CALEDONIA
Offshore Wind Farm

Code: UKCAL-CWF-CON-EIA-APL-00001-A019

Application Document 13

Appendix 13-3 Caledonia North Integrity Matrices

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Table of Contents

List of Tables

Acronyms and Abbreviations

AEoSI	Adverse Effects on Site Integrity
EIA	Environmental Impact Assessment
EU	European Union
LSE	Likely Significant Effect
OWF	Offshore Wind Farm
RIAA	Report to Inform Appropriate Assessment
SAC	Special Area of Conservation
SPA	Special Protection Area

1 Introduction

1.1.1.1 This appendix provides the integrity matrices to support the Report to Inform Appropriate Assessment (RIAA) (Application Document 13: Caledonia North Report to Inform Appropriate Assessment) for the Proposed Development (Offshore), specifically Caledonia North, located in the Moray Firth, Scotland.

1.1.1.2 The Proposed Development (Offshore) will be developed in two phases (see Volume 1, Chapter 5: Proposed Development Phasing), referred to as Caledonia North and Caledonia South. The Array Areas of the two phases are referred to as the Caledonia North Site and the Caledonia South Site. It is assumed that construction of the two application areas could be progressed in either order (e.g., Caledonia North constructed in the first phase, then Caledonia South in the second phase, or vice-versa) or at the same time. This has been assessed within a RIAA covering Caledonia North and Caledonia South in isolation, as well as the Proposed Development (Offshore) (i.e., Caledonia North and Caledonia South combined) (Application Document 13).

1.1.1.3 Evidence for or against adverse effects on site integrity (AEoSI) on qualifying features of European sites, specifically Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), and Likely Significant Effect (LSE) is detailed within the footnotes to the integrity matrix, as follows:

✓ = AEoSI cannot be excluded

X = AEoSI can be excluded

C = Construction

O = Operation and Maintenance

D = Decommissioning

N/A = Effect not relevant to feature (no potential for pathway)

1.1.1.4 The integrity matrices are provided in Section 2 which, aligned with the structure of the RIAA, is structured as follows:

- Section 2.1 – Caledonia North;
- Section 2.2 – Caledonia South; and
- Section 2.3 – Proposed Development (Offshore).

2 Integrity Matrices

2.1 Caledonia North

2.1.1 Marine Mammals

Matrix 1: Moray Firth SAC.

Name of European site	Moray Firth SAC											
European Union (EU) Code:	UK9020313											
Distance to project (km):	37.7											
Assessment of AEoSI												
Effects	Underwater noise			Collision risk			Vessel disturbance			Change to prey		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D
Bottlenose dolphin	Xa	Xa	Xa	Xb	Xb	Xb	Xc	Xc	Xc	Xd	Xd	Xd

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the highly mobile and transient nature of bottlenose dolphin, and the localised impact ranges from underwater noise compared to the distance to the site.

Xb: No AEoSI alone concluded due to bottlenose dolphins being highly mobile, and given observed responses to noise, are expected to detect vessels in close proximity and largely avoid collision.

Xc: No AEoSI alone concluded as bottlenose dolphin have reasonable adaptability, are tolerant of vessel movement and have a high recoverability to potential vessel disturbance.

Xd: No AEoSI alone concluded given the highly adaptable diet of bottlenose dolphin and the localised nature of the impact.

2.1.2 Offshore Ornithology

Matrix 2: East Caithness Cliffs SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European Site	East Caithness Cliffs SPA											
EU Code:	UK9001182											
Distance to project (km):	51.4											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D
Herring gull	N/A	N/A	N/A	N/A	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Great-black backed gull*	N/A	N/A	N/A	N/A	Xb	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake	Xc	Xd	Xc	N/A	Xd	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Guillemot	Xc	Xe	Xc	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Razorbill	Xc	Xf	Xc	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, herring gull will be maintained as a feature in the long term.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Such level of effect can almost certainly be concluded as intangible, regardless of the change in survival rate. Therefore, subject to natural change, great black-backed gull will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xd: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 92 breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.051% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xf No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 11 breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.034% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 3: Moray Firth SPA.

Name of European site	Moray Firth SPA					
EU Code:	UK9020313					
Distance to project (km):	62.6					
Assessment of AEoSI						
Effects	Distributional responses			Collision risk		
Stage of development	C	O	D	C	O	D
Common scoter	Xa	Xb	Xa	N/A	Xc	N/A
Eider	Xa	Xb	Xa	N/A	Xc	N/A
Goldeneye	Xa	Xb	Xa	N/A	Xc	N/A
Great northern diver	Xa	Xb	Xa	N/A	Xc	N/A
Long-tailed duck	Xa	Xb	Xa	N/A	Xc	N/A
Red-breasted merganser	Xa	Xb	Xa	N/A	Xc	N/A
Red-throated diver	Xa	Xb	Xa	N/A	Xc	N/A
Scaup	Xa	Xb	Xa	N/A	Xc	N/A
Slavonian grebe	Xa	Xb	Xa	N/A	Xc	N/A
Velvet scoter	Xa	Xb	Xa	N/A	Xc	N/A
Shag	Xa	Xb	Xa	N/A	Xc	N/A

Evidence supporting conclusions

Xa: No AEoSI with respect to vessel traffic when considering the limited spatial and temporal effect of vessel traffic and the intent to use established vessel routes and the adherence to a Vessel Management Plan. In addition the effect of distributional responses from the presence of vessels are likely to be reversible in nature, with birds returning to the area following the passage of vessels.

Xb: No AEoSI with respect to potential disturbance and displacement effects due to the limited spatial overlap with operation and maintenance vessel routes.

Xc: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the Environmental Impact Assessment (EIA) level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Matrix 4: North Caithness Cliffs SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	North Caithness Cliffs SPA											
EU Code:	UK9001181											
Distance to project (km):	89.4											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Razorbill*	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Puffin*	Xa	Xc	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xd	Xa	N/A	Xd	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the most recent count for both the Applicant and Guidance Approach predicted that additional breeding adult mortalities due to distributional responses per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, this species will be maintained as a feature in the long term.

Xc: Although the predicted survival rate percentage point change exceeded the <0.02 threshold, when considering the level of effect being at most a single breeding adult per annum (when considering the Guidance approach of 60% displacement and a 3-5% mortality rate), such a level of effect would be indistinguishable from natural fluctuations in the population. No AEoSI therefore concluded. Additionally, the PVA results within Application Document 13, Appendix 13-2: Habitat Regulation Appraisal (HRA) Population Viability Assessment (PVA) Technical Note and In-combination Assessment further emphasise the intangible nature of such a predicted effect.

Xd: No AEoSI alone concluded for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 5: Troup, Pennan and Lion's Heads SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Troup, Pennan and Lion's Heads SPA											
EU Code:	UK9002471											
Distance to project (km):	26.2											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Razorbill*	Xa	Xc	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Herring gull*	N/A	N/A	N/A	N/A	Xd	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xe	Xa	N/A	Xe	N/A	N/A	Xe	N/A	N/A	N/A	N/A
Fulmar	N/A	Xf	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 14 breeding adult mortalities (based on 60% displacement and 3-5% mortality rate), the annual reduction in the growth rate due to distributional responses

is predicted to be at most 0.032% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population.

Xc: No AEoSI alone concluded as the most recent count for both the Applicant and Guidance Approach predicted that additional breeding adult mortalities due to distributional responses per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, herring gull will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 6: Pentland Firth Islands SPA.

Name of European site	Pentland Firth Islands SPA		
EU Code:	UK9001131		
Distance to project (km):	65.2		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Arctic tern	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded based on limited records during the breeding season in Caledonia North, indicating that it is not an area of importance for these tern species. In addition, given that shortest distance to shore from the Offshore Project is 23.4km and that UK Arctic terns typically migrate up to 20km from the coast, there is limited intersection of potential migratory corridors.

Matrix 7: Moray and Narin Coast SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Moray and Narin Coast SPA		
EU Code:	UK9001625		
Distance to project (km):	38.9		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Pink-footed goose	N/A	Xa	N/A
Redshank	N/A	Xa	N/A
Red-breasted merganser*	N/A	Xa	N/A
Oystercatcher*	N/A	Xa	N/A
Dunlin*	N/A	Xa	N/A
Wigeon*	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI alone concluded as the level of apportioned impact to Moray and Narin Coast SPA would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Matrix 8: Moray and Narin Coast Ramsar.

Name of European site	Moray and Narin Coast Ramsar		
EU Code:	UK13048		
Distance to project (km):	38.9		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Greylag goose	N/A	Xa	N/A
Pink-footed goose	N/A	Xa	N/A
Redshank	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Matrix 9: Copinsay SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Copinsay SPA											
EU Code:	UK9002151											
Distance to project (km):	80.9											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Guillemot*	Xa	Xe	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Great black-backed gull	N/A	N/A	N/A	N/A	Xf	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the citation and most recent count for the Guidance Approach predicted that additional breeding adult mortalities due to distributional responses per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult per annum. Such level of effect can almost certainly be concluded as intangible, regardless of the change in survival rate. Therefore, subject to natural change, great black-backed gull will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 10: Hoy SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Hoy SPA											
EU Code:	UK9002141											
Distance to project (km):	94.1											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Great skua	N/A	N/A	N/A	N/A	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Guillemot*	Xb	Xc	Xb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Puffin*	Xb	Xd	Xb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xb	Xe	Xb	N/A	Xf	N/A	N/A	Xg	N/A	N/A	N/A	N/A
Great black-backed gull	N/A	N/A	N/A	N/A	Xh	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xi	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xc: No AEoSI alone concluded as the citation and most recent count for the Guidance Approach predicted that additional breeding adult mortalities due to distributional responses per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xd: Although the predicted survival rate percentage point change exceeded the <0.02 threshold for the most recent count, when considering the level of effect being less than a single breeding adult per annum (when considering the Guidance approach of 60% displacement and a 3-5% mortality rate), such a level of effect would be indistinguishable from natural fluctuations in the population. No AEoSI therefore concluded.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Such level of effect can almost certainly be concluded as intangible, regardless of the change in survival rate. Therefore, subject to natural change, great black-backed gull will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 11: Buchan Ness to Collieston Coast SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Buchan Ness to Collieston Coast SPA											
EU Code:	UK9002491											
Distance to project (km):	78.0											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is at most one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 12: Auskerry SPA.

Name of European site	Auskerry SPA		
EU Code:	UK9002381		
Distance to project (km):	94.3		
Assessment of AEoSI			
Effects	Distributional responses		
Stages of Development	C	O	D
Storm petrel	Xa	Xa	Xa

Evidence supporting conclusions

Xa: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and Caledonia North.

Matrix 13: Dornoch Firth and Loch Fleet SPA.

Name of European site	Dornoch Firth and Loch Fleet SPA		
EU Code:	UK9001622		
Distance to project (km):	72.5		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Osprey	N/A	Xa	N/A
Wigeon	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI alone concluded as the level of apportioned impact to Dornoch Firth and Loch Fleet SPA would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Matrix 14: Dornoch Firth and Loch Fleet Ramsar.

Name of European site	Dornoch Firth and Loch Fleet Ramsar		
EU Code:	UK9001622		
Distance to project (km):	72.5		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Wigeon	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI alone concluded as the level of apportioned impact to Dornoch Firth and Loch Fleet Ramsar would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Matrix 15: Rousay SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Rousay SPA											
EU Code:	UK9002371											
Distance to project (km):	123.0											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot*	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xc	Xa	N/A	Xd	N/A	N/A	Xe	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult even when considering the Guidance approach. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 16: Marwick head SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Marwick head SPA								
EU Code:	UK9002121								
Distance to project (km):	117.3								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stages of Development	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xc	Xa	N/A	Xd	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is at most a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Matrix 17: Calf of Eday SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Calf of Eday											
EU Code:	UK9002431											
Distance to project (km):	119.9											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot*	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xc	Xa	N/A	Xd	N/A	N/A	Xe	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult per annum. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 18: Cromarty Firth SPA.

