# Salamander Offshore Wind Farm

## Offshore EIA Report

## Volume ER.A.3, Chapter 23: Summary of Impacts and Mitigations

SALAMANDER

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# Glossary

| Key Terms | Definition |
|---|---|
| Cumulative effects | The combined effect of the Salamander Project with the effects from a number of different projects, on the same single receptor/resource. |
| Cumulative impact | Impacts that result from changes caused by other past, present or reasonably foreseeable actions together with the Salamander Project. |
| Effect | Term used to express the consequence of an impact. The significance of an effect is determined by correlating the magnitude of the impact with the importance, or sensitivity, of the receptor or resource in accordance with defined significance criteria. |
| Environmental Impact Assessment (EIA) | A statutory process by which the likely significant effects of certain projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the Environmental Impact Assessment (Scotland) Regulations (2017), including the publication of an Environmental Impact Assessment Report (EIAR). |
| Environmental Impact Assessment Report (EIAR) | A document reporting the findings of the EIA and produced in accordance with the EIA Regulations. |
| Export Cable Corridor (ECC) | The specific corridor of seabed (seaward of Mean High Water Springs (MHWS)) and land (landward of MHWS) from the Offshore Array Area (OAA) to the Onshore Substation, within which the export cables will be located. |
| Impact | An impact is considered to be the change to the baseline as a result of an activity or event related to the Salamander Project. Impacts can be both adverse or beneficial impacts on the environment and be either temporary or permanent. |
| Inter-Related Effect (or Inter-Relationships) | The likely effects of multiple impacts from the proposed development on one receptor. For example, noise and air quality together could have a greater effect on a residential receptor than each impact considered separately. |
| Offshore Array Area | The offshore area within which the wind turbine generators, foundations, mooring lines and anchors, and inter-array cables and associated infrastructure will be located. |
| Offshore Development | The entire Offshore Development, including all offshore components of the Project (WTGs, Inter-array and Offshore Export Cable(s), floating substructures, mooring lines and anchors, and all other associated offshore infrastructure) required across all Project phases from development to decommissioning, for which the Applicant is seeking consent. |
| Offshore Development Area | The total area comprising the Offshore Array Area and the Offshore Export Cable Corridor. |
| Offshore Export Cable Corridor | The area that will contain the Offshore Export Cable(s) between the boundary of the Offshore Array Area and MHWS. |

| Key Terms | Definition |
|---|---|
| Onshore Development | The entire Onshore Development, including Construction Compounds at the Landfall, temporary working areas, Onshore Export Cables, Transition Joint Bay, Joint Bays, Onshore Substation and Energy Balancing Infrastructure, Construction Compounds, any associated landscaping (if required) and access (and all other associated infrastructure) across all Project phases from development to decommissioning, for which the Applicant is seeking consent. |
| Onshore Development Area | The total area comprising the Landfall, Onshore Export Cable Corridor, and Onshore Substation, EBI and associated infrastructure. |
| Onshore Substation | Comprises a compound containing the electrical components for transforming the power supplied from the Salamander Project to 132 kV and to adjust the power quality and power factor, as required to meet the UK Grid Code for supply to the National Grid. The onshore substation is also the compound in which EBI and associated infrastructure will be co-located. |
| Receptor (Onshore) | Any physical, biological or anthropogenic element of the environment that may be affected or impacted by the Salamander Project. Receptors can include natural features such as rivers, forests and wildlife habitats as well as man-made features like residential areas, schools and cultural heritage sites. |
| Receptor (Offshore) | Any physical, biological or anthropogenic element of the environment that may be affected or impacted by the Salamander Project. Receptors can include natural features such as the seabed and wildlife habitats as well as man-made features like fishing vessels and cultural heritage sites. |
| Salamander Project | The proposed Salamander Offshore Wind Farm. The term covers all elements of both the offshore and onshore aspects of the project. |

# Acronyms

| Term | Definition |
|---|---|
| EBI | Energy Balancing Infrastructure |
| ECC | Export Cable Corridor |
| EIA | Environmental Impact Assessment |
| OAA | Offshore Array Area |
| WTG | Wind Turbine Generator |

# 23 Summary of Impacts and Mitigations

## 23.1 Introduction

23.1.1.1 This chapter of the Offshore Environmental Impact Assessment Report (EIAR) provides a summary of the potential impacts assessed and conclusions of the EIA undertaken for the Salamander Project Offshore Development. **Table 23-1** to **Table 23-15** summarise the Impacts for the Offshore Development considered in isolation and cumulatively with other relevant projects. A cumulative assessment with the Onshore Development is summarised in **Section 23.3**.

