ExA requested (ExQ1 BNE.1.2 [PD-010]) that text be added to clarify whether the Proposed Development in combination with other plans and projects would or would not have a significant effect.
- 2.3.5 The Applicant argues [REP1-013] that the screening tables (Table 3, 4 and 5) do consider the impact pathways both alone and in-combination with other plans and projects. No revisions were made to the HRA Report to provide clarity on in-combination assessment at the screening stage.
- 2.3.6 RIES Q2 (to Applicant): The Applicant is requested to revise the HRA Report to provide an extra column in screening Tables 3, 4 and 5, to identify which pathways and qualifying features were considered in relation to LSE screening for in-combination effects. For the impact pathways or potential effects that have been screened into the consideration of site integrity stage for the project alone, no consideration of in-combination effects is required at Stage 1. However, for effects that are small but not significant alone these should be considered in combination with other relevant plans or projects.
- 2.3.7 NE raised further concerns with the in-combination assessment in ID1, ID11, ID13, ID14, ID15, ID25, ID30 of their Relevant Representation (RR) AS-015, which are discussed in Table 2.2 and 3.1 below.

# 2.4 The Applicant's assessment

2.4.1 The Applicant's conclusions in respect of screening are presented in Section 3.3 of the HRA Report [REP5-020]. They are summarised in the Applicant's screening matrices in Appendix D of the HRA Report [REP5-020].

# Sites for which the Applicant concluded <u>no LSE</u> on all qualifying features

- 2.4.2 The Applicant concluded that the Proposed Development would not be likely to give rise to significant effects, either alone or in combination with other projects or plans, on all qualifying features of the following European site:
  - Greater Wash SPA.
- 2.4.3 NE confirmed it agreed with the Applicant's conclusion of no LSEs in respect of the above European site in paragraph 2.1.7 and ID35 of their RR [AS-015].

# Sites for which the Applicant concluded <u>LSE</u> on some or all qualifying features

- 2.4.4 The Applicant concluded that the Proposed Development would be likely to give rise to significant effects, either alone or in combination with other projects or plans, on one or more of the qualifying features of:
  - Humber Estuary SAC;
  - Humber Estuary SPA;
  - Humber Estuary Ramsar;
  - The Wash and North Norfolk Coast SAC.
- 2.4.5 The qualifying features and LSE pathways screened in by the Applicant are detailed in Table 2 and Table D1 of the HRA Report [REP5-020].
- 2.4.6 The Applicant's decision to exclude certain LSE impact pathways was disputed by IPs and has been questioned by the ExA during the Examination. See Section 2.5 of this RIES for further details.

#### 2.5 Examination matters

2.5.1 Matters raised in the Examination to date, or for which the ExA seeks clarity, in relation to LSEs screened out [or not considered] by the Applicant are summarised in Table 2.2 below.

Table 2.2: Issues raised in the Examination to date by the ExA and IPs in relation to the Applicant's screening of LSEs (alone and in-combination)

ID	Potential impact pathway	Details of issue	ExA observation/ question
Wash	and North Norfolk Coas	SAC	
2.1.	Construction  Direct loss or changes in foraging habitat; changes in water and sediment quality; collision risk; lighting effects; underwater noise; visual disturbance.  Operation  Underwater noise; visual disturbance; lighting effects; collision risk.	In ID34 of their RR [AS-015], NE considered that the Wash and North Norfolk Coast SAC should be screened for LSE stating that harbour seal from this SAC may be present within the impact zone of the Proposed Development. The Applicant revised the HRA Report [REP5-020] to include consideration of the SAC (Table 2, Table 3).	RIES Q3 (to NE): Can NE confirm whether it agrees with the conclusions of the screening assessment for the Wash and North Norfolk Coast SAC presented in Table 3 of the HRA Report [REP5-020]? If not, what are the issues it does not agree with?
Humb	er Estuary SAC, Humber	Estuary SPA, Humber Estuary Ramsar, a	nd Wash and North Norfolk Coast SAC
2.2.	Construction Changes in water quality from accidental spillages	The ExA requested (Question BNE.1.6 [PD-010]) that the Applicant explains why the application of the industry guidance to control accidental spillages has not been considered to constitute mitigation (further to the People Over Wind and Peter Sweetman v Coillte Teoranta) judgement (Case C-323/17)). The Applicant	N/A

		maintained that the actions constitute standard practice and are not measures that are designed specifically to avoid harmful effects on European features, and as a consequence, do not comprise mitigation in the HRA context [REP2-009].	
2.3.	Operation Changes in water quality from accidental spillages	The HRA Report does not appear to address the potential for accidental spillages to occur during operation. The Applicant however refers to oil spillage contingency plans in response to ExQ1 NS1.8 [REP2-009]. Here the Applicant explains that the Port Marine Safety Code requirements, which identifies the environment as a receptor, is a reactive control measure and can alleviate the environmental consequences of a collision.	RIES Q4 (to NE and MMO): The HRA Report does not appear to address the potential for accidental spillages to occur during operation. Can NE and the MMO confirm that they are satisfied with the absence of an assessment for this potential pathway? If it is not, could NE and the MMO set out what steps the Applicant needs to take?
Humbe	r Estuary SAC, Humber	Estuary SPA and Humber Estuary Ramsa	r site
2.4.	Construction and operation Air quality impacts - deposition of airborne pollutants	ID1 of NE's RR [AS-015] requested further information in relation to the assessment methodology for air quality impacts from construction and operational phase traffic and/or marine vessel emissions. NE also requested that further habitat features (H1130 'Estuaries', H1110 'Sandbanks which are slightly covered by seawater all the time' and H1140 'Mudflats and sandflats not covered by seawater at low tide') should be considered in the screening assessment of air quality impacts. The Applicant's response is set out in Table 3.1	RIES Q5 (to NE): Following the Applicant's revisions to the HRA Report [REP5-020], can NE confirm its view on the conclusions of the screening assessment for the following additional Humber Estuary SAC habitat features considered in Table 3:  • H1130 'Estuaries'; • H1110 'Sandbanks which are slightly covered by seawater all the time'; and