Name of European site	Cromarty Firth SPA		
EU Code:	UK9001623		
Distance to project (km):	105.9		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Whooper swan	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Matrix 19: Cromarty Firth Ramsar. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Cromarty Firth Ramsar		
EU Code:	UK9001623		
Distance to project (km):	105.9		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Common tern*	N/A	Xb	N/A
Dunlin*	N/A	Xa	N/A
Knot*	N/A	Xa	N/A
Oystercatcher*	N/A	Xa	N/A
Red-breasted merganser*	N/A	Xa	N/A
Redshank*	N/A	Xa	N/A
Scaup*	N/A	Xa	N/A
Wigeon*	N/A	Xc	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI alone concluded as only three maximum raw counts of common tern were recorded during the breeding season in Caledonia North, indicating that it is not an area of importance for these tern species. In addition, given that shortest distance to shore from the Offshore Project is 23.4km and that common terns typically travel up to 10km from the coast, there is limited intersection of potential migratory corridors.

Xc: No AEoSI alone concluded as the level of apportioned impact to Cromarty Firth Ramsar would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Matrix 20: West Westray SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	West Westray SPA											
EU Code:	UK9002101											
Distance to project (km):	131.7											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Razorbill*	Xa	Xc	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xd	Xa	N/A	Xe	N/A	N/A	Xf	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as for both citation and most recent count, the Applicant Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 21: Inner Moray Firth SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Inner Moray Firth SPA		
EU Code:	UK9001624		
Distance to project (km):	107.9		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Red-breasted merganser	N/A	Xa	N/A
Redshank	N/A	Xa	N/A
Curlew*	N/A	Xa	N/A
Goldeneye*	N/A	Xa	N/A
Oystercatcher*	N/A	Xa	N/A
Scaup*	N/A	Xa	N/A
Teal*	N/A	Xa	N/A
Wigeon*	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI alone concluded as the level of apportioned impact to Inner Moray Firth SPA would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Matrix 22: Inner Moray Firth Ramsar.

Name of European site	Inner Moray Firth Ramsar		
EU Code:	UK9001624		
Distance to project (km):	107.9		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Red-breasted merganser	N/A	Xa	N/A
Redshank	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Matrix 23: Fowlsheugh SPA.

Name of European site	Fowlsheugh SPA											
EU Code:	UK9002271											
Distance to project (km):	136.9											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Razorbill	Xa	Xe	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 24: Cape Wrath SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Cape Wrath SPA											
EU Code:	UK9001231											
Distance to project (km):	175.3											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Puffin*	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xc	Xa	N/A	Xd	N/A	N/A	Xe	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult per annum. Such level of effect can almost certainly be concluded as intangible, regardless of the change in survival rate. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 25: Sule Skerry and Sule Stack SPA.

Name of European site	Sule Skerry and Sule Stack SPA								
EU Code:	UK9002181								
Distance to project (km):	154.8								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stage of development	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A
Puffin	Xa	Xe	Xa	N/A	N/A	N/A	N/A	N/A	N/A
Storm petrel	Xf	Xf	Xf	N/A	N/A	N/A	N/A	N/A	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than a single breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as for both citation and most recent count, the Applicant Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xf: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and Caledonia North.

Matrix 26: Fair Isle SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Fair Isle SPA								
EU Code:	UK9002091								
Distance to project (km):	160.6								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stage of development	C	O	D	C	O	D	C	O	D
Gannet*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A
Razorbill*	Xa	Xe	Xa	N/A	N/A	N/A	N/A	N/A	N/A
Puffin*	Xa	Xf	Xa	N/A	N/A	N/A	N/A	N/A	N/A
Great skua*	N/A	N/A	N/A	N/A	Xg	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xh	Xa	N/A	Xh	N/A	N/A	Xi	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than a single breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single (0.16) breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single (<0.01) breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality is less than a single (0.01) breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Matrix 27: Sumburgh Head SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Sumburgh Head SPA											
EU Code:	UK9002511											
Distance to project (km):	202.4											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 28: Foula SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Foula SPA											
EU Code:	UK9002061											
Distance to project (km):	22.5											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Great skua	N/A	N/A	N/A	N/A	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xb	Xc	Xb	N/A	Xd	N/A	N/A	Xe	N/A	N/A	N/A	N/A
Puffin	Xb	Xf	Xb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 29: North Rona and Sula Sgeir SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	North Rona and Sula Sgeir SPA											
EU Code:	UK9001011											
Distance to project (km):	242.6											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Storm petrel	Xe	Xe	Xe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xf	Xa	N/A	Xg	N/A	N/A	Xh	N/A	N/A	N/A	N/A
Puffin	Xa	Xi	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xj	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than a single breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and Caledonia North.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xj: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 30: Mousa SPA.

Name of European site	Mousa SPA		
EU Code:	UK9002361		
Distance to project (km):	220.1		
Assessment of AEoSI			
Effects	Distributional responses		
Stage of development	C	O	D
Storm petrel	Xa	Xa	Xa

Evidence supporting conclusions

Xa: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and Caledonia North.

Matrix 31: Forth Islands SPA.

Name of European site	Forth Islands SPA								
EU Code:	UK9004171								
Distance to project (km):	244.0								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stage of development	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xb	N/A	N/A	Xb	N/A
Kittiwake*	Xa	Xc	Xa	N/A	Xd	N/A	N/A	Xe	N/A
Razorbill	Xa	Xf	Xa	N/A	N/A	N/A	N/A	N/A	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as for both citation and most recent count, the Applicant and Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Matrix 32: Noss SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Noss SPA											
EU Code:	UK9002081											
Distance to project (km):	237.6											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Great skua	N/A	N/A	N/A	N/A	Xe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xf	Xa	N/A	Xg	N/A	N/A	Xh	N/A	N/A	N/A	N/A
Puffin*	Xa	Xi	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xj	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than a single breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xj: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 33: St Abb's Head to Fast Castle SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	St Abb's Head to Fast Castle SPA								
EU Code:	UK9004271								
Distance to project (km):	247.8								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stage of development	C	O	D	C	O	D	C	O	D
Kittiwake*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Matrix 34: Ronas Hill - North Roe and Tingon SPA.

Name of European site	Ronas Hill - North Roe and Tingon SPA		
EU Code:	UK9002041		
Distance to project (km):	281.4		
Assessment of AEoSI			
Effects	Collision risk		
Stage of development	C	O	D
Great skua	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Matrix 35: Fetlar SPA.

Name of European site	Fetlar SPA					
EU Code:	UK9002031					
Distance to project (km):	290.5					
Assessment of AEoSI						
Effects	Collision risk			Barrier effect		
Stage of development	C	O	D	C	O	D
Great skua	N/A	Xa	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 36: Hermaness, Saxa Vord and Valla Field SPA.

Name of European site	Hermaness, Saxa Vord and Valla Field SPA											
EU Code:	UK9002011											
Distance to project (km):	324.9											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Great skua	N/A	N/A	N/A	N/A	Xe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake	Xa	Xf	Xa	N/A	Xg	N/A	N/A	Xh	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xi	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than a single breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 37: Handa SPA.

Name of European site	Handa SPA											
EU Code:	UK9001241											
Distance to project (km):	207.5											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Great skua	N/A	N/A	N/A	N/A	Xe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 38: Shiant Isles SPA.

Name of European site	Shiant Isles SPA											
EU Code:	UK9001041											
Distance to project (km):	293.5											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 39: St Kilda SPA.

Name of European site	St Kilda SPA					
EU Code:	UK9001031					
Distance to project (km):	408.8					
Assessment of AEoSI						
Effects	Collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D
Great skua	N/A	Xa	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 40: Ythan Estuary SPA.

Name of European site	Ythan Estuary SPA		
EU Code:	UK9002221		
Distance to project (km):	93.1		
Assessment of AEoSI			
Effects	Distributional responses		
Stages of Development	C	O	D
Sandwich tern	Xa	N/A	N/A

Evidence supporting conclusions

Xa: No AEoSI alone due to lack of connectivity with the OECC determined by no individuals being recorded during intertidal surveys.

Matrix 41: Farne Islands SPA.

Name of European site	Farne Islands SPA								
EU Code:	UK9006021								
Distance to project (km):	230.6								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stage of development	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult per annum. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Matrix 42: Flamborough and Filey Coast SPA.

Name of European site	Flamborough and Filey Coast SPA											
EU Code:	UK9006101											
Distance to project (km):	459.2											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia North conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than a single breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 43: Coquet Island SPA.

Name of European site	Coquet Island SPA		
EU Code:	UK9006031		
Distance to project (km):	310.8		
Assessment of AEoSI			
Effects	Barrier effect		
Stages of Development	C	O	D
Fulmar	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

2.1.3 Migratory Fish

Matrix 44: River Spey SAC.

Name of European site	River Spey SAC					
EU Code:	UK9002231					
Distance to project (km):	27.0					
Assessment of AEoSI						
Effects	Underwater noise			Electromagnetic frequencies (EMF)		
Stage of development	C	O	D	C	O	D
Atlantic salmon	Xa	N/A	Xa	N/A	Xb	N/A
Sea lamprey	Xa	N/A	Xa	N/A	Xb	N/A
Freshwater pearl mussel	Xc	N/A	Xc	N/A	Xc	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the transient nature and low sensitivity of Atlantic salmon and sea lamprey, and the localised impact ranges from underwater noise compared to the distance to the site (59.0km to the Array).

Xb: No AEoSI alone concluded due to the highly mobile and transient nature of Atlantic salmon and sea lamprey, and the comparatively localised impact ranges from EMF effects (<10m) compared to the available habitat and the distance to the site (27.0km to the OECC).

Xc: No AEoSI alone concluded given that no AEoSI is concluded for Atlantic salmon where the freshwater pearl mussel resides within the gills.

Matrix 45: River Thurso SAC.

Name of European Site	River Thurso SAC					
EU Code:	UK0030264					
Closest distance to project (km):	69.8					
Assessment of AEoSI						
Effects	Underwater noise			Electromagnetic frequencies (EMF)		
Stage of development	C	O	D	C	O	D
Atlantic salmon	Xa	N/A	Xa	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the transient nature and low sensitivity of Atlantic salmon, and the localised impact ranges from underwater noise compared to the distance to the site (69.8km to the Array).

Xb: No AEoSI alone concluded due to the highly mobile and transient nature of Atlantic salmon, the comparatively localised impact ranges from EMF effects (<10m) compared to the available habitat and the distance to the site (88.2km to the OECC).

Matrix 46: Berriedale and Langwell Waters SAC.

Name of European Site	Berriedale and Langwell Waters SAC					
EU Code:	UK0030088					
Distance to project (km):	49.3					
Assessment of AEoSI						
Effects	Underwater noise			Electromagnetic frequencies (EMF)		
Stage of development	C	O	D	C	O	D
Atlantic salmon	Xa	N/A	Xa	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the transient nature and low sensitivity of Atlantic salmon, and the localised impact ranges from underwater noise compared to the distance to the site (49.3km to the Array).

Xb: No AEoSI alone concluded due to the highly mobile and transient nature of Atlantic salmon, the comparatively localised impact ranges from EMF effects (<10m) compared to the available habitat and the distance to the site (55.6km to the OECC).