23.1.1.2 The significance of an effect has been determined within each impact assessment chapter by correlating the magnitude of the impact and the sensitivity of the receptor whilst also utilising professional judgement and industry best practice guidance. A matrix approach has been used throughout with details presented in **Volume ER.A.2, Chapter 6: EIA Methodology**.

23.1.1.3 For the purposes of this EIA, where effects are identified as **Minor** or **Negligible** they are deemed to be **Not Significant** in EIA terms. **Major** and **Moderate** effects are deemed to be **Significant** in EIA terms and additional mitigation may be required. Where further mitigation is not feasible, a residual significant effect may remain. Unless otherwise described as beneficial or negligible, all effects reported on within this EIAR are adverse.

23.1.1.4 The potential impacts from the Offshore Development have been assessed using the worst-case parameters established within the Project Design Envelope, with the relevant worst-case parameters for each receptor presented within each receptor topic chapter. Embedded mitigation measures (i.e. those built into the Salamander Project concept, either through design (primary mitigation) or implementation of industry best practice (tertiary mitigation)) that will reduce the potential impacts on specific receptors have also been taken into account during the assessments and are presented in each chapter (**Volume ER.A.3, Chapters 7 to 21**); these are also summarised within this Chapter.

23.1.1.5 The structure of summary of impacts and mitigation tables shown in **Section 23.2** differ based on the topic, therefore, in some cases the cumulative assessment is presented at the end of each table. Additionally, where an '*' is included within **Table 23-3** and **Table 23-4**, this indicates that the assessment of cumulative significance has been based on expert judgement as to the cumulative receptor sensitivity and cumulative magnitude.

23.1.1.6 Based on the conclusions of the EIA, the Offshore Development is not expected to result in significant effects for the majority of environmental receptors assessed and where significant effects have been identified to potentially occur, additional mitigation measures are proposed to reduce effects to non-significant levels.