		of [REP1-013]. The Applicant revised the HRA Report to include consideration of the additional features in Table 3 (Humber Estuary SAC).	H1140 'Mudflats and sandflats not covered by seawater at low tide').  If NE has any issues with the conclusions, could it identify what the Applicant needs to do to address them.
2.5.	Construction  Air quality impacts deposition of airborne pollutants from construction traffic on designated features	Table 3 of the HRA Report [APP-115] concludes that there is no potential for LSE in relation to the physical change to habitats resulting from the deposition of airborne pollutants arising during the construction phase. ID2 of NE's RR [AS-015] recommended the adoption of the precautionary approach and that further assessment is undertaken in specific response to traffic peaks of over 200 HGV movements per day and plant emissions presented in ES Chapter 13: Air Quality [APP-049]. The Applicant's response is set out in Table 3.1 of [REP1-013] providing justification for why it considers the assessment is robust. The revised HRA Report maintains that there will be no potential for LSE.	RIES Q6 (to NE): In light of the Applicant's justification at [REP1-013], can NE confirm its view on the conclusions of the screening assessment set out in Table 3 of the HRA Report [REP5-020] in relation to the pathway 'physical change to habitats resulting from the deposition of airborne pollutants'?
2.6.	Construction Air quality impacts from construction dust	The original HRA Report [APP-115] ruled out the potential of LSE in relation to construction dust on the grounds that the majority of habitats closest to the site are marine and not sensitive to dust smothering. ID4 of NE's RR [AS-015] questioned these conclusions. The Applicant's response is set out in Table 3.1	RIES Q7 (to NE): Following the Applicant's revisions to the HRA Report [REP5-020], is NE satisfied with the revised screening assessment of the construction dust pathway and the screening conclusions with respect to the habitat features of the Humber Estuary SAC and Ramsar site?

		of [REP1-013] and the HRA Report was revised to include additional habitat features . The HRA Report concludes on a precautionary basis that there is the potential for LSE on the 'H1140 mudflats and sandflats are not covered by sea water in low tide' feature and Criterion 1 of the Ramsar site, taking the construction dust pathway forward to Stage 2.	If it is not, could NE set out what steps the Applicant needs to take?
2.7.	Various impacts to coastal waterbirds	NE's RR [AS-015] (ID5) provided comments on the language and presentation of data in the original HRA Report and requested further information in relation to SPA/ Ramsar bird species data. The Applicant's response is set out in Table 3.1 of [REP1-013] and the HRA Report was updated to include further bird species data (Appendix A).	RIES Q8 (to NE): Following the Applicant's revisions to the HRA Report [REP5-020], in particular the inclusion of Appendix A, can NE confirm whether it is content with the presentation and robustness of the baseline data for coastal waterbirds?  If it is not, could NE set out what steps the Applicant would need to take to address NE's concerns?
2.8.	Direct loss or changes to migratory fish habitat (dredge disposal)	NE in ID10 of its RR [AS-015], noted that Table 3 of the HRA Report [APP-115] omitted the potential for LSE arising from the direct loss or changes to migratory fish habitat impact pathway with regards to dredging disposal on sea and river lamprey. The Applicant clarified [REP1-013] that it considers there to be no potential for LSE however the revised HRA Report [REP5-020] has been amended to state 'Yes' for the potential for LSE.	RIES Q9 (to Applicant): Please rectify the discrepancy in Table 3 between the potential for LSE ('YES') and justification presented ('no LSE') for the 'Direct loss or changes to migratory fish habitat' pathway arising from dredge disposal.
2.9.	Operation phase	NE in ID10 of its RR [AS-015] did not consider that the Applicant had provided	N/A

Underwater r vessel operat including mai dredging and disposal	impact pathway for lamprey are stating that this pathway should be provided to be assess for AEoI. The Applicant has reversely HRA Report to consider this pastage 2, on a precautionary be migratory fish and marine mare Impacts to common seal (feating Wash and North Norfolk Coast also been taken forward to the consideration of site integrity.	nd grey seal, Id be e levels essed further vised the ethway at esis, for both mmals. ure of the SAC) have
2.10 Potential imp could result i features of th Estuary SPA, Ramsar	out the potential impacts that in LSE on features of the Humber	the Applicant's assessment of the following pathways in Table 4 of the revised HRA Report [REP5-020]:  • impact of capital dredge disposal on SPA features;  • indirect loss or change to seabed habitats and species as a result of changes to hydrodynamic and sedimentary processes;  • changes in water and sediment quality;  • artificial lighting.  If NE has any issues with the Applicant's assessment, could it set out what the

		The Applicant clarified [REP1-013] that:	
		• It did not consider the impact of capital dredge disposal on SPA features relevant given the distance of the dredge disposal site offshore (the SPA features relying on intertidal habitat). The HRA Report was revised to include this justification in Table 4.	
		<ul> <li>The indirect loss or change to seabed habitats and species as a result of changes to hydrodynamic and sedimentary processes was termed 'Loss or change to coastal waterbird habitat' and is included in Table 4 of the HRA. The Applicant revised the HRA Report to clarify this.</li> </ul>	
		<ul> <li>The Applicant revised the HRA Report to include changes in water and sediment quality in Table 4 (concluding no LSE).</li> <li>The Applicant revised the HRA Report to</li> </ul>	
		include an assessment of artificial lighting in Table 4 (concluding no LSE).	
2.11	Impacts to supporting habitats (intertidal and subtidal) of the Humber Estuary SPA	In ID10 of its RR [AS-015] NE raised concerns that the supporting habitats (both intertidal and subtidal) of the Humber Estuary SPA had been omitted from the screening (Table 4) yet had been assessed for AEoI (section 4.2.1).	N/A
		The Applicant clarified that in Table 4 of the HRA Report (APP-115), the potential for an LSE on supporting habitat had been	

		considered within impact pathways on 'loss or change to coastal waterbird habitat' during construction and 'direct changes to coastal waterbird habitat foraging and roosting habitat as a result of marine infrastructure' during operation.	
2.12	Maintenance dredging activity	Paragraph 3.3.3 of the HRA Report [APP-115] states that the maintenance dredging activity for this project will be carried out under the Applicant's existing marine licence for the disposal of dredged material. ID10 of NE's RR [AS-015] requests an updated Dredging Protocol to be provided to allow for all information on maintenance dredging activity to be captured in the Examination so that a robust assessment can take place.  The Applicant stated [REP1-013] that "an updated Maintenance Dredging Baseline Document will be produced in due course to reflect the addition of IERRT infrastructure to the operational maintenance dredged envelope of the port. ABP's current Marine Licence for the disposal of maintenance dredged arisings expires at the end of 2025 so any renewal will reflect all operational areas of the port, including IERRT".  No further information has been submitted to the Examination.	N/A