2.2 Caledonia South

2.2.1 Marine Mammals

Matrix 47: Moray Firth SAC.

Name of European site	Moray Firth SAC											
EU Code:	UK9020313											
Distance to project (km):	37.7											
Assessment of AEoSI												
Effects	Underwater noise			Collision risk			Vessel disturbance			Changes to prey		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D
Bottlenose dolphin	Xa	Xa	Xa	Xb	Xb	Xb	Xc	Xc	Xc	Xd	Xd	Xd

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the highly mobile and transient nature of bottlenose dolphin, and the localised impact ranges from underwater noise compared to the distance to the site.

Xb: No AEoSI alone concluded due to bottlenose dolphins being highly mobile, and given observed responses to noise, are expected to detect vessels in close proximity and largely avoid collision.

Xc: No AEoSI alone concluded as bottlenose dolphin have reasonable adaptability, are tolerant of vessel movement and have a high recoverability to potential vessel disturbance.

Xd: No AEoSI alone concluded given the highly adaptable diet of bottlenose dolphin and the localised nature of the impact.

2.2.2 Offshore Ornithology

Matrix 48: East Caithness Cliffs SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European Site	East Caithness Cliffs SPA											
EU Code:	UK9001182											
Distance to project (km):	51.4											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D
Herring gull	N/A	N/A	N/A	N/A	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Great-black backed gull*	N/A	N/A	N/A	N/A	Xb	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake	Xc	Xd	Xc	N/A	Xe	N/A	N/A	Xf	N/A	N/A	N/A	N/A
Guillemot	Xc	Xg	Xc	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Razorbill	Xc	Xh	Xc	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	Xa	N/A	N/A	N/A	N/A	N/A	Xi	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, herring gull will be maintained as a feature in the long term.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult per annum. Such level of effect can almost certainly be concluded as intangible, regardless of the change in survival rate. Therefore, subject to natural change, great black-backed gull will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xd: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 11 breeding adult additional mortalities per annum, the annual reduction in the growth rate due to collision risk is predicted to be at most 0.026% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 15 breeding adult additional mortalities per annum, the annual reduction in the growth rate due to combined distributional responses and collision risk is predicted to be at most 0.035% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 162 breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.091% against the latest colony count. Regardless of the colony's population trend,

such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 13 breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.037% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 49: Moray Firth SPA.

Name of European site	Moray Firth SPA					
EU Code:	UK9020313					
Distance to project (km):	62.6					
Assessment of AEoSI						
Effects	Distributional responses			Collision risk		
Stage of development	C	O	D	C	O	D
Common scoter	Xa	Xb	Xa	N/A	Xc	N/A
Eider	Xa	Xb	Xa	N/A	Xc	N/A
Goldeneye	Xa	Xb	Xa	N/A	Xc	N/A
Great northern diver	Xa	Xb	Xa	N/A	Xc	N/A
Long-tailed duck	Xa	Xb	Xa	N/A	Xc	N/A
Red-breasted merganser	Xa	Xb	Xa	N/A	Xc	N/A
Red-throated diver	Xa	Xb	Xa	N/A	Xc	N/A
Scaup	Xa	Xb	Xa	N/A	Xc	N/A
Slavonian grebe	Xa	Xb	Xa	N/A	Xc	N/A
Velvet scoter	Xa	Xb	Xa	N/A	Xc	N/A
Shag	Xa	Xb	Xa	N/A	Xc	N/A

Evidence supporting conclusions

Xa: No AEoSI with respect to vessel traffic when considering the limited spatial and temporal effect of vessel traffic and the intent to use established vessel routes and the adherence to a Vessel Management Plan. In addition the effect of distributional responses from the presence of vessels are likely to be reversible in nature, with birds returning to the area following the passage of vessels.

Xb: No AEoSI with respect to potential disturbance and displacement effects due to the limited spatial overlap with potential operation and maintenance vessel routes.

Xc: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Matrix 50: North Caithness Cliffs SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	North Caithness Cliffs SPA											
EU Code:	UK9001181											
Distance to project (km):	89.4											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Razorbill*	Xa	Xc	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Puffin*	Xa	Xd	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xe	Xa	N/A	Xe	N/A	N/A	Xe	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 24 breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to

distributional responses is predicted to be at most 0.043% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the most recent count for both the Applicant and Guidance Approach predicted that additional breeding adult mortalities due to distributional responses per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xd: Although the predicted survival rate percentage point change exceeded the <0.02 threshold, when considering the level of effect being at most a single breeding adult per annum (when considering the Guidance approach of 60% displacement and a 3-5% mortality rate), such a level of effect would be indistinguishable from natural fluctuations in the population. No AEoSI therefore concluded. Additionally, the PVA results within Application Document 13, Appendix 13-2: Habitat Regulation Appraisal (HRA) Population Viability Assessment (PVA) Technical Note and In-combination Assessment further emphasise the intangible nature of such a predicted effect.

Xe: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 51: Troup, Pennan and Lon's Head SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Troup, Pennan and Lion's Heads SPA											
EU Code:	UK9002471											
Distance to project (km):	26.2											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Razorbill*	Xa	Xc	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Herring gull*	N/A	N/A	N/A	N/A	Xd	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xe	Xa	N/A	Xe	N/A	N/A	Xf	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 26 breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to

distributional responses is predicted to be at most 0.059% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of two breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.029% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, herring gull will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of six breeding adult additional mortalities (based on 30% displacement and 1-3% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.025% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 52: Pentland Firth Islands SPA.

Name of European site	Pentland Firth Islands SPA		
EU Code:	UK9001131		
Distance to project (km):	65.2		
Assessment of AEoSI			
Effects	Collision risk		
Stage of development	C	O	D
Arctic tern	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded based on limited records during the breeding season in Caledonia South, indicating that it is not an area of importance for these tern species. In addition, given that shortest distance to shore from the Offshore Project is 23.4km and that UK Arctic terns typically migrate up to 20km from the coast, there is limited intersection of potential migratory corridors.

Matrix 53: Moray and Nairn Coast SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Moray and Nairn Coast SPA		
EU Code:	UK9001625		
Distance to project (km):	38.9		
Assessment of AEoSI			
Effects	Collision risk		
Stage of development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Pink-footed goose	N/A	Xa	N/A
Redshank	N/A	Xa	N/A
Red-breasted merganser*	N/A	Xa	N/A
Oystercatcher*	N/A	Xa	N/A
Dunlin*	N/A	Xa	N/A
Wigeon*	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI alone concluded as the level of apportioned impact to Moray and Narin Coast SPA would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Matrix 54: Moray and Nairn Coast Ramsar.

Name of European site	Moray and Nairn Coast Ramsar		
EU Code:	UK0030262		
Distance to project (km):	38.9		
Assessment of AEoSI			
Effects	Collision risk		
Stage of development	C	O	D
Greylag goose	N/A	Xa	N/A
Pink-footed goose	N/A	Xa	N/A
Redshank	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Matrix 55: Copinsay SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Copinsay SPA											
EU Code:	UK9002151											
Distance to project (km):	80.9											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Guillemot*	Xa	Xe	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Great black-backed gull	N/A	N/A	N/A	N/A	Xf	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe:No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of three breeding adult mortalities (based on 60% displacement and 3-5% mortality rate), the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.034% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult per annum. Such level of effect can almost certainly be concluded as intangible, regardless of the change in survival rate. Therefore, subject to natural change, great black-backed gull will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 56: Hoy SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Hoy SPA											
EU Code:	UK9002141											
Distance to project (km):	94.1											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Great skua	N/A	N/A	N/A	N/A	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Guillemot*	Xb	Xc	Xb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Puffin*	Xb	Xd	Xb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xb	Xe	Xb	N/A	Xf	N/A	N/A	Xg	N/A	N/A	N/A	N/A
Great black-backed gull	N/A	N/A	N/A	N/A	Xh	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xi	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xc: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of five breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.034% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xd: Although the predicted survival rate percentage point change exceeded the <0.02 threshold for the most recent count, when considering the level of effect being less than a single breeding adult per annum (when considering the Guidance approach of 60% displacement and a 3-5% mortality rate), such a level of effect would be indistinguishable from natural fluctuations in the population. No AEoSI therefore concluded.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult per annum. Such level of effect can almost certainly be concluded as intangible, regardless of the change in survival rate. Therefore, subject to natural change, great black-backed gull will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 57: Buchan Ness to Collieston Coast SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Buchan Ness to Collieston Coast SPA											
EU Code:	UK9002491											
Distance to project (km):	78.0											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake*	Xa	Xb	Xa	N/A	Xb	N/A	N/A	Xb	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xc	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 58: Auskerry SPA.

Name of European site	Auskerry SPA		
EU Code:	UK9002381		
Distance to project (km):	94.3		
Assessment of AEoSI			
Effects	Distributional responses		
Stage of development	C	O	D
Storm petrel	Xa	Xa	Xa

Evidence supporting conclusions

Xa: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and Caledonia South.

Matrix 59: Dornoch Firth and Loch Fleet SPA.

Name of European site	Dornoch Firth and Loch Fleet SPA		
EU Code:	UK9001622		
Distance to project (km):	72.5		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Osprey	N/A	Xa	N/A
Wigeon	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI alone concluded as the level of apportioned impact to Dornoch Firth and Loch Fleet SPA would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Matrix 60: Dornoch Firth and Loch Fleet Ramsar.

Name of European site	Dornoch Firth and Loch Fleet Ramsar		
EU Code:	UK9001622		
Distance to project (km):	72.5		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Wigeon	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI alone concluded as the level of apportioned impact to Dornoch Firth and Loch Fleet Ramsar would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Matrix 61: Rousay SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Rousay SPA											
EU Code:	UK9002371											
Distance to project (km):	123.0											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot*	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xc	Xa	N/A	Xd	N/A	N/A	Xe	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of two breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.024% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 62: Marwick head SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Marwick head SPA								
EU Code:	UK9002121								
Distance to project (km):	117.3								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stages of Development	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xc	Xa	N/A	Xd	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of three breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.025% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Matrix 63: Calf of Eday. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Calf of Eday											
EU Code:	UK9002431											
Distance to project (km):	119.9											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot*	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xc	Xa	N/A	Xd	N/A	N/A	Xe	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of two breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.024% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 64: Cromarty Firth SPA.

Name of European site	Cromarty Firth SPA		
EU Code:	UK9001623		
Distance to project (km):	105.9		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Whooper swan	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Matrix 65: Cromarty Firth Ramsar. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Cromarty Firth Ramsar		
EU Code:	UK9001623		
Distance to project (km):	105.9		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Common tern*	N/A	Xb	N/A
Dunlin*	N/A	Xa	N/A
Knot*	N/A	Xa	N/A
Oystercatcher*	N/A	Xa	N/A
Red-breasted merganser*	N/A	Xa	N/A
Redshank*	N/A	Xa	N/A
Scaup*	N/A	Xa	N/A
Wigeon*	N/A	Xc	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI alone concluded as no raw counts of common tern were recorded during the breeding season in Caledonia South, indicating that it is not an area of importance for these tern species. In addition, given that shortest distance to shore from the Offshore Project is 23.4km and that common terns typically travel up to 10km from the coast, there is limited intersection of potential migratory corridors.