## 23.2 Summary of the Offshore Development considered in isolation and cumulatively with other relevant projects

### 23.2.1 Marine Physical Processes

**Table 23-1 Summary of Marine Physical Processes Impacts and Mitigation**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Marine Physical Processes** | | | | | | | | | | | | | | | |
| *Construction* | | | | | | | | | | | | | | | |
| Potential increases in SSC and associated changes to seabed substrate | Offshore Array Area (OAA) and Offshore Export Cable Corridor (ECC) | N/A | N/A | N/A | N/A | Potential pathway of effect for other topics:<br>• **Volume ER.A.3, Chapter 8: Water and Sediment Quality;**<br>• **Volume ER.A.3, Chapter 9: Benthic and Intertidal Ecology;**<br>• **Volume ER.A.3, Chapter 10: Fish and Shellfish Ecology;**<br>• **Volume ER.A.3, Chapter 13: Commercial Fisheries;**<br>• **Volume ER.A.3, Chapter 17: Marine Archaeology and Cultural Heritage; and**<br>• **Volume ER.A.3, Chapter 18: Other Users of the Marine Environment.** | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 7: Marine Physical Processes** | [Potential pathway of effect for other topics] | N/A | Potential for cumulative interaction is very low, therefore not considered further. | | | | |
| Potential changes to sediment transport system by changes in wave and current climate | OAA and Offshore ECC | N/A | N/A | N/A | N/A | | | [Potential pathway of effect for other topics] | N/A | Potential for cumulative interaction is very low, therefore not considered further. | | | | |
| Potential changes to the morphology of the seabed (including scour) | OAA and Offshore ECC | Co2<br>Co14<br>Co9<br>Co52<br>Co30 | Designated areas of seabed | High | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 7: Marine Physical Processes** as it was concluded that the effect was Not Significant. | Negligible | Not Significant | Potential for cumulative interaction is limited, therefore not considered further. | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Potential changes in morphology of the coast | OAA and Offshore ECC | Co2<br>Co14<br>Co9<br>Co30 | The coast | Medium | Low | Minor | | Minor | Not Significant | Potential for cumulative interaction is limited, therefore not considered further. | | | | | |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |
| Potential changes to sediment transport system by changes in wave and current climate | OAA and Offshore ECC | N/A | N/A | N/A | N/A | Potential pathway of effect for other topics:<br>• **Volume ER.A.3, Chapter 8: Water and Sediment Quality;**<br>• **Volume ER.A.3, Chapter 9: Benthic and Intertidal Ecology;**<br>• **Volume ER.A.3, Chapter 10: Fish and Shellfish Ecology;**<br>• **Volume ER.A.3, Chapter 13: Commercial Fisheries;**<br>• **Volume ER.A.3, Chapter 17: Marine Archaeology and Cultural Heritage; and**<br>• **Volume ER.A.3, Chapter 18: Other Users of the Marine Environment.** | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 7: Marine Physical Processes** | [Potential pathway of effect for other topics] | N/A | Potential for cumulative interaction is very low, therefore not considered further. | | | | | |
| Potential changes to the morphology of the seabed (including scour) | OAA and Offshore ECC | Co1<br>Co52 | Designated areas of seabed | High | Negligible | Negligible | | Negligible | Not Significant | Potential for cumulative interaction is limited, therefore not considered further. | | | | | |
| Potential changes in morphology of the coast | OAA and Offshore ECC | N/A | The coast | Medium | Low | Minor | | Minor | Not Significant | Potential for cumulative interaction is limited, therefore not considered further. | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Potential changes to water column processes (mixing and stratification) | OAA and Offshore ECC | N/A | Water column stratification / the Buchan Front | Medium | Negligible | Negligible<br><br>Potential pathway of effect for other topics:<br>• **Volume ER.A.3, Chapter 8: Water and Sediment Quality;**<br>• **Volume ER.A.3, Chapter 9: Benthic and Intertidal Ecology;**<br>• **Volume ER.A.3, Chapter 10: Fish and Shellfish Ecology;**<br>• **Volume ER.A.3, Chapter 13: Commercial Fisheries;**<br>• **Volume ER.A.3, Chapter 17: Marine Archaeology and Cultural Heritage; and**<br>• **Volume ER.A.3, Chapter 18: Other Users of the Marine Environment.** | | Negligible | Not Significant | Medium | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 7: Marine Physical Processes** | Negligible | Not Significant |
| *Decommissioning* | | | | | | | | | | | | | | | |
| Potential increases in SSC and associated changes to seabed substrate | OAA and Offshore ECC | N/A | N/A | N/A | N/A | Potential pathway of effect for other topics:<br>• **Volume ER.A.3, Chapter 8: Water and Sediment Quality;**<br>• **Volume ER.A.3, Chapter 9: Benthic and Intertidal Ecology;**<br>• **Volume ER.A.3, Chapter 10: Fish and Shellfish Ecology;**<br>• **Volume ER.A.3, Chapter 13: Commercial Fisheries;**<br>• **Volume ER.A.3, Chapter 17: Marine Archaeology** | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 7: Marine Physical Processes** | [Potential pathway of effect for other topics] | N/A | Potential for cumulative interaction is very low, therefore not considered further. | | | | | |
| Potential changes to sediment transport system by changes in wave and current climate | OAA and Offshore ECC | N/A | N/A | N/A | N/A | | | [Potential pathway of effect for other topics] | N/A | Potential for cumulative interaction is very low, therefore not considered further. | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | | | | **and Cultural Heritage; and**<br>• **Volume ER.A.3, Chapter 18: Other Users of the Marine Environment.** | | | | | | | | | |