				1
	2.13	Construction phase Zone of influence distances	At ID30 of AS-015, NE requested a review of the screening distance in the context of underwater noise disturbance for impact pathways that are not localised. NE asserted that the screening pathways used should meet best practice guidance. Furthermore, NE requested that the screening distance of 15km for the impact/zone of influence to be fully justified along with the distances of 33-36 km for disturbance to seals. In their response [REP1-013], the Applicant stated that the zone of influence is constrained by the shape of the estuary and largely limited to between Salt End (upstream) and Grimsby to Spurn Bight (downstream) and therefore the elevated underwater noise levels generated during piling for the Proposed Development cannot extend beyond 15 km.	RIES Q11 (to NE): ID30 of AS-015 requests that the Applicant reviews the screening distance and impact/zone of influence distances. Is NE content with the Applicant's response in REP1-013? If not, please explain what would need to be provided/detailed within the Applicant's HRA report?
2	2.14	Operational phase Changes to seabed habitats and features as a result of sediment deposition	The original HRA Report [APP-115] excluded changes to benthic habitats/species as a result of sediment deposition during maintenance dredging. NE disagreed that LSE could be excluded [ID46, AS-011] as the amount of smothering is only estimated and the extent of deposition has not been defined. The Applicant provided further evidence in the revised HRA Report [REP5-020] to support the conclusion of no LSE (Table 3).	RIES Q12 (to NE): The Applicant has revised the HRA Report to provide further information on sedimentation tolerance but maintains its conclusion on no LSE for this pathway arising from the development alone. Are you content with the Applicant's conclusions on this matter? If NE is not content, please explain why that is.

# 2.6 Summary of Examination outcomes in relation to screening

- 2.6.1 Of the matters detailed in Table 2.2 of this RIES, the Applicant has agreed during the Examination that an LSE should also be screened in for:
  - Construction dust impacts for the Humber Estuary SAC feature 'mudflats and sandflats not covered by seawater in low tide' and the Humber Estuary Ramsar site 'Criterion 1 – natural wetland habitats that are of international importance'.
  - Underwater noise from vessel operations including maintenance dredging and dredge disposal, with respect to marine mammals and migratory fish of the Humber Estuary SAC and the Wash and North Norfolk Coast SAC.
- 2.6.2 To date in the Examination, a number of matters identified in Table 2.2 of this RIES remain unresolved. The ExA seeks responses from the Applicant and IPs, where indicated, to provide clarity on the outstanding matters.

# 3 ADVERSE EFFECTS ON INTEGRITY

# 3.1 Conservation Objectives

- 3.1.1 The conservation objectives for all of the European sites for which a LSE was identified by the Applicant at the point of the DCO application were included within Table 6 of the HRA Report [REP5-020].
- 3.1.2 Paragraph 3.1.5 explains that the condition of the features of the Humber Estuary SAC, SPA and Ramsar site are 'not assessed', however, the condition statement assessment of the respective Site of Special Scientific Interest (SSSI) Units predominantly class the estuary as in favourable (6.09% of the area) and unfavourable but recovering (88.21% of the area) condition.

# 3.2 The Applicant's assessment

3.2.1 The European sites and qualifying features for which LSE were identified were further assessed by the Applicant to determine if they could be subject to AEoI from the Proposed Development, either alone or in combination. The outcomes of the Applicant's assessment of effects on integrity are summarised in Chapter 4: Stage 3 – Appropriate Assessment of the HRA Report [REP5-020].

#### **Mitigation measures**

- 3.2.2 The Applicant's HRA Report identified mitigation measures in paragraph 4.10.38 [REP5-020] which explains that these are secured in the DCO process as they are set out in the Construction Environmental Management Plan (CEMP) [REP5-018]. These have been taken into account in the Applicant's assessment of effects on integrity.
- 3.2.3 The ExA requested (BNE.1.2 [PD-010]) the Applicant include a table that identifies all of the mitigation measures relied upon by the Applicant in reaching its conclusions that there would be no adverse effects on the integrity of the sites. This is provided in the revised HRA Report at Table 40: Summary of Proposed Mitigation Measures [REP5-020].
  - **RIES Q13 (to Applicant):** Specify, for each of the mitigation measures listed in Table 40, the mechanism by which they are secured (with cross references to the specific locations in the relevant parts of the draft DCO).
- 3.2.4 The effectiveness of certain mitigation measures has been considered as part of the Examination, as explained in Table 3.1 below.

#### Sites for which the Applicant concluded no AEoI

- 3.2.5 The Applicant concluded that the Proposed Development would not adversely affect the integrity of all of the European sites and features assessed, either alone or in combination with other projects or plans:
  - Humber Estuary SAC;

- Humber Estuary SPA;
- Humber Estuary Ramsar site;
- The Wash and North Norfolk Coast SAC.
- 3.2.6 Although NE confirm in their RR [AS-015] agreement with the conclusions of no AEoI for some impact pathways, NE explained it would be unable to agree with the Applicant's conclusion across the board, until further information is provided. These matters are discussed in Table 3.1 below.

#### 3.3 Examination matters

3.3.1 Matters raised in the Examination to date, or for which the ExA seeks clarity, in relation to AEoIs are summarised in Table 3.1 below.