Xc: No AEoSI alone concluded as the level of apportioned impact to Cromarty Firth Ramsar would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Matrix 66: West Westray SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	West Westray SPA											
EU Code:	UK9002101											
Distance to project (km):	131.7											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Razorbill*	Xa	Xc	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xd	Xa	N/A	Xe	N/A	N/A	Xf	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of eight breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.024% against the latest colony count. Regardless of the colony's population trend,

such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 67: Inner Moray Firth SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Inner Moray Firth SPA		
EU Code:	UK9001624		
Distance to project (km):	107.9		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Red-breasted merganser	N/A	Xa	N/A
Redshank	N/A	Xa	N/A
Curlew*	N/A	Xa	N/A
Goldeneye*	N/A	Xa	N/A
Oystercatcher*	N/A	Xa	N/A
Scaup*	N/A	Xa	N/A
Teal*	N/A	Xa	N/A
Wigeon*	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI alone concluded as the level of apportioned impact to Inner Moray Firth SPA would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Matrix 68: Inner Moray Firth Ramsar.

Name of European site	Inner Moray Firth Ramsar		
EU Code:	UK9001624		
Distance to project (km):	107.9		
Assessment of AEoSI			
Effects	Collision risk		
Stages of Development	C	O	D
Bar-tailed godwit	N/A	Xa	N/A
Greylag goose	N/A	Xa	N/A
Red-breasted merganser	N/A	Xa	N/A
Redshank	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Matrix 69: Fowlsheugh SPA.

Name of European site	Fowlsheugh SPA											
EU Code:	UK9002271											
Distance to project (km):	136.9											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xb	N/A	N/A	Xb	N/A	N/A	N/A	N/A
Razorbill	Xa	Xc	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xd	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.
Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 70: Cape Wrath SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Cape Wrath SPA											
EU Code:	UK9001231											
Distance to project (km):	175.3											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Puffin*	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xc	Xa	N/A	Xd	N/A	N/A	Xe	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 71: Sule Skerry and Sule Stack SPA.

Name of European site	Sule Skerry and Sule Stack SPA								
EU Code:	UK9002181								
Distance to project (km):	154.8								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stage of development	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A
Puffin	Xa	Xe	Xa	N/A	N/A	N/A	N/A	N/A	N/A
Storm petrel	Xf	Xf	Xf	N/A	N/A	N/A	N/A	N/A	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is one breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xf: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and Caledonia South.

Matrix 72: Fair Isle SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Fair Isle SPA								
EU Code:	UK9002091								
Distance to project (km):	160.6								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stage of development	C	O	D	C	O	D	C	O	D
Gannet*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A
Razorbill*	Xa	Xe	Xa	N/A	N/A	N/A	N/A	N/A	N/A
Puffin*	Xa	Xf	Xa	N/A	N/A	N/A	N/A	N/A	N/A
Great skua*	N/A	N/A	N/A	N/A	Xg	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xh	Xa	N/A	Xi	N/A	N/A	Xj	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xj: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Matrix 73: Sumburgh Head SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Sumburgh Head SPA											
EU Code:	UK9002511											
Distance to project (km):	202.4											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 74: Foula SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Foula SPA											
EU Code:	UK9002061											
Distance to project (km):	22.5											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Great skua	N/A	N/A	N/A	N/A	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xb	Xc	Xb	N/A	Xd	N/A	N/A	Xe	N/A	N/A	N/A	N/A
Puffin	Xb	Xf	Xb	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single (0.01) breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 75: North Rona and Sula Sgeir SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	North Rona and Sula Sgeir SPA											
EU Code:	UK9001011											
Distance to project (km):	242.6											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xb	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Storm petrel	Xe	Xe	Xe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xf	Xa	N/A	Xg	N/A	N/A	Xh	N/A	N/A	N/A	N/A
Puffin	Xa	Xi	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xj	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and Caledonia South.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xj: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 76: Mousa SPA.

Name of European site	Mousa SPA		
EU Code:	UK9002361		
Distance to project (km):	220.1		
Assessment of AEoSI			
Effects	Distributional responses		
Stage of development	C	O	D
Storm petrel	Xa	Xa	Xa

Evidence supporting conclusions

Xa: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and Caledonia South.

Matrix 77: Forth Islands SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Forth Islands SPA								
EU Code:	UK9004171								
Distance to project (km):	224.0								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stage of development	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xb	N/A	N/A	Xb	N/A
Kittiwake	Xa	Xc	Xa	N/A	Xd	N/A	N/A	Xe	N/A
Razorbill	Xa	Xf	Xa	N/A	N/A	N/A	N/A	N/A	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as for both citation and most recent count, the Applicant and Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Matrix 78: 85 Noss SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Noss SPA											
EU Code:	UK9002081											
Distance to project (km):	237.6											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Great skua	N/A	N/A	N/A	N/A	Xe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake*	Xa	Xf	Xa	N/A	Xg	N/A	N/A	Xh	N/A	N/A	N/A	N/A
Puffin*	Xa	Xi	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xj	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xj: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 79: St Abb's Head to Fast Castle SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	St Abb's Head to Fast Castle SPA								
EU Code:	UK9004271								
Distance to project (km):	247.8								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stage of development	C	O	D	C	O	D	C	O	D
Kittiwake*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Matrix 80: Ronas Hill - North Roe and Tingon SPA.

Name of European site	Ronas Hill - North Roe and Tingon SPA		
EU Code:	UK9002041		
Distance to project (km):	281.4		
Assessment of AEoSI			
Effects	Collision risk		
Stage of development	C	O	D
Great skua	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Matrix 81: Fetlar SPA.

Name of European site	Fetlar SPA					
EU Code:	UK9002031					
Distance to project (km):	290.5					
Assessment of AEoSI						
Effects	Collision risk			Barrier effect		
Stage of development	C	O	D	C	O	D
Great skua	N/A	Xa	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 82: Hermaness, Saxa Vord and Valla Field SPA.

Name of European site	Hermaness, Saxa Vord and Valla Field SPA											
EU Code:	UK9002011											
Distance to project (km):	324.9											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Great skua	N/A	N/A	N/A	N/A	Xe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittiwake	Xa	Xf	Xa	N/A	Xg	N/A	N/A	Xh	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xi	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 83: Handa SPA.

Name of European site	Handa SPA											
EU Code:	UK9001241											
Distance to project (km):	207.5											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Great skua	N/A	N/A	N/A	N/A	Xe	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 84: Shiant Isles SPA.

Name of European site	Shiant Isles SPA											
EU Code:	UK9001041											
Distance to project (km):	293.5											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 85: St Kilda SPA.

Name of European site	St Kilda SPA					
EU Code:	UK9001031					
Distance to project (km):	408.8					
Assessment of AEoSI						
Effects	Collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D
Great skua	N/A	Xa	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 86: Ythan Estuary SPA.

Name of European site	Ythan Estuary SPA		
EU Code:	UK9002221		
Distance to project (km):	93.1		
Assessment of AEoSI			
Effects	Distributional responses		
Stages of Development	C	O	D
Sandwich tern	Xa	N/A	N/A

Evidence supporting conclusions

Xa: No AEoSI alone due to lack of connectivity with the OECC determined by no individuals being recorded during intertidal surveys.

Matrix 87: Farne Islands SPA.

Name of European site	Farne Islands SPA								
EU Code:	UK9006021								
Distance to project (km):	276.5								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk		
Stage of development	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Matrix 88: Flamborough and Filey Coast SPA.

Name of European site	Flamborough and Filey Coast SPA											
EU Code:	UK9006101											
Distance to project (km):	459.2											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of Caledonia South conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 89: Coquet Island SPA.

Name of European site	Coquet Island SPA		
EU Code:	UK9006031		
Distance to project (km):	310.8		
Assessment of AEoSI			
Effects	Barrier effect		
Stages of Development	C	O	D
Fulmar	N/A	Xa	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

2.2.3 Migratory Fish

Matrix 90: River Spey SAC.

Name of European site	River Spey SAC					
EU Code:	UK9002231					
Distance to project (km):	27.0					
Assessment of AEoSI						
Effects	Underwater noise			Electromagnetic frequencies (EMF)		
Stage of development	C	O	D	C	O	D
Atlantic salmon	Xa	N/A	Xa	N/A	Xb	N/A
Sea lamprey	Xa	N/A	Xa	N/A	Xb	N/A
Freshwater pearl mussel	Xc	N/A	Xc	N/A	Xc	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the transient nature and low sensitivity of Atlantic salmon and sea lamprey, and the localised impact ranges from underwater noise compared to the distance to the site (54.6km to the Array).

Xb: No AEoSI alone concluded due to the highly mobile and transient nature of Atlantic salmon and sea lamprey, their low sensitivity to SSC based on naturally occurring events, and the comparatively localised impact ranges from SSC plumes compared to the available habitat and the distance to the site (27.0km to the OECC).

Xc: No AEoSI alone concluded given that no AEoSI is concluded for Atlantic salmon where the freshwater pearl mussel resides within the gills.

Matrix 91: River Thurso SAC.

Name of European Site	River Thurso SAC					
EU Code:	UK0030264					
Distance to project (km):	69.8					
Assessment of AEoSI						
Effects	Underwater noise			Electromagnetic frequencies (EMF)		
Stage of development	C	O	D	C	O	D
Atlantic salmon	Xa	N/A	Xa	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the transient nature and low sensitivity of Atlantic salmon, and the localised impact ranges from underwater noise compared to the distance to the site (88.2km to the Array).

Xb: No AEoSI alone concluded due to the highly mobile and transient nature of Atlantic salmon, the comparatively localised impact ranges from EMF effects (<10m) compared to the available habitat and the distance to the site (98.7km to the OECC).

Matrix 92: Berriedale and Langwell Waters SAC.

Name of European Site	Berriedale and Langwell Waters SAC					
EU Code:	UK0030088					
Distance to project (km):	49.3					
Assessment of AEoSI						
Effects	Underwater noise			Electromagnetic frequencies (EMF)		
Stage of development	C	O	D	C	O	D
Atlantic salmon	Xa	N/A	Xa	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the transient nature and low sensitivity of Atlantic salmon, and the localised impact ranges from underwater noise compared to the distance to the site (55.6km to the Array).

Xd: No AEoSI alone concluded due to the highly mobile and transient nature of Atlantic salmon, the comparatively localised impact ranges from EMF effects (<10m) compared to the available habitat and the distance to the site (56.9km to the OECC).

2.3 The Proposed Development (Offshore)

2.3.1 Marine Mammals

Matrix 93: Moray Firth SAC.

Name of European site	Moray Firth SAC														
EU Code:	UK9020313														
Distance to project (km):	37.7														
Assessment of AEoSI															
Effects	Underwater noise			Collision risk			Vessel disturbance			Changes to prey			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Bottlenose dolphin	Xa	Xa	Xa	Xb	Xb	Xb	Xc	Xc	Xc	Xd	Xd	Xd	Xe	Xf	Xe

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the highly mobile and transient nature of bottlenose dolphin, and the localised impact ranges from underwater noise compared to the distance to the site.

Xb: No AEoSI alone concluded due to bottlenose dolphins being highly mobile, and given observed responses to noise, are expected to detect vessels in close proximity and largely avoid collision.

Xc: No AEoSI alone concluded as bottlenose dolphin have reasonable adaptability, are tolerant of vessel movement and have a high recoverability to potential vessel disturbance.

Xd: No AEoSI alone concluded given the highly adaptable diet of bottlenose dolphin and the localised nature of the impact.

Xe: No AEoSI in-combination concluded due to the intermittent nature of effects, high tolerance for disturbance, lack of evidence to suggest any long-term population level effects, and limitations within the modelling assessment.

Xf: No AEoSI in-combination concluded due to the high tolerance of the species for disturbance and the nature of operational noise.

2.3.2 Offshore Ornithology

Matrix 94: East Caithness Cliffs. "*" Identifies species which are part of an assemblage feature only.

Name of European site	East Caithness Cliffs SPA														
EU Code:	UK9001182														
Distance to project (km):	51.4														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Herring gull	N/A	N/A	N/A	N/A	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xb	N/A
Great black-backed gull*	N/A	N/A	N/A	N/A	Xc	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xb	N/A
Kittiwake	Xd	Xe	Xd	N/A	Xf	N/A	N/A	Xg	N/A	N/A	N/A	N/A	Xb	✓h	Xb
Guillemot	Xd	Xi	Xd	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xb	✓j	Xb
Razorbill	Xd	Xk	Xd	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xb	Xl	Xb
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xm	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, herring gull will be maintained as a feature in the long term.

Xb: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult per annum. Such level of effect can almost certainly be concluded as intangible, regardless of the change in survival rate. Therefore, subject to natural change, great black-backed gull will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xe: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 14 breeding adult additional mortalities per annum, the annual reduction in the growth rate due to collision risk is predicted to be at most 0.035% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 19 breeding adult additional mortalities per annum, the annual reduction in the growth rate due to collision risk is predicted to be at most 0.047% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

✓h: AEoSI in-combination concluded. As the colony is in significant decline, the level of in-combination impact predicted is unstainable when considering the resilience of the kittiwake feature of the SPA. As such, the potential for an AEoSI cannot be ruled out to the conservation objectives of kittiwake at East Caithness Cliffs SPA in relation to collision and distributional responses effects from the Proposed Development (Offshore) in-combination during the O&M phase.

Xi: No AEoSI alone concluded due to the results of population viability analysis when considering the maximum predicted impact of 222 additional mortalities per annum. The annual reduction in growth rate due to distributional responses is predicted to be at most 0.125 and 0.023% following the Guidance and Applicant approach respectively. When considering the known colony growth trend of 2.19% (Colony Annual Compound Growth Rate), the colony growth rate would still remain positive when assessed against the long-term growth trend for the colony. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

✓j: AEoSI in-combination concluded. Whilst the evidence would suggest that the potential for the Guidance approach upper impact is highly unlikely to occur, and under all growth rate scenarios in the population would be predicted to remain positive, such a level of effect would likely compromise the resilience of the colony over the 35 year period. As such, the upper limit of the Guidance approach would be considered to have a significant effect on the guillemot feature at this site. No AEoSI concluded when considering the Applicant or lower Guidance approach range in-combination effect.

Xk: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 21 breeding adult mortalities the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.060% following the Guidance approach, which would mean the colony would continue to grow in the long term. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xl: No AEoSI in-combination concluded. Although the level of predicted impact when considering the Applicant and Guidance Approach is not insignificant, available evidence suggests that the colony is in stable condition with enough resilience to withstand such a level of potential effect in-combination. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xm: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 95: Moray Firth SPA.

Name of European site	Moray Firth SPA								
EU Code:	UK9020313								
Distance to project (km):	62.6								
Assessment of AEoSI									
Effects	Distributional responses			Collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D
Common scoter	Xa	Xb	Xa	N/A	Xc	N/A	Xd	Xde	Xd
Eider	Xa	Xb	Xa	N/A	Xc	N/A	Xd	Xde	Xd
Goldeneye	Xa	Xb	Xa	N/A	Xc	N/A	Xd	Xde	Xd
Great northern diver	Xa	Xb	Xa	N/A	Xc	N/A	Xd	Xde	Xd
Long-tailed duck	Xa	Xb	Xa	N/A	Xc	N/A	Xd	Xde	Xd
Red-breasted merganser	Xa	Xb	Xa	N/A	Xc	N/A	Xd	Xde	Xd
Red-throated diver	Xa	Xb	Xa	N/A	Xc	N/A	Xd	Xde	Xd
Scaup	Xa	Xb	Xa	N/A	Xc	N/A	Xd	Xde	Xd
Slavonian grebe	Xa	Xb	Xa	N/A	Xc	N/A	Xd	Xde	Xd
Velvet scoter	Xa	Xb	Xa	N/A	Xc	N/A	Xd	Xde	Xd

Name of European site	Moray Firth SPA								
Shag	Xa	Xb	Xa	N/A	Xc	N/A	Xd	Xde	Xd

Evidence supporting conclusions

Xa: No AEoSI with respect to vessel traffic when considering the limited spatial and temporal effect of vessel traffic and the intent to use established vessel routes and the adherence to a Vessel Management Plan. In addition, the effect of distributional responses from the presence of vessels are likely to be reversible in nature, with birds returning to the area following the passage of vessels.

Xb: No AEoSI with respect to potential disturbance and displacement effects due to the limited spatial overlap with operation and maintenance vessel routes.

Xc: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xd: No AEoSI in-combination for distributional responses concluded as during the operation and maintenance phase, the export cable will be installed and subterranean. Any maintenance requirements will be highly localised both spatially and temporally, therefore no potential for an in-combination effect to occur.

Xe: No AEoSI in-combination for migratory collision risk concluded as when considering the intangible impact contribution the Proposed Development (Offshore) would add to any in-combination effect, combined with the conclusions of the strategic assessment conducted by WWT and MacArthur Green (2014) it can be confidently concluded there is no potential for an AEoSI for the Proposed Development (Offshore) in-combination with other plans and projects.

Reference: Wildfowl and Wetlands Trust and MacArthur Green (2014) ‘Strategic Assessment of collision risk of Scottish offshore wind farms to migrating birds’. Report for Marine Scotland

Matrix 96: North Caithness Cliffs SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	North Caithness Cliffs SPA														
EU Code:	UK9001181														
Distance to project (km):	89.4														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xi	Xc	Xi
Razorbill*	Xa	Xd	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xi	Xe	Xi
Puffin*	Xa	Xf	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xi	Xg	Xi
Kittiwake*	Xa	Xh	Xa	N/A	Xh	N/A	N/A	Xh	N/A	N/A	N/A	N/A	Xi	Xi	Xi
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xj	N/A	NA	Xi	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 32 breeding adult additional mortalities, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.124% against the latest colony count. When considering the known colony growth trend of 5.86% (Colony Annual Compound Growth Rate), the colony growth rate would still remain positive when assessed against the long-term growth trend for the colony. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI in-combination concluded as when considering the Applicant's or Guidance approach the impacts from the Proposed Development (Offshore) in-combination with all other projects would have a limited effect on the overall status or trajectory of the population, as the resulting reduction in growth rate would at most be 0.24% annually for these scenarios. Therefore, there is no potential for an AEoSI to the conservation objectives of the guillemot feature of this site and subject to natural change, guillemot will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of three breeding adult additional mortalities, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.025% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as when considering the Applicant's or Guidance approach the impacts from the Proposed Development (Offshore) in-combination with all other projects would have a limited effect on the overall status or trajectory of the population, as the resulting reduction in growth rate would at most be 0.25 % annually for these scenarios. Therefore, there is no potential for an AEoSI to the conservation objectives of the guillemot feature of this site and subject to natural change, razorbill will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of two breeding adult additional mortalities, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.067% against the latest colony count and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xg: No AEoSI in-combination concluded. When considering all projects identified, the Proposed Development (Offshore) provides an impact contribution of only 0.6% - 1.5%, which can be considered a non-material contribution to the overall effect. Inclusion of the Proposed Development (Offshore) certainly wouldn't be the tipping point for any in-combination predicted impact total causing an AEoSI, given its contribution to the overall effect.

Xh: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xj: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 97: Troup, Pennan and Lion's Head SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Troup, Pennan and Lion's Head SPA														
EU Code:	UK9002471														
Distance to project (km):	26.2														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	Xc	Xg
Razorbill*	Xa	Xd	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	Xe	Xg
Herring gull*	N/A	N/A	N/A	N/A	Xf	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A
Kittiwake*	Xa	Xh	Xa	N/A	Xi	N/A	N/A	Xj	N/A	N/A	N/A	N/A	Xg	✓k	Xg
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xl	N/A	N/A	Xg	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 34 breeding adult additional mortalities, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.081% against the latest colony count. The loss of a maximum 34 breeding adults per annum would not tip the long term colony growth rate of 0.28% into decline. Therefore, when considering the long-term growth rate, regardless of the colony's population fluctuating trends, such a level of effect would likely be indistinguishable from natural fluctuations in the population. Subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI in-combination concluded as when considering the Applicant's or Guidance approach the impacts from the Proposed Development (Offshore) in-combination with all other projects would have a limited effect on the overall status or trajectory of the population, as the resulting reduction in growth rate would at most be 0.091% - 0.409% annually for these scenarios. Therefore, there is no potential for an AEoSI to the conservation objectives of the guillemot feature of this site and subject to natural change, guillemot will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of three breeding adult additional mortalities, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.054% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as when considering the Applicant's or Guidance approach the impacts from the Proposed Development (Offshore) in-combination with all other projects would have a limited effect on the overall status or trajectory of the population, as the resulting reduction in growth rate would at most be 0.34% annually for these scenarios. Therefore, there is no potential for an AEoSI to the conservation objectives of the guillemot feature of this site and subject to natural change, razorbill will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, herring gull will be maintained as a feature in the long term.

Xg: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xh: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of six breeding adult additional mortalities, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.023% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xj: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of eight breeding adult additional mortalities, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.035% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

✓k: AEoSI in-combination concluded. As the colony is in significant decline, the level of in-combination impact predicted is unstainable when considering the resilience of the kittiwake feature of the SPA. As such, the potential for an AEoSI cannot be ruled out for the conservation objectives of kittiwake at Troup, Pennan and Lion's Head SPA in relation to collision and distributional responses effects from the Proposed Development (Offshore) in-combination during the O&M phase.

Xl: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 98: Pentland Firth Islands SPA.

Name of European site	Pentland Firth Islands SPA					
EU Code:	UK9001131					
Distance to project (km):	65.2					
Assessment of AEoSI						
Effects	Collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D
Arctic tern	N/A	Xa	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded based on limited records during the breeding season in the Proposed Development (Offshore), indicating that it is not an area of importance for these tern species. In addition, given that shortest distance to shore from the Offshore Project is 23.4km and that UK Arctic terns typically migrate up to 20km from the coast, there is limited intersection of potential migratory corridors

Xb: No AEoSI in-combination concluded because Arctic tern was recorded in limited numbers within the 24 months of site-specific DAS, as expected given the Proposed Development (Offshore) is outwith of the species foraging range and expected migratory corridor. Given the above information, the Proposed Development (Offshore) would certainly not provide any tangible contribution to any in-combination effect.

Matrix 99: Moray and Nairn Coast SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Moray and Nairn Coast SPA					
EU Code:	UK9001625					
Distance to project (km):	38.9					
Assessment of AEoSI						
Effects	Collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D
Bar-tailed godwit	N/A	Xa	N/A	N/A	Xb	N/A
Greylag goose	N/A	Xa	N/A	N/A	Xb	N/A
Pink-footed goose	N/A	Xa	N/A	N/A	Xb	N/A
Redshank	N/A	Xa	N/A	N/A	Xb	N/A
Red-breasted merganser*	N/A	Xa	N/A	N/A	Xb	N/A
Oystercatcher*	N/A	Xa	N/A	N/A	Xb	N/A
Dunlin*	N/A	Xc	N/A	N/A	Xb	N/A
Wigeon*	N/A	Xc	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI in-combination concluded as when considering the intangible impact contribution the Proposed Development (Offshore) would add to any in-combination effect, combined with the conclusions of the strategic assessment conducted by WWT and MacArthur Green (2014), it can be confidently concluded there is no potential for an AEoSI for the Proposed Development (Offshore) in-combination with other plans and projects.