Table 3.1: Issues raised in the Examination to date by the ExA and IPs in relation to the Applicant's assessment of effects on integrity (alone and in-combination)

ID	Potential impact pathway	Details of issue	ExA observation/ question
Humbe	er Estuary SAC, The	Wash and North Norfolk Coast SAC	
3.1	Operation phase Underwater noise from vessel operations including maintenance dredging and dredge	Section 5 of ES Appendix 9.2: Underwater Noise Assessment [APP-088] provides pre-construction underwater noise monitoring results which were undertaken in the Humber Estuary at Green Port Hull (GPH) during October 2014, based on a report from ABPmer. At REP1-013, the Applicant cites this as "a detailed review of existing ambient noise sources and measured levels in the Humber Estuary". In response to BNE 1.5 set out in ExQ1 [PD-010], the Applicant stated in REP2-009, "maintenance dredging and associated vessel movements are already ongoing activities in the main navigation channel and berths at the various ports on the Humber (including both the Port of Hull which includes GPH and the Port of Immingham) and form part of the baseline soundscape of the estuary." Responding to question BNE2.03 in ExQ2 [PD-013], the Applicant provided further detail [REP4-008] stating the monitoring at the GPH provided it with key	RIES Q14 (to NE and MMO): Section 5.6 of ES Appendix 9.2: Underwater Noise Assessment [APP-088] provides pre-construction underwater noise monitoring results which were undertaken in the Humber Estuary at Green Port Hull (GPH) during October 2014, based on a report from ABPmer. The Applicant provided further detail to this approach to modelling at REP1-013, REP2-009 and REP4-008. Can NE and the MMO advise whether you are content that the underwater noise baseline modelling is robust? If you are not content, please explain why that is the case.

		such, the model is informed using 'real world data'. As such, the Applicant is reassured that data presented is robust and representative of underwater noise within the Humber Estuary.	
3.2	Construction phase Mitigation measures to reduce risk of injury to marine mammals	Paragraph 4.11.39 of the HRA Report [APP-115] sets out the mitigation measures that will be implemented during piling to reduce the level of impact associated with underwater noise and vibration on fish and grey seal during construction. In the ID22 of [AS-015], NE noted that it was supportive of this but welcomed continued engagement on this protocol. In [REP1-013] and [REP5-016], the Applicant welcomed this engagement and stated this was agreed on 19 April 2023. The updated HRA Report [REP5-020] was amended to reflect this position.	RIES Q15 (to NE): ID22 of [AS-015], supports the mitigation measures set out in paragraph 4.11.39 of [APP-115] that would be implemented during piling to reduce the level of impact associated with underwater noise and vibration on fish and grey seal during construction.  The HRA Report was updated at DL5 [REP5-020] and this paragraph [now 4.11.40] has been updated. Please confirm whether you agree with this updated text and whether you have any other concerns in relation to this mitigation protocol?
3.3	Construction phase Marine mammal sensitivity to Permanent Threshold Shift (PTS)	ID26 of [AS-015] contests the Applicant's application of a high sensitivity given to marine mammals Permanent Threshold Shift (PTS) and that it is inappropriate to consider the size of a PTS zone in regard to sensitivity. The Applicant's response [REP1-013] set out why the methodology was suitable and states that the overall sensitivity of marine mammals to underwater noise from piling is considered to be moderate and for dredging/vessels	RIES Q16 (to NE): ID26 of [AS-015] contests the Applicant's application of a high sensitivity given to marine mammals Permanent Threshold Shift and that it is inappropriate to consider the size of a PTS zone in regard to sensitivity. ID26 requests that the ES is amended but the Applicant has amended the HRA Report [REP5-020]. Can NE confirm if it agrees with the updated HRA Report [REP5-020], particularly the conclusions

		it is considered to be low. The updated HRA Report [REP5-020] conclusion assumes that seals are not considered to be at risk of any permanent or temporary injury during piling. The potential for an AEoI cannot, however, be ruled out and on this basis, mitigation has been proposed (paragraph 4.11.32). Regarding effects on grey seal and common seal (disturbance), paragraph 4.11.39 concludes that the behavioural effects of underwater noise and vibration from piling works and would be temporary and of short duration. Furthermore, seals are also highly mobile and wide ranging, and therefore are likely to be able to exploit other areas for foraging during piling. The Applicant therefore considers that behavioural effects on seals during the piling works are unlikely to result in an	presented in paras 4.11.32 and 4.11.39? If NE does not agree with those conclusions, please explain why that is the case.
3.4	Construction phase Assessment of underwater noise and vibration during piling, capital dredging and dredge disposal – consideration of the disturbance and injury pathways	AEoI.  At ID28 of [AS-015], NE raise the point that injury and disturbance should be assessed as separate pathways and the assessment of disturbance requires more detail. Following those submissions, NE also requested the Applicant to consider further mitigation or monitoring of these pathways. Similarly, at ID31 NE noted the suite of projects identified by the Applicant within 10km of the Proposed	RIES Q17 (to NE): Can you confirm whether the changes made in section 4.11 of the updated HRA Report [REP5-020] have addressed the concern raised in ID 28 of AS-015 and if not please explain why that is the case?

		Development, that could produce underwater noise at levels that could lead to disturbance, and or/injury, of marine mammals. NE agreed in principle that the standard mitigation undertaken by other projects will mitigate injury to marine mammals. However, NE asserted that no equivalent standard mitigation had been considered for disturbance.  In their response [REP1-013], the Applicant states that the HRA Report will be updated, and this is provided in section 4.11 of [REP5-020].	
Humbe	er Estuary SAC, Hum	ber Estuary SPA and Humber Estuary Ra	msar
3.5	Operation Air quality impacts	NE in ID3 of its RR [AS-015] advised that the HRA Report [APP-115] did not provide sufficient information to enable it to concur there would be no AEoI in relation to exceedances in the Process Contributions (PCs) for the critical level of annual NO <sub>x</sub> at three sections of saltmarsh identified in Table 20 of the HRA Report. NE requested that the percentage of predicted nitrogen pollution used against the environmental benchmark be taken forward to determine the critical load for NO <sub>x</sub> , and that further mitigation should be considered within the HRA Report. The Applicant's response is set out in Table 3.1 of [REP1-013] and explains that the	RIES Q18 (to NE): Following the Applicant's updates to the HRA Report, please confirm whether you agree with the conclusion of no AEoI as a result of operational airborne emissions to the habitats of the Humber Estuary SAC and Ramsar site? If NE does not agree with a conclusion of there being no AEoI, explain why that is the case.