Xc: No AEoSI alone concluded as the level of apportioned impact to Moray and Narin Coast SPA would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Reference: Wildfowl and Wetlands Trust and MacArthur Green (2014) 'Strategic Assessment of collision risk of Scottish offshore wind farms to migrating birds'. Report for Marine Scotland

Matrix 100: Moray and Nairn Coast Ramsar.

Name of European site	Moray and Nairn Coast Ramsar					
EU Code:	UK9001625					
Distance to project (km):	38.9					
Assessment of AEoSI						
Effects	Collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D
Greylag goose	N/A	Xa	N/A	N/A	Xb	N/A
Pink-footed goose	N/A	Xa	N/A	N/A	Xb	N/A
Redshank	N/A	Xa	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI in-combination concluded as when considering the intangible impact contribution the Proposed Development (Offshore) would add to any in-combination effect, combined with the conclusions of the strategic assessment, it can be confidently concluded there is no potential for an AEoSI for the Proposed Development (Offshore) in-combination with other plans and projects.

Matrix 101: Copinsay SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Copinsay SPA														
EU Code:	UK9002151														
Distance to project (km):	80.9														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot*	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	Xc	Xg
Kittiwake*	Xa	Xd	Xa	N/A	Xe	N/A	N/A	Xf	N/A	N/A	N/A	N/A	Xg	Xg	Xg
Great black-backed gull	N/A	Xh	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xi	N/A	N/A	Xg	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as it was concluded that there is no potential for an AEoSI with respect to distributional responses during the operation and maintenance phase of the Proposed Development. Therefore, since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of four breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate

due to distributional responses is predicted to be at most 0.044% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI in-combination concluded. When considering the Applicant's or Guidance approach, it is clear that the loss of three to 12 birds per annum would likely be intangible from the natural baseline mortality per annum, as this would lead to a reduction in the growth rate of at most 0.13% annually. Therefore, there is no potential for an AEoSI to the conservation objectives of the guillemot feature of this site and subject to natural change, guillemot will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term

Xg: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult per annum. Such level of effect can almost certainly be concluded as intangible, regardless of the change in survival rate. Therefore, subject to natural change, great black-backed gull will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 102: Hoy SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Hoy SPA														
EU Code:	UK9002141														
Distance to project (km):	94.1														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Great skua	N/A	N/A	N/A	N/A	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xb	N/A
Guillemot*	Xc	Xd	Xc	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xb	Xe	Xb
Puffin*	Xc	Xf	Xc	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xb	Xb	Xb
Kittiwake*	Xc	Xg	Xc	N/A	Xh	N/A	N/A	Xi	N/A	N/A	N/A	N/A	Xb	Xb	Xb
Great black-backed gull	N/A	N/A	N/A	N/A	Xj	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xb	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xk	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xc: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xd: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of six breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.041% against the latest colony count. Such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded. when considering the Applicant's or Guidance approach, it is clear that the loss of under two to eight birds per annum would likely be intangible from the natural baseline mortality per annum. Whether considering the Applicant's approach or Guidance approach the impacts from Caledonia in-combination with all other projects would have a limited effect on the overall status or trajectory of the population, as the resulting reduction in growth rate would be well under 0.1% for all scenarios. Therefore, there is no potential for an AEoSI to the conservation objectives of the guillemot feature of this site and subject to natural change, guillemot will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Such a level of impact can confidently be classified as intangible, regardless of the predicted survival rate percentage point change. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term

Xj: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult per annum. Such level of effect can almost certainly be concluded as intangible, regardless of the change in survival rate. Therefore, subject to natural change, great black-backed gull will be maintained as a feature in the long term.

Xk: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 103: Buchan Ness to Collieston Coast SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Buchan Ness to Collieston Coast SPA														
EU Code:	UK9002491														
Distance to project (km):	78.0														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake*	Xa	Xb	Xa	N/A	Xb	N/A	N/A	Xb	N/A	N/A	N/A	N/A	Xc	✓d	Xc
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xd	N/A	Xc	Xc	Xc

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

✓d: AEoSI in-combination concluded. As the colony is in significant decline, the level of in-combination impact predicted is unstainable when considering the resilience of the kittiwake feature of the SPA. As such, the potential for an AEoSI cannot be ruled out to the conservation objectives of kittiwake at Buchan Ness to Collieston Coast SPA in relation to collision and distributional responses effects from the Proposed Development (Offshore) in-combination during the O&M phase.

Xe: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 104: Auskerry SPA.

Name of European site	Auskerry SPA					
EU Code:	UK9002381					
Distance to project (km):	94.3					
Assessment of AEoSI						
Effects	Distributional responses			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D
Storm petrel	Xa	Xa	Xa	Xa	Xb	Xa

Evidence supporting conclusions

Xa: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and the Proposed Development (Offshore).

Xb: No AEoSI in-combination concluded as no storm petrel species were recorded within the full 24 months of digital aerial surveys, suggesting no potential connectivity with any storm petrel features screened in for assessment. This conclusion is then corroborated when considering the additional evidence presented regarding storm petrel distribution. It can therefore be concluded, there is no potential for the Proposed Development (Offshore) to contribute to any in-combination effect.

Matrix 105: Dornoch Firth and Loch Fleet SPA.

Name of European site	Dornoch Firth and Loch Fleet SPA					
EU Code:	UK9001622					
Distance to project (km):	72.5					
Assessment of AEoSI						
Effects	Collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stages of Development	C	O	D	C	O	D
Bar-tailed godwit	N/A	Xa	N/A	N/A	Xb	N/A
Greylag goose	N/A	Xa	N/A	N/A	Xb	N/A
Osprey	N/A	Xa	N/A	N/A	Xb	N/A
Wigeon	N/A	Xc	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI in-combination for migratory collision risk concluded as when considering the intangible impact contribution the Proposed Development (Offshore) would add to any in-combination effect, combined with the conclusions of the strategic assessment conducted by WWT and MacArthur Green (2014) it can be confidently concluded there is no potential for an AEoSI for the Proposed Development (Offshore) in-combination with other plans and projects.

Xc: No AEoSI alone concluded as the level of apportioned impact to Dornoch Firth and Loch Fleet SPA would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Matrix 106: Dornoch Firth and Loch Fleet Ramsar.

Name of European site	Dornoch Firth and Loch Fleet Ramsar					
EU Code:	UK9001622					
Distance to project (km):	69.5					
Assessment of AEoSI						
Effects	Collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stages of Development	C	O	D	C	O	D
Bar-tailed godwit	N/A	Xa	N/A	N/A	Xb	N/A
Greylag goose	N/A	Xa	N/A	N/A	Xb	N/A
Wigeon	N/A	Xc	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI in-combination concluded as when considering the intangible impact contribution the Proposed Development (Offshore) would add to any in-combination effect, combined with the conclusions of the strategic assessment conducted by WWT and MacArthur Green (2014), it can be confidently concluded there is no potential for an AEoSI for the Proposed Development (Offshore) in-combination with other plans and projects.

Xc: No AEoSI alone concluded as the level of apportioned impact to Dornoch Firth and Loch Fleet Ramsar would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Reference: Wildfowl and Wetlands Trust and MacArthur Green (2014) 'Strategic Assessment of collision risk of Scottish offshore wind farms to migrating birds'. Report for Marine Scotland

Matrix 107: Rousay SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Rousay SPA														
EU Code:	UK9002371														
Distance to project (km):	123.0														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot*	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xc	xd	Xc
Kittiwake*	Xa	Xe	Xa	N/A	Xf	N/A	N/A	Xg	N/A	N/A	N/A	N/A	Xc	Xh	Xc
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xi	N/A	N/A	Xh	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of two breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.027% against the latest colony count. Regardless of the colony's population trend,

such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xd: No AEoSI in-combination concluded. On review of Northeast and East Scotwind Projects in-combination datasets and recently submitted applications in Scotland (Culzean, Salamander and Ossian) no projects were found to contribute to an in-combination effect.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term

Xh: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xi: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 108: Marwick head SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Marwick Head SPA											
EU Code:	UK9002121											
Distance to project (km):	117.3											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stages of Development	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	Xc	Xd	Xc
Kittiwake*	Xa	Xe	Xa	N/A	Xf	N/A	N/A	Xg	N/A	Xc	Xc	Xc

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of four breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.031% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xd: No AEoSI in-combination concluded. Even when considering a maximum predicted impact of four breeding adult mortalities (based on 60% displacement and 3-5% mortality rate), the annual reduction in the growth rate is predicted to be at most 0.024% - 0.051% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, there is no potential for an AEoSI to the conservation objectives of the guillemot feature of this site and subject to natural change, guillemot will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Matrix 109: Calf of Eday. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Calf of Eday														
EU Code:	UK9002431														
Distance to project (km):	119.9														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot*	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xd	N/A
Kittiwake*	Xa	Xe	Xa	N/A	Xf	N/A	N/A	Xg	N/A	N/A	N/A	N/A	N/A	Xc	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xh	N/A	N/A	Xc	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of two breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to distributional responses is predicted to be at most 0.030% against the latest colony count. Regardless of the colony's population trend,

such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xd: No AEoSI in-combination concluded. On review of Northeast and East Scotwind Projects in-combination datasets and recently submitted applications in Scotland (Culzean, Salamander and Ossian) no projects were found to contribute to an in-combination effect.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term

Xh: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 110: Cromarty Firth SPA.

Name of European site	Cromarty Firth SPA					
EU Code:	UK9001623					
Distance to project (km):	119.9					
Assessment of AEoSI						
Effects	Collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stages of Development	C	O	D	C	O	D
Bar-tailed godwit	N/A	Xa	N/A	N/A	Xb	N/A
Greylag goose	N/A	Xa	N/A	N/A	Xb	N/A
Whooper swan	N/A	Xa	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI in-combination concluded as when considering the intangible impact contribution the Proposed Development (Offshore) would add to any in-combination effect, combined with the conclusions of the strategic assessment conducted by WWT and MacArthur Green (2014), it can be confidently concluded there is no potential for an AEoSI for the Proposed Development (Offshore) in-combination with other plans and projects.

Reference: Wildfowl and Wetlands Trust and MacArthur Green (2014) 'Strategic Assessment of collision risk of Scottish offshore wind farms to migrating birds'. Report for Marine Scotland

Matrix 111: Cromarty Firth Ramsar. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Cromarty Firth Ramsar					
EU Code:	UK9001623					
Distance to project (km):	105.9					
Assessment of AEoSI						
Effects	Collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stages of Development	C	O	D	C	O	D
Bar-tailed godwit	N/A	Xa	N/A	N/A	Xb	N/A
Greylag goose	N/A	Xa	N/A	N/A	Xb	N/A
Common tern*	N/A	Xc	N/A	N/A	Xb	N/A
Dunlin*	N/A	Xa	N/A	N/A	Xb	N/A
Knot*	N/A	Xa	N/A	N/A	Xb	N/A
Oystercatcher*	N/A	Xa	N/A	N/A	Xb	N/A
Red-breasted merganser*	N/A	Xa	N/A	N/A	Xb	N/A
Redshank*	N/A	Xa	N/A	N/A	Xb	N/A
Scaup*	N/A	Xa	N/A	N/A	Xb	N/A
Wigeon*	N/A	Xd	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI in-combination concluded as when considering the intangible impact contribution the Proposed Development (Offshore) would add to any in-combination effect, combined with the conclusions of the strategic assessment conducted by WWT and MacArthur Green (2014), it can be confidently concluded there is no potential for an AEoSI for the Proposed Development (Offshore) in-combination with other plans and projects.