		process contribution does not exceed the Critical Level for $NO_x$ and that the impact is imperceptible. The updated HRA Report [REP5-020] also includes this information from paragraph 4.7.5 onwards, Table 22.	
3.6	Construction Loss of intertidal habitat	The conservation objective for the feature 'mudflats and sandflats not covered by seawater at low tide' is set to 'restore' and this should be considered in the assessment. The impact is classed as 'de minimis' in the HRA Report [APP-115] but NE do not agree that AEoI can be excluded.  Further contextual information has been provided by the Applicant in paragraph 4.3.9 of the revised HRA Report [REP5-020] on the scale of natural background changes in habitat (in response to ExQ BNE1.2(e)).	RIES Q19 (to NE): The conservation objective for the Humber Estuary is that the extent and distribution of qualifying natural habitats should be maintained or restored 'subject to natural change'. In light of the revisions made to the HRA Report [REP5-020] in relation to the loss of intertidal habitat, please advise whether you now concur that AEoI can be excluded? If NE does not agree with a conclusion of there being no AEoI, explain why that is the case.
3.7	Construction phase Potential impacts on underwater noise and vibration on fish	Paragraph 4.11.39 of the HRA Report [APP-115] sets out the mitigation measures to reduce the level of impact associated with underwater noise and vibration on qualifying species during the construction phase. ID12 of NE's RR [AS-015] requested that the HRA Report explain how the proposed mitigations demonstrate a reduced impact on the feature for which it is intended. The Applicant provided further justification for the absence of AEoI [REP1-013], and	RIES Q20 (to NE and MMO): Please advise whether you are content that the mitigation measures proposed to reduce the level of impact associated with underwater noise and vibration on qualifying species during the construction phase would be sufficient to ensure no AEoI? If you are not content please explain why that is the case.

further detail in paragraph 4.11.40 of the revised HRA Report [REP5-020] to explain the impact of the mitigation measures. NE also requested clarification over the dates of the restrictions to percussive piling (between 1 March to 31 March, 1 June to 30 June and 1 August to 31 October inclusive). Paragraph 5.1.30 of REP1-020 states that the MMO maintains its position that the timing of the proposed piling restrictions within the waterbody should be between 1 April and 31 May inclusive, which covers part of the smolt downstream migration and from 1 June to 30 June and 1 August to 31 October inclusive, as this will minimise the impacts on silver eels, river lamprey and adult Atlantic salmon. The MMO also set out an alternative approach to mitigation timings during June (for Salmonid Smolts) and August to October (for adult Salmonids) which considers tidal states for piling in paragraph 5.1.33. The Applicant clarified [REP1-013] that the time periods reflected the sensitive periods for both glass eel and river lamprey. NE also requested that the impact of vibro-piling on migratory lamprey be considered in the HRA Report [APP-115]. The Applicant signposted [REP1-013] to

		where this had been considered in the HRA Report (Table 3 and Table 5 in Section 3 (Screening), and Section 4.11 of the Appropriate Assessment).	
3.8	Construction phase In-combination effects: - direct intertidal habitat loss - direct subtidal habitat loss - subtidal habitat change as result of the removal of seabed material during capital dredging	NE's RR [AS-015] (ID13, ID14 and ID15) states that NE does not agree with the Applicant's conclusions of no AEoI for these three impact pathways incombination with other plans and projects. In response to ExQ1 BNE.1.17 seeking clarity on NE's concerns, NE explained [REP2-019] that it sought further information on the scope of the incombination assessment. It considered it should include relevant projects/plans within East Riding of Yorkshire, North Lincolnshire and North East Lincolnshire, and specifically for the Immingham Green Energy Terminal (IGET) to be included. The Applicant maintains ([REP1-013] and [REP3-014]) that the assessment was based on the information available at the time of submission of the IERRT DCO application, including in respect of the IGET project, and is therefore robust.	RIES Q21 (to Applicant): The ExA is concerned about the level of detail provided in Tables 37, 38 and 39 of the revised HRA Report [REP5-020]. The ExA further considers that the Applicant's response to Issue Specific Hearing 3 Action Point 32 [REP5-025] was inadequate, with reliance in effect being placed on using the IGET application documentation to source the necessary information. The Applicant is requested to provide an updated version of the HRA Report with an in-combination assessment which quantifies the extent of in-combination effects wherever possible.
3.9	Operational phase The potential effects of changes to qualifying habitats as result of	Section 4 of the HRA Report [APP-115] reports that faunal assemblages are likely to recover. Footnote 16 of the HRA Report describes the community and states that these species would typically fully reestablish in less than one to two years.	RIES Q22 (to Applicant): Footnote 16 of the HRA Report [REP5-020] reports that benthic communities are expected to recover in less than two to three years. However, maintenance dredging is

	the removal of seabed material during maintenance dredging	ID19 of NE's RR [AS-015] stated that although it is likely to agree that the overall functioning of the intertidal and subtidal habitats of the region will not be affected by the maintenance dredging, it raised concerns regarding the recovery of the infaunal communities within the footprint of the Proposed Development owing to the frequency of the dredging maintenance regime. However, these concerns were subsequently withdrawn [AS-017]. The ExA notes that further justification has been added to section 4 of the revised HRA Report (4.4.45 – 4.4.52 in REP5-020]).	expected to happen three to four times per year in some areas and every one to two years in others. What are the implications for the recovery of the benthic communities?  RIES Q23 (to NE): The ExA notes that NE has withdrawn its previous concerns about the effects of disturbance resulting from the removal of seabed material during maintenance dredging (ID 19 of [AS-015] and [AS-017]). NE is requested to explain why its position has changed.
3.10	Construction and operational phases The potential effects of elevated suspended sediment concentration on marine mammals	ID20 of NE's RR [AS-015] stated that the water quality impacts arising from dredging and dredging disposal activities and operational vessel movements on marine mammals had not been accounted for in the HRA Report [APP-115] or ES. The Applicant clarified [Rep1-013] that this pathway had been considered in Table 3 of the HRA Report (concluding no LSE) and NE confirmed its satisfaction with this matter at DL2 [REP2-019].	N/A
3.11	The potential effects of the introduction and	NE observed in ID21 [AS-015] that a biosecurity plan within the Construction and Environmental Management Plan	RIES Q24 (to Applicant): In response to NE's request for the provision of biosecurity measures during the