Xc: No AEoSI alone concluded as only three maximum raw counts of common tern were recorded during the breeding season in the Proposed Development (Offshore), indicating that it is not an area of importance for these tern species. In addition, given that shortest distance to shore from the Offshore Project is 23.4km and that common terns typically travel up to 10km from the coast, there is limited intersection of potential migratory corridors.

Xd: No AEoSI alone concluded as the level of apportioned impact to Cromarty Firth Ramsar would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Reference: Wildfowl and Wetlands Trust and MacArthur Green (2014) ‘Strategic Assessment of collision risk of Scottish offshore wind farms to migrating birds’. Report for Marine Scotland

Matrix 112: West Westray SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	West Westray SPA														
EU Code:	UK9002101														
Distance to project (km):	131.7														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Guillemot	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xc	Xd	Xc
Razorbill*	Xa	Xe	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xc	Xf	Xc
Kittiwake*	Xa	Xg	Xa	N/A	Xh	N/A	N/A	Xi	N/A	N/A	N/A	N/A	Xc	Xf	Xc
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xj	N/A	N/A	Xfe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of 10 breeding adult additional mortalities (based on 60% displacement and 3-5% mortality rate) per annum, the annual reduction in the growth rate due to

distributional responses is predicted to be at most 0.028% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, guillemot will be maintained as a feature in the long term.

Xc: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xd: No AEoSI in-combination concluded. When considering the Applicant's approach, it is clear that the loss of under three to 12 birds per annum would likely be intangible from the natural baseline mortality per annum. When considering the Applicant's or Guidance approach the impacts from the Proposed Development (Offshore) in-combination with all other projects would have a limited effect on the overall status or trajectory of the population, as the resulting reduction in growth rate would be under 0.1% for these scenarios. Therefore, there is no potential for an AEoSI to the conservation objectives of the guillemot feature of this site and subject to natural change, guillemot will be maintained as a feature in the long term.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xf: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term

Xj: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 113: Inner Moray Firth SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Inner Moray Firth SPA					
EU Code:	UK9001624					
Distance to project (km):	107.9					
Assessment of AEoSI						
Effects	Collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stages of Development	C	O	D	C	O	D
Bar-tailed godwit	N/A	Xa	N/A	N/A	Xb	N/A
Greylag goose	N/A	Xa	N/A	N/A	Xb	N/A
Red-breasted merganser	N/A	Xa	N/A	N/A	Xb	N/A
Redshank	N/A	Xa	N/A	N/A	Xb	N/A
Curlew*	N/A	Xa	N/A	N/A	Xb	N/A
Goldeneye*	N/A	Xa	N/A	N/A	Xb	N/A
Oystercatcher*	N/A	Xa	N/A	N/A	Xb	N/A
Scaup*	N/A	Xa	N/A	N/A	Xb	N/A
Teal*	N/A	Xa	N/A	N/A	Xb	N/A
Wigeon*	N/A	Xc	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI in-combination concluded as when considering the intangible impact contribution the Proposed Development (Offshore) would add to any in-combination effect, combined with the conclusions of the strategic assessment conducted by WWT and MacArthur Green (2014), it can be confidently concluded there is no potential for an AEoSI for the Proposed Development (Offshore) in-combination with other plans and projects.

Xc: No AEoSI alone concluded as the level of apportioned impact to Inner Moray Firth SPA would not result in the survival rate percentage point change exceeding an increase of 0.02%. Such level of effects would almost certainly be indistinguishable from natural fluctuations in the population and therefore would not lead to an AEoSI.

Reference: Wildfowl and Wetlands Trust and MacArthur Green (2014) 'Strategic Assessment of collision risk of Scottish offshore wind farms to migrating birds'. Report for Marine Scotland

Matrix 114: Inner Moray Firth Ramsar.

Name of European site	Inner Moray Firth Ramsar					
EU Code:	UK9001624					
Distance to project (km):	107.9					
Assessment of AEoSI						
Effects	Collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stages of Development	C	O	D	C	O	D
Bar-tailed godwit	N/A	Xa	N/A	N/A	Xb	N/A
Greylag goose	N/A	Xa	N/A	N/A	Xb	N/A
Red-breasted merganser	N/A	Xa	N/A	N/A	Xb	N/A
Redshank	N/A	Xa	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted impact is less than a single individual per annum at the EIA level, such a level of effect can be concluded as intangible and would therefore not lead to an AEoSI.

Xb: No AEoSI in-combination concluded as when considering the intangible impact contribution the Proposed Development (Offshore) would add to any in-combination effect, combined with the conclusions of the strategic assessment conducted by WWT and MacArthur Green (2014), it can be confidently concluded there is no potential for an AEoSI for the Proposed Development (Offshore) in-combination with other plans and projects.

Reference: Wildfowl and Wetlands Trust and MacArthur Green (2014) 'Strategic Assessment of collision risk of Scottish offshore wind farms to migrating birds'. Report for Marine Scotland

Matrix 115: Fowlsheugh SPA.

Name of European site	Fowlsheugh SPA														
EU Code:	UK9002271														
Distance to project (km):	136.9														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xb	N/A	N/A	Xb	N/A	N/A	N/A	N/A	Xc	Xd	Xc
Razorbill	Xa	Xe	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xd	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A	N/A	Xd	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as for both citation and most recent count, the Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xd: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 116: Cape Wrath SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Cape Wrath SPA														
EU Code:	UK9001231														
Distance to project (km):	175.3														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Puffin*	Xa	Xb	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xc	Xd	Xc
Kittiwake*	Xa	Xe	Xa	N/A	Xf	N/A	N/A	Xg	N/A	N/A	N/A	N/A	Xc	Xd	Xc
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xh	N/A	N/A	Xc	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xc: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xd: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 117: Sule Skerry and Sule Stack SPA.

Name of European site	Sule Skerry and Sule Stack SPA											
EU Code:	UK9002181											
Distance to project (km):	154.8											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	Xe	Xf	Xe
Puffin	Xa	Xg	Xa	N/A	N/A	N/A	N/A	N/A	N/A	Xe	✓h	Xe
Storm petrel	Xi	Xi	Xi	N/A	N/A	N/A	N/A	N/A	N/A	Xe	Xj	Xe

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is at most one breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xf: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xg: No AEoSI alone concluded as for both citation and most recent count, the Applicant Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

✓h: AEoSI in-combination concluded. Whilst the evidence would suggest that the potential for the Guidance approach impact is unlikely to occur, a reduction in growth rate annually of up to 0.84% would be considered to have a significant effect on the puffin feature of this site. The potential for an AEoSI is therefore concluded when considering the level of potential effect predicted from the Guidance approach in-combination.

Xi: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and the Proposed Development (Offshore).

Xj: No AEoSI in-combination concluded as no storm petrel species were recorded within the full 24 months of digital aerial surveys, suggesting no potential connectivity with any storm petrel features screened in for assessment. This conclusion is then corroborated when considering the additional evidence presented regarding storm petrel distribution. It can therefore be concluded, there is no potential for the Proposed Development (Offshore) to contribute to any in-combination effect.

Matrix 118: Fair Isle SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Fair Isle SPA											
EU Code:	UK9002091											
Distance to project (km):	160.6											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D
Gannet*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	Xe	Xf	Xe
Razorbill*	Xa	Xg	Xa	N/A	N/A	N/A	N/A	N/A	N/A	Xe	Xf	Xe
Puffin*	Xa	Xh	Xa	N/A	N/A	N/A	N/A	N/A	N/A	Xe	Xi	Xe
Great skua*	N/A	N/A	N/A	N/A	Xj	N/A	N/A	N/A	N/A	N/A	Xk	N/A
Kittiwake*	Xa	Xl	Xa	N/A	Xm	N/A	N/A	Xn	N/A	Xe	Xf	Xe

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than a single breeding adult. Such a level of impact can confidently be classified as intangible, regardless of the predicted survival rate percentage point change. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xf: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded due to the results of population viability analysis where even when considering a predicted impact of two breeding adult additional mortalities per annum, the annual reduction in the growth rate due to collision risk is predicted to be at most 0.026% against the latest colony count. Regardless of the colony's population trend, such a level of effect would almost certainly be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xi: No AEoSI in-combination. When considering the Applicant's or Guidance approach, it is clear that the loss of two to eight birds per annum would likely be intangible from the natural baseline mortality per annum. Even when considering the Guidance approach, the reduction in growth rate remains low at 0.19% at most per annum for all projects in-combination, this is considered to have a limited effect on the overall status or trajectory of the population. Subject to natural change, puffin will be maintained as a feature in the long term.

Xj: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xk: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible level of effect, that would be well within the error margins of the assessment, and therefore no potential for any contribution to an in-combination effect.

Xl: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xm: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xn: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Matrix 119: Sumburgh Head SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Sumburgh Head SPA													
EU Code:	UK9002511													
Distance to project (km):	202.4													
Assessment of AEoSI														
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A	Xe	Xe	Xe
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 120: Foula SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Foula SPA														
EU Code:	UK9002061														
Distance to project (km):	222.5														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Great skua	N/A	N/A	N/A	N/A	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xb	N/A
Puffin	Xc	Xd	Xc	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xb	Xe	Xb
Kittiwake*	Xc	Xf	Xc	N/A	Xg	N/A	N/A	Xh	N/A	N/A	N/A	N/A	Xb	Xb	Xb
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xi	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xc: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xe: No AEoSI in-combination. Even when considering the Guidance approach upper range of displacement effect (60% displacement; 3 – 5% mortality), only a single breeding adult is predicted to be subject to mortality annually, for which the majority of impact is predicted within the non-breeding season. Despite the unfavourable condition of the colony, considering the likely intangible contribution from the Proposed Development (Offshore), significant over estimation of effect and the minimal reduction in growth rate predicted, the potential for an AEoSI can be ruled out. Subject to natural change, guillemot will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 121: North Rona and Sula Sgeir SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	North Rona and Sula Sgeir SPA														
EU Code:	UK9001011														
Distance to project (km):	242.6														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A	N/A	Xe	N/A
Storm petrel	Xf	Xf	Xf	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	Xg	Xg
Kittiwake*	Xa	Xh	Xa	N/A	Xi	N/A	N/A	Xj	N/A	N/A	N/A	N/A	N/A	Xe	N/A
Puffin*	Xa	Xk	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xl	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xf: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and the Proposed Development (Offshore).

Xg: No AEoSI in-combination concluded as no storm petrel species were recorded within the full 24 months of digital aerial surveys, suggesting no potential connectivity with any storm petrel features screened in for assessment. This conclusion is then corroborated when considering the additional evidence presented regarding storm petrel distribution. It can therefore be concluded, there is no potential for the Proposed Development (Offshore) to contribute to any in-combination effect.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xj: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xk: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xl: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 122: Mousa SPA.

Name of European site	Mousa SPA					
EU Code:	UK9002361					
Distance to project (km):	220.1					
Assessment of AEoSI						
Effects	Distributional responses			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D
Storm petrel	Xa	Xa	Xa	Xa	Xb	Xa

Evidence supporting conclusions

Xa: No AEoSI alone as site specific digital aerial surveys along with evidence from existing literature suggests low connectivity and minimal to no overlap between storm petrel species distribution and the Proposed Development (Offshore).