	spread of non- native species during construction	(CEMP) would be produced and implemented by the Applicant to limit the risk of non-native species being introduced during construction. NE requested that a biosecurity plan is also produced for the operational phase. The Applicant responded to this in [REP1-013] stating that it already has existing biosecurity measures in place and would be willing to apply these to the operational phase. The Applicant's Draft Statement of Common Ground between the Applicant and NE [REP5-016] states that this matter was agreed on 19 April 2023.	operational phase, you stated in REP1-013 that your existing biosecurity measures would be applied to the operational phase. The Draft Statement of Common Ground between the Applicant and NE [REP5-016] states that this matter was agreed on 19 April 2023. Please provide details of the existing biosecurity measures that have been agreed with NE for the operational phase and indicate how these would be secured within any made DCO.  RIES Q25 (to NE): The Draft Statement of Common Ground between the Applicant and NE [REP5-016] states that on 19 April 2023 you agreed to the Applicant implementing their existing biosecurity measures during the operational phase of the Proposed Development. Please confirm that this correctly reflects your position.
3.12	Construction phase The potential for AEoI on qualifying habitats and species due to in- combination effects	Table 20.5 of ES Chapter 20: Cumulative and In-combination Effects [APP-056] sets out the review of other projects, developments and activities on the short list. In ID25 of [AS-015], NE advised that the cumulative underwater noise disturbance effect to grey seal had not been considered in sufficient detail as there was limited information presented regarding the benefit of reducing barrier	RIES Q26 (to NE): With respect to ID25, please confirm whether the content of section 4.11 of the updated HRA Report [REP5-020] has addressed your concern and if not explain why that is the case

		effects and/or disturbance, particularly on a temporal and spatial basis. ID25 AS-015 requested a more detailed assessment of in-combination disturbance/barrier effects for the grey seal feature of the Humber Estuary SAC, and if necessary, consideration of further mitigation.  The updated HRA Report [REP5-020] explains that seals are recorded as undertaking wide ranging movements in the outer Humber Estuary and approaches as well as more widely in the North Sea so are likely to be able to exploit a much wider area for foraging during any piling activity. The updated HRA Report concludes that behavioural effects on seals during the piling works are unlikely to result in an AEoI (paragraph 4.11.39).	
3.13	Construction phase Underwater noise impacts from vibro- piling	In ID33 of AS-015, NE requested further detail on how much of the piling could be achieved using vibro-piling to enable greater understanding of how much this mitigation measure could be applied across the piling campaign. In REP1-020, the MMO concluded that there is a risk of impact (particularly behavioural effects) from both percussive and vibro-piling operations (paragraph 5.1.12).	RIES Q27 (to NE and MMO): ID33 of AS-015 requests for further detail on how much of the piling could be achieved using vibro-piling to enable greater understanding of how much this mitigation measure could be applied across the piling campaign. The Applicant responded by referring to paragraph 6.2.3 in ES Appendix 9.2 [APP-088]. Can NE and the MMO confirm that this
		In its response [REP1-013], the Applicant referred to ES Appendix 9.2 (APP-088) which states "the maximum impact pile	information and mitigation is sufficient for reliable assessment conclusions within the HRA Report and AEoI? If the

driving scenario will involve approximately 20 minutes of vibro piling and 180 minutes of impact piling per day in a 12-hour shift. In reality, less than 4 piles are likely to be driven per day and, therefore, the assessment is considered to represent a worst case" (paragraph 6.2.3).

Both NE and the MMO refer to [ID32 of AS-015 and REP1-020 respectively] refer to CEFAS response regarding the use of up to four piling rigs which may lead to increased Sound Exposure Levels over a 24 hour period compared to that presented by the application documents. The MMO [REP1-020] suggest that given the worse case position outlined above by the Applicant in response to NE's ID32 [REP1-013], a daily restriction to the number of hours of piling should be applied.

information included in the ES is considered to be insufficient, please advise how that deficiency should be addressed.

# **Humber Estuary SPA and Humber Estuary Ramsar**

3.14 Operational phase

Potential changes
to waterbird
foraging and
roosting habitat as
a result of the

Table 10 of the HRA Report [APP-115] presents the potential for an AEoI on qualifying species due to changes to waterbird foraging and roosting habitat as a result of the presence of marine infrastructure. In ID6 of their RR [AS-015], NE requested a more detailed assessment of impacts on key species, particularly regarding observed approach

RIES Q28 (to NE): In light of the changes to the HRA Report, does NE agree with the Applicant's conclusions of no potential AEoI on the qualifying interest features of the Humber Estuary SPA and Ramsar site as a result of changes to waterbird foraging and roosting habitat? If not please explain why that is the case.

	presence of marine infrastructure	distances. NE considered that there was a risk of loss of ecological function for SPA waterbirds and this requires further assessment within the HRA Report. The Applicant responded to this in [REP1-013] and has revised the HRA Report to include further information (paragraph 4.3.29 onwards).	
3.15	Potential noise and visual disturbance on qualifying species	The HRA Report [APP-115] contains references to the Institute of Estuarine & Coastal Studies' (IECS, 2013) Waterbird Disturbance Mitigation Toolkit. In ID7 of their RR [AS-015], ID7 of [REP2-019], and its response to ExQ1 BNE.1.15 [REP2-019] NE state that they do not support the use of this toolkit noting that the results have not been peer reviewed and any assessment that relies on the toolkit may be inaccurate.  The Applicant clarified [REP1-013] that the toolkit had only been used to provide contextual information for the assessment of disturbance and the IERRT ES and HRA Report do not apply the toolkit thresholds.	RIES Q29 (to NE): In light of the clarification provided by the Applicant, can NE confirm whether it agrees with the methodology for assessing waterbird disturbance, in particular the assumptions regarding responses and sensitivity of waterbird species (Table 28 [REP5-020]). If the Applicant's clarification has not addressed NE's concern how might that be addressed by the Applicant?
3.16	Construction phase Potential noise and visual disturbance on qualifying species	In ID7 of its RR [AS-015], NE requested further information on the importance of "Sector B" for Ramsar/SPA birds and provide an assessment as to whether this is likely to change once the Proposed Development is under construction.	RIES Q30 (to NE): The Applicant has provided further information on the importance of Sector B (compared to Sectors A and C) in Appendix A of the revised HRA Report [REP5-020]. In NE's opinion, are these changes sufficient to

		The Applicant revised the HRA Report to include Appendix A: Baseline Information to Inform the HRA to provide further information in section 4.10 [REP5-020].	inform a robust assessment of impacts from noise and visual disturbance? If the Applicant's clarification has not addressed NE's concern how might this be addressed?
3.17	Construction phase Potential noise and visual disturbance on qualifying species	Paragraph 4.10.19 in the HRA Report [APP-115] provides noise levels at 600m and 1.8km. In ID7 of its RR [AS-015], NE requested noise levels during piling and other construction activities at 200m and 300m from the source be provided.  The Applicant was requested by the ExA at BNE.1.2 (m) to either incorporate into the HRA Report details of the expected noise levels at 50, 200 and 300 metres from the works site or explain why that information should not be incorporated into the updated HRA. No revisions have been made to the relevant paragraph (previously 4.10.19 of the [APP-115], now 4.10.22 of [REP5-020]) but further justification has been provided for the use of a 200m buffer (paragraphs 4.10.18 - 19) and to the justification for no AEoI in Table 30.	RIES Q31 (to NE): In light of the revisions to the HRA Report [REP5-020] is NE now content that the assessment of construction noise disturbance is adequate? If not, please explain why that is the case.
3.18	Construction phase Potential noise and visual disturbance on qualifying species	Section 4.10 of the HRA Report [APP-115] provides an assessment of airborne noise and visual disturbance during construction on qualifying bird species. In ID7 of its RR [AS-015], NE requested that this section	N/A

		of the HRA Report indicates the expected number of passage and wintering seasons for SPA birds that will be affected during the construction phase. NE further requested that the HRA Report should also identify the expected period of each of the main construction activities (eg capital dredge, construction of jetties etc.).  The Applicant confirmed [REP1-013] that the assessment has assumed that the construction activities could occur at any time of year (as a worst case). Information on the construction programme has also been included in the revised HRA Report [REP5-020] at paragraphs 1.2.5 – 1.2.7.	
3.19	Construction  Potential noise and visual disturbance on qualifying species	Paragraph 4.10.23 of the HRA Report [APP-115] states that 'the near shore environment in the Port of Immingham area is already subject to large numbers of vessel movements". In ID7 of its RR [AS-015], NE requested that the term 'large numbers' is quantified and how the Proposed Development will change this figure.  The Applicant confirmed [REP1-013] that the Port of Immingham currently has over 118,000 transiting movements of vessels per year – the majority moving in close	N/A

		proximity to the site of the IERRT development.	
3.20	Construction phase Potential noise and visual disturbance on qualifying species	Paragraph 4.10.24 of the HRA Report [APP-115] indicates that that there will be less than one week where noise levels are likely to cause disturbance. In ID7 of its RR [AS-015], NE requested that further detail be provided in relation to when in the construction phase this is likely to occur and confirm whether it is likely to occur within the sensitive period. The Applicant confirmed [REP1-013] that the assessment has been based on the precautionary assumption that the works could occur at any time of year as a worst case.	N/A
3.21	Construction phase Potential noise and visual disturbance on qualifying species	Paragraph 4.10.29 of the HRA Report [APP-115] states that birds that are disturbed within intertidal areas by construction works can use other areas beyond 200m of works as shown in ES Figure 9.10 [APP-065] or could feed at night around the construction zone (once work has stopped). In ID7 of its RR [AS-015], NE stated that if the birds are already feeding at night, the HRA Report does not represent an additional feeding period to make up for the effects of construction disturbance. NE suggested that further assessment was required	RIES Q32 (to NE): With respect to the further assessment of the potential energetic cost of bird disturbance during the construction period requested in ID7 of RR [AS-015], explain what additional information would be required to address NE's concern.  RIES Q33 (to Applicant): In paragraph 4.10.32 of [REP5-020], it is stated that birds would be expected to re-distribute to the nearby foreshore in the Immingham area if disturbed by construction works. Paragraph 4.10.34 of [REP5-020] notes a degree of uncertainty

	around the potential energetic costs to birds as a result of this level of disturbance.  In response, the Applicant referred [REP1-013] to research (summarised in paragraphs 4.10.11 and 4.10.12 of the HRA Report) which suggests that wading birds need to be disturbed relatively frequently before adverse effects (in terms of energetic costs or reduction in fitness) are likely to occur.	about the ability of other areas of foreshore to accommodate displaced birds. Given that, why does the Applicant consider that the displaced birds could be accommodated elsewhere in the estuary?
3.22 Construction phase Potential noise and visual disturbance on qualifying species	Paragraph 4.10.30 of the HRA Report [APP-115] discusses the area zone of disturbance as a percentage of the Humber SPA and Ramsar designations. In ID7 of its RR [AS-015], NE states that the number of birds an area supports is of greater importance compared to estuary resource. NE asserts that if an area supports important numbers of any SPA / Ramsar bird species, it should be considered of high importance. NE also observe that areas of mudflat vary in terms of prey availability and disturbance levels, and therefore vary in their importance as SPA bird feeding areas. Birds disturbed from important feeding areas are not necessarily able to find alternative mudflats with additional feeding capacity at the relevant times.	See questions above.