Xb: No AEoSI in-combination concluded as no storm petrel species were recorded within the full 24 months of digital aerial surveys, suggesting no potential connectivity with any storm petrel features screened in for assessment. This conclusion is then corroborated when considering the additional evidence presented regarding storm petrel distribution. It can therefore be concluded, there is no potential for the Proposed Development (Offshore) to contribute to any in-combination effect.

Matrix 123: Forth Islands SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Forth Islands SPA											
EU Code:	UK9004171											
Distance to project (km):	244.0											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xb	N/A	N/A	Xb	N/A	Xc	✓d	Xc
Kittiwake*	Xa	Xe	Xa	N/A	Xf	N/A	N/A	Xg	N/A	Xc	Xh	Xc
Razorbill	Xa	Xi	Xa	N/A	N/A	N/A	N/A	N/A	N/A	Xc	Xh	Xc

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as for both citation and most recent count, the Applicant and Guidance Approach predicted that additional breeding adult mortalities per annum equates to a <0.02 survival rate percentage point change and would therefore be indistinguishable from natural fluctuations in the population. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

✓d: AEoSI in-combination concluded. At this current time the potential for an AEoSI cannot be ruled out for potential effects of collision risk, distributional responses and combined effects in-combination for the Proposed Development with other plans and projects given the significant impact of HPAI on the integrity of the site.

Xe: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xh: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, razorbill will be maintained as a feature in the long term.

Matrix 124: Noss SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	Noss SPA														
EU Code:	UK9002081														
Distance to project (km):	237.6														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A	N/A	Xe	N/A
Great skua	N/A	N/A	N/A	N/A	Xf	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A
Kittiwake*	Xa	Xh	Xa	N/A	Xi	N/A	N/A	Xj	N/A	N/A	N/A	N/A	N/A	Xe	N/A
Puffin*	Xa	Xk	Xa	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xl	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xg: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xj: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xk: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance Approach. Therefore, subject to natural change, puffin will be maintained as a feature in the long term.

Xl: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 125: St Abb's Head to Fast Castle SPA. "*" Identifies species which are part of an assemblage feature only.

Name of European site	St Abb's Head to Fast Castle SPA											
EU Code:	UK9004271											
Distance to project (km):	247.8											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake*	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	Xe	Xe	Xe

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Matrix 126: Ronas Hill - North Roe and Tingon SPA.

Name of European site	Ronas Hill - North Roe and Tingon SPA					
EU Code:	UK9002041					
Distance to project (km):	281.4					
Assessment of AEoSI						
Effects	Collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D
Great skua	N/A	Xa	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Matrix 127: Fetlar SPA.

Name of European site	Fetlar SPA								
EU Code:	UK9002031								
Distance to project (km):	290.5								
Assessment of AEoSI									
Effects	Collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D
Great skua	N/A	Xa	N/A	N/A	N/A	N/A	N/A	Xb	N/A
Fulmar	N/A	N/A	N/A	N/A	Xc	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xc: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 128: Hermaness, Saxa Vord and Valla Field SPA.

Name of European site	Hermaness, Saxa Vord and Valla Field SPA														
EU Code:	UK9002011														
Distance to project (km):	324.9														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A	Xe	Xg	Xe
Great skua	N/A	N/A	N/A	N/A	Xf	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A
Kittiwake	Xa	Xh	Xa	N/A	Xi	N/A	N/A	Xj	N/A	N/A	N/A	N/A	Xg	Xg	Xg
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xk	N/A	N/A	Xg	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is at most one breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI in-combination despite the effects of Highly Pathogenic Avian Influenza (HPAI) only a minimal reduction in the growth rate of at most 0.30% is predicted annually when considering the Guidance approach upper range of effect. Even when accounting for the long-term growth trend inclusive of the effect of HPAI (1999 – 2023 with a growth rate of 0.56% per annum), the colony is still predicted to maintain a positive growth trend. The potential for an AEoSI can therefore be confidently ruled out.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xg: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xh: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xi: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xj: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xk: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 129: Handa SPA.

Name of European site	Handa SPA														
EU Code:	UK9001241														
Distance to project (km):	207.5														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A	N/A	Xe	N/A
Great skua	N/A	N/A	N/A	N/A	Xf	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xe	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xg	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xf: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xg: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 130: Shiant Isles SPA.

Name of European site	Shiant Isles SPA														
EU Code:	UK9001041														
Distance to project (km):	293.5														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A	N/A	Xe	N/A
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 131: St Kilda SPA.

Name of European site	St Kilda SPA								
EU Code:	UK9001031								
Distance to project (km):	408.8								
Assessment of AEoSI									
Effects	Collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stages of Development	C	O	D	C	O	D	C	O	D
Great skua	N/A	Xa	N/A	N/A	N/A	N/A	N/A	Xb	N/A
Fulmar	N/A	N/A	N/A	N/A	Xc	N/A	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, great skua will be maintained as a feature in the long term.

Xb: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xc: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 132: Ythan Estuary SPA.

Name of European site	Ythan Estuary SPA					
EU Code:	UK9002221					
Distance to project (km):	93.1					
Assessment of AEoSI						
Effects	Distributional responses			Assessment of AEoSI (in-combination with other plans and projects)		
Stages of Development	C	O	D	C	O	D
Sandwich tern	Xa	N/A	N/A	Xb	N/A	N/A

Evidence supporting conclusions

Xa: No AEoSI alone due to lack of connectivity with the OECC determined by no individuals being recorded during intertidal surveys.

Xb: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Matrix 133: Farne Islands SPA.

Name of European site	Farne Islands SPA											
EU Code:	UK9006021											
Distance to project (km):	230.6											
Assessment of AEoSI												
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D
Kittiwake	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	Xe	Xe	Xe

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, kittiwake will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Matrix 134: Flamborough and Filey Coast SPA.

Name of European site	Flamborough and Filey Coast SPA														
EU Code:	UK9006101														
Distance to project (km):	459.2														
Assessment of AEoSI															
Effects	Distributional responses			Collision risk			Combined distributional response and collision risk			Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D	C	O	D	C	O	D
Gannet	Xa	Xb	Xa	N/A	Xc	N/A	N/A	Xd	N/A	N/A	N/A	N/A	Xe	Xe	Xe
Fulmar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Xf	N/A	N/A	Xe	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded for the construction/ decommissioning phase based on the operation and maintenance phase of the Proposed Development (Offshore) conclusion. Since the equivalent impacts during the construction phase are predicted to be of a considerably smaller duration, spatial scale and magnitude, as well as being fully reversible, the same conclusion can confidently be made for construction and decommissioning for all sites and receptors.

Xb: No AEoSI alone concluded as the level of predicted annual additional mortality due to distributional response is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xc: No AEoSI alone concluded as the level of predicted annual additional mortality due to collision risk is less than a single breeding adult. Additionally, the survival rate percentage point changes does not exceed an increase of 0.02% annually when considering both the Applicant and Guidance approach. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xd: No AEoSI alone concluded as the level of predicted annual additional mortality due to combined distributional responses and collision risk is less than one breeding adult when considering the Applicant or the Guidance approach respectively. Additionally, the survival rate percentage point changes do not exceed an increase of 0.02% annually. Therefore, subject to natural change, gannet will be maintained as a feature in the long term.

Xe: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

Xf: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Matrix 135: Coquet Island SPA.

Name of European site	Coquet Island SPA					
EU Code:	UK9006031					
Distance to project (km):	310.8					
Assessment of AEoSI						
Effects	Barrier effect			Assessment of AEoSI (in-combination with other plans and projects)		
Stages of Development	C	O	D	C	O	D
Fulmar	N/A	Xa	N/a	N/A	Xb	N/A

Evidence supporting conclusions

Xa: No AEoSI alone concluded as fulmar are considered to have a very low sensitivity to displacement when considering the species extensive foraging ranges and versatile foraging behaviour.

Xb: No AEoSI in-combination concluded as the assessment alone concluded potential for an intangible effect only, which would not materially contribute to any in-combination effect, especially considering the level of precaution applied within assessments and low connectivity with the site feature.

2.3.3 Migratory Fish

Matrix 136: River Spey SAC.

Name of European site	River Spey SAC								
EU Code:	UK0019811								
Distance to project (km):	27.0								
Assessment of AEoSI									
Effects	Underwater noise			Electromagnetic frequencies (EMF)			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D
Atlantic salmon	Xa	N/A	Xa	N/A	Xb	N/A	Xc	Xd	Xc
Sea lamprey	Xa	N/A	Xa	N/A	Xb	N/A	Xc	Xd	Xc
Freshwater pearl mussel	Xe	N/A	Xe	N/A	Xe	N/A	Xe	Xe	Xe

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the transient nature and low sensitivity of Atlantic salmon and sea lamprey, and the localised impact ranges from underwater noise compared to the distance to the site (58.9km to the Array).

Xb: No AEoSI alone concluded due to the highly mobile and transient nature of Atlantic salmon and sea lamprey, and the comparatively localised impact ranges from EMF effects (<10m) compared to the available habitat and the distance to the site (27.0km to the OECC).

Xc: No AEoSI in-combination concluded given the spatial extent considered for the identified effects and the ranges between the designated sites and the projects considered in-combination.

Xd: No AEoSI in-combination concluded when factoring in the lack of potential adverse effects from the proposed development alone, and the highly localised nature of the impact for projects considered in-combination.

Xe: No AEoSI alone concluded given that no AEoSI is concluded for Atlantic salmon where the freshwater pearl mussel resides within the gills.

Matrix 137: River Thurso SAC.

Name of European site	River Thurso SAC								
EU Code:	UK0030264								
Distance to project (km):	69.8								
Assessment of AEoSI									
Effects	Underwater noise			Electromagnetic frequencies (EMF)			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D
Atlantic salmon	Xa	N/A	Xa	N/A	Xb	N/A	Xc	Xd	Xc

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the transient nature and low sensitivity of Atlantic salmon, and the localised impact ranges from underwater noise compared to the distance to the site (69.8km to the Array).

Xb: No AEoSI alone concluded due to the highly mobile and transient nature of Atlantic salmon, the comparatively localised impact ranges from EMF effects (<10m) compared to the available habitat and the distance to the site (98.7km to the OECC).

Xc: No AEoSI in-combination concluded given the spatial extent considered for the identified effects and the ranges between the designated sites and the projects considered in-combination.

Xd: No AEoSI in-combination concluded when factoring in the lack of potential adverse effects from the proposed development alone, and the highly localised nature of the impact for projects considered in-combination.

Matrix 138: Berriedale and Langwell Waters SAC.

Name of European site	Berriedale and Langwell Waters SAC								
EU Code:	UK0030088								
Distance to project (km):	49.3								
Assessment of AEoSI									
Effects	Underwater noise			Electromagnetic frequencies (EMF)			Assessment of AEoSI (in-combination with other plans and projects)		
Stage of development	C	O	D	C	O	D	C	O	D
Atlantic salmon	Xa	N/A	Xa	N/A	Xb	N/A	Xc	Xd	Xc

Evidence supporting conclusions

Xa: No AEoSI alone concluded due to the transient nature and low sensitivity of Atlantic salmon, and the localised impact ranges from underwater noise compared to the distance to the site (49.3km to the Array).

Xb: No AEoSI alone concluded due to the highly mobile and transient nature of Atlantic salmon, the comparatively localised impact ranges from EMF effects (<10m) compared to the available habitat and the distance to the site (56.9km to the OECC).

Xc: No AEoSI in-combination concluded given the spatial extent considered for the identified effects and the ranges between the designated sites and the projects considered in-combination.

Xd: No AEoSI in-combination concluded when factoring in the lack of potential adverse effects from the proposed development alone, and the highly localised nature of the impact for projects considered in-combination.

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