	Construction phase Potential noise and visual disturbance on qualifying species	ES Figure 9.10 [APP-065] identifies areas where birds can roost on structures in the intertidal zone. In ID7 of its RR [AS-015], NE observed that the HRA Report [APP-115] does not assess impacts on feeding birds and roosting birds separately. NE also requested that an assessment be provided to consider whether other suitable structures could be used for roosting, and whether additional mitigation measures are required.  The Applicant notes [REP1-013] that the only listed SPA assemblage species screened in and recorded to be using these structures is turnstone.  The Applicant considers [REP1-013] that turnstone would be expected to continue using these structures during construction, as they are highly tolerant to disturbance, that the marine infrastructure will not prevent any direct access to established roosting habitat, and there are a wide variety of alternative structures available in the nearby area for this species to utilise.	RIES Q34 (to Applicant): The Applicant is requested to clarify:  - whether the evidence presented in Table 29 of the HRA Report [REP5-020] on the sensitivity of turnstone to disturbance stimuli applies to roosting as well as foraging.  - where in the revised HRA Report have the following been considered:  • airborne noise and visual disturbance impacts from construction on birds roosting on structures in the intertidal zone;  • consideration of whether there are other suitable structures for the birds to use; and  • whether additional mitigation measures are required?
3.24	Construction phase Potential noise and visual disturbance	NE ID7 of [AS-015] – raised various concerns about the effectiveness of the mitigation measures proposed. These	RIES Q35 (to NE): Given the additional information provided in Appendix E of the HRA Report [REP5-020] is NE content that its concern with respect to the

	on qualifying species	concerns were elaborated on in response to ExQ BNE.1.16 [REP2-020].  The Applicant's revised HRA Report [REP5-020] provides further detail on the effectiveness of these measured in Appendix E, specifically with respect to minimising the potential for AEoI on qualifying features in Table 30.	proposed measures for mitigating noise and visual disturbance effects has been addressed? If not, please explain how NE's concern might be addressed.
3.25	Operational phase Potential noise and visual disturbance on qualifying species	Paragraph 4.10.53 of the revised HRA Report details mitigation measures proposed during operation for disturbance impacts to waterbirds, comprising screening of the development from the foreshore, with phased removal of screens after 2 years. NE questioned (ID8 [AS-015]) why the screening cannot be made permanent. The Applicant argues [REP1-013] and [REP5-020] that the measure has been proposed simply to assist in habituation to the new infrastructure, but in the context of the location of the new berths within the port, it is not actually considered necessary.	N/A
3.26	Operational phase Potential noise and visual disturbance on qualifying species	Monitoring bird numbers is proposed at paragraph 4.10.56 [APP-115]. NE questioned (ID8 [AS-015]) what steps would be taken if the monitoring showed a significant decrease in bird numbers to the point where a species would no longer	RIES Q36 (to NE): Does NE consider adaptive monitoring to be necessary to reach a conclusion of no AEoI in the context of operational noise and visual disturbance? If the undertaking of adaptive monitoring is considered

	T	T	
		be considered to be in numbers that are locally, regionally, nationally, or internationally important.	necessary to reach a conclusion of no AEoI, please explain why that would be the case.
		The Applicant argues [REP1-013] that monitoring will be undertaken to provide general data and as a continuation of the existing monitoring along the Humber south bank, but adaptive monitoring is not proposed and not considered necessary.	
3.27	Operational phase Potential noise and visual disturbance on qualifying species	Paragraph 4.10.40 of the HRA Report [APP-115] discusses the disturbance from vessels. In ID8 of its RR [AS-015], NE requested further information regarding the route that vessels are likely to take in and out of the dock, and whether this is within 300m of birds that roost on the water, especially shelduck. Additional information should also be provided around how this compares with the current and forecasted numbers of vessels utilising the area.	RIES Q37 (to NE): Following the revision to the HRA Report [REP5-020] is NE content with the assessment of operational noise and visual disturbance and the conclusions of no AEoI? If not, please explain how NE's concern might be addressed.
		The Applicant confirmed [REP1-013] that vessels using the Eastern Jetty and approaching and leaving the Inner Dock regularly approach within 300 m of areas used by qualifying SPA/ Ramsar bird species, including Shelduck, and that the Proposed Development would represent an approximate 3% annual increase in vessel traffic. Additional information on	

	roosting habitat is described in Appendix A of the HRA Report [REP5-020].	
The potential for AEoI on qualifying habitats and species due to in combination effects	Table 31 of the HRA Report [APP-115] sets out the potential for an AEoI on grey seal, a qualifying species, due to potential underwater noise and vibration during piling causing avoidance responses and intermittent barrier effects. The table states that with the proposed mitigation in place, the potential for injury effects on seals is considered to be limited. Chapter 20 of the ES [APP-056] assesses underwater noise effects in-combination with other plans and projects and notes that other projects that are likely to result in underwater effects will require similar mitigation to the Proposed Development. On this basis, the HRA Report [APP-115] concluded that underwater noise effects on grey seals during piling is considered unlikely. In the ID25 of AS-015, NE noted two issues, firstly that the mitigation proposed is aimed at reducing injury rather than addressing barrier effects, and secondly, that a detailed in-combination effect assessment be undertaken. Where relevant, NE also requested that further mitigation is considered. The Applicant responded in REP1-013 and concluded that none of the conservation objectives were compromised and so that there is no	RIES Q38 (to NE): Further to the issues raised by NE and the Applicant's response in REP1-013, please advise whether NE's concern has been addressed and if not indicate what further would be required this concern?

potential for AEoI on qualifying interest	
features.	

# 4 CONCLUDING REMARKS

- 4.0.1 This RIES is based on information submitted throughout the Examination by the Applicants and IPs, up to DL5 (23 October 2023), in relation to potential effects on European sites. It should be read in conjunction with the Examination documents referred to throughout.
- 4.0.2 The RIES has identified deficiencies in the ExA's understanding of IPs' positions on Habitats Regulations matters and comments on the RIES will assist the ExA when it makes recommendation(s) to the Secretary of State. In particular, the ExA seeks:
  - Responses to the questions identified in Sections 1 to 5 of this RIES (in particular Tables 2.2 and 3.1).
- 4.0.3 Comments on the RIES must be submitted for DL7 (11 December 2023).