### 23.2.2 Water and Sediment Quality

**Table 23-2 Summary of Water and Sediment Quality Impacts and Mitigation**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Water and Sediment Quality** | | | | | | | | | | | | | | | |
| *Construction* | | | | | | | | | | | | | | | |
| Remobilisation of sediments causing increased suspended solids concentration in the water column leading to deterioration of water quality | OAA and Offshore ECC | Co4<br>Co5<br>Co6<br>Co9 | Sediment quality | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 8: Water and Sediment Quality** as it was concluded that the effect was Not Significant | Minor | Not Significant | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 8: Water and Sediment Quality** as it was concluded that the effect was Not Significant | Minor | Not Significant |
| | | | Water quality | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| | | | Water quality within designated WFD water bodies | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| Remobilisation of sediments and use of drilling muds causing potential resuspension of contaminated sediments into the water column leading to deterioration of water and sediment quality | OAA and Offshore ECC | Co4<br>Co5<br>Co6<br>Co9 | Sediment quality | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible to Medium | Low | Minor | | Minor | Not Significant |
| | | | Water quality | Medium | Low | Minor | | Minor | Not Significant | Negligible to Medium | Low | Minor | | Minor | Not Significant |
| | | | Water quality within designated WFD water bodies | Medium | Low | Minor | | Minor | Not Significant | Negligible to Medium | Low | Minor | | Minor | Not Significant |
| Accidental release of pollutants and sewage waste into the water column from vessels and helicopters during transit and construction operations | OAA and Offshore ECC | Co3<br>Co7<br>Co9 | Sediment quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality within designated WFD water bodies | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| Accidental release of litter and debris into the water column from vessels and | | Co3 | Sediment quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| helicopters during transit and construction operations | OAA and Offshore ECC | Co7<br>Co9 | Water quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality within designated WFD water bodies | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |
| Remobilisation of sediments causing increased suspended solids concentration in the water column leading to deterioration of water quality | OAA and Offshore ECC | Co10 | Sediment quality | Low | Low | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 8: Water and Sediment Quality** as it was concluded that the effect was Not Significant | Negligible | Not Significant | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 8: Water and Sediment Quality** as it was concluded that the effect was Not Significant | Minor | Not Significant |
| | | | Water quality | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| | | | Water quality within designated WFD water bodies | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| Accidental release of pollutants and sewage waste into the water column from vessels and helicopters during transit, operations and maintenance | OAA and Offshore ECC | Co3<br>Co7<br>Co10 | Sediment quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality within designated WFD water bodies | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| Accidental release of litter and debris into the water column from vessels and helicopters during transit and construction operations | OAA and Offshore ECC | Co3<br>Co7<br>Co10 | Sediment quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality within designated WFD water bodies | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Removal of biofouling from the subsea structures and leaching of antifouling, anticorrosive agents from coated infrastructure leading to water and sediment quality deterioration | OAA and Offshore ECC | Co10 | Sediment quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality within designated WFD water bodies | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| *Decommissioning* | | | | | | | | | | | | | | | |
| Remobilisation of sediments causing increased suspended solids concentration in the water column leading to deterioration of water quality | OAA and Offshore ECC | Co3<br>Co7<br>Co10 | Sediment quality | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed, as it was concluded that the effect was Not Significant | Minor | Not Significant | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 8: Water and Sediment Quality** as it was concluded that the effect was Not Significant | Minor | Not Significant |
| | | | Water quality | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| | | | Water quality within designated WFD water bodies | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| Remobilisation of sediments causing potential resuspension of contaminated sediments into the water column leading to deterioration of water and sediment quality | OAA and Offshore ECC | Co3<br>Co7<br>Co10 | Sediment quality | Negligible | Low | Negligible | | Negligible | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| | | | Water quality | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| | | | Water quality within designated WFD water bodies | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| Accidental release of pollutants and sewage waste and into the water column from vessels and helicopters during transit and decommissioning operations | OAA and Offshore ECC | Co3<br>Co7 | Sediment quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | Water quality within designated WFD water bodies | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| Accidental release of litter and debris into the water column from vessels and helicopters during transit and decommissioning operations | OAA and Offshore ECC | Co3<br>Co7 | Sediment quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |
| | | | Water quality within designated WFD water bodies | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |

### 23.2.3 Benthic and Intertidal Ecology

**Table 23-3 Summary of Benthic and Intertidal Ecology Impacts and Mitigation**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Benthic and Intertidal Ecology** | | | | | | | | | | | | | | | |
| *Construction* | | | | | | | | | | | | | | | |
| Temporary habitat loss | OAA and Offshore ECC | Co14<br>Co12 | VER B Infralittoral Rock (Scenario 1)<br>VER C Circalittoral Rock (Scenario 1)<br>VER D Sabellaria on Atlantic Rock (Scenario 1)<br>VER G Sublittoral coarse sediment (Scenario 1)<br>Ocean quahog | Medium – High | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 9: Benthic and Intertidal Ecology** it was concluded that the effect was Not Significant | Negligible | Not Significant | * | * | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 9: Benthic and Intertidal Ecology** as it was concluded that the effect was Not Significant | Minor | Not Significant |
| | OAA and Offshore ECC | Co14<br>Co12 | VER B Infralittoral Rock (Scenario 2)<br>VER C Circalittoral Rock (Scenario 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 2)<br>VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER G Sublittoral coarse sediment (Scenario 2)<br>VER H Littoral sand<br>VER I Sublittoral Sand<br>VER J Circalittoral Mud | Medium – High | Low | Minor | | Minor | Not Significant | Medium – High | Low | Minor | | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Increase SSC and associated deposition | OAA and Offshore ECC | Co48<br>Co9 | VER B Infralittoral Rock (Scenario 1)<br>VER E Circalittoral Mixed Sediment<br>VER G Sublittoral Coarse Sediment (Scenario 1 & 2)<br>VER H Littoral Sand<br>VER K Ocean quahog | Low – High | Negligible – Low | Negligible | | Negligible | Not Significant | * | * | Minor | | Minor | Not Significant |
| | OAA and Offshore ECC | Co48<br>Co9 | VER A Littoral Rock<br>VER B Infralittoral Rock (Scenario 2)<br>VER C Circalittoral Rock (Scenario 1 & 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 1 & 2)<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER I Sublittoral Sand<br>VER J Circalittoral Mud | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| Increased risk and introduction and spread of INNS | OAA and Offshore ECC | Co9<br>Co44 | VER B Infralittoral Rock (Scenario 1)<br>VER C Circalittoral Rock (Scenario 1)<br>VER D Sabellaria on Atlantic Rock (Scenario 1)<br>VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER G Sublittoral Coarse Sediment | Low – High | Negligible – Low | Negligible | | Negligible | Not Significant | * | * | Minor | | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | (Scenario 1)<br>VER H Littoral Sand<br>VER I Sublittoral Sand<br>VER J Circalittoral Mud<br>VER K Ocean quahog | | | | | | | | | | | | |
| | OAA and Offshore ECC | Co9<br><br>Co44 | VER B Infralittoral Rock (Scenario 2)<br>VER C Circalittoral Rock (Scenario 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 2)<br>VER G Sublittoral Coarse Sediment (Scenario 2) | Medium – High | Low | Minor | | Minor | Not Significant | Medium – High | Low | Minor | | Minor | Not Significant |
| Disturbance of contaminated sediments | OAA and Offshore ECC | Co9<br><br>Co48 | VER A Littoral Rock<br>VER B Infralittoral Rock (Scenario 1 & 2)<br>VER C Circalittoral Rock (Scenario 1 & 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 1 & 2)<br>VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER G Sublittoral Coarse Sediment (Scenario 1 & 2)<br>VER H Littoral Sand | Low – Medium | Negligible – Low | Negligible | | Negligible | Not Significant | * | * | Minor | | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | OAA and Offshore ECC | Co9<br><br>Co48 | VER I Sublittoral Sand<br>VER J Circalittoral Mud<br>VER K Ocean quahog | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |
| Long-term loss to benthic habitats and species | OAA and Offshore ECC | Co14<br><br>Co12 | VER B Infralittoral Rock (Scenario 1 & 2)<br>VER C Circalittoral Rock (Scenario 1 & 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 1 & 2)<br>VER G Sublittoral Coarse Sediment (Scenario 1)<br>VER K Ocean quahog | Low – High | Negligible – Low | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 9: Benthic and Intertidal Ecology** as it was concluded that the effect was Not Significant | Negligible | Not Significant | * | * | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 9: Benthic and Intertidal Ecology** as it was concluded that the effect was Not Significant | Minor | Not Significant |
| | OAA and Offshore ECC | Co14<br><br>Co12 | VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER G Sublittoral Coarse Sediment (Scenario 2)<br>VER I Sublittoral Sand<br>VER J Circalittoral Mud | High | Low | Minor | | Minor | Not Significant | High | Low | Minor | | Minor | Not Significant |
| Temporary habitat loss or disturbance | OAA and Offshore ECC | Co14<br><br>Co12<br><br>Co10 | VER B Infralittoral Rock (Scenario 1)<br>VER C Circalittoral Rock (Scenario 1)<br>VER D Sabellaria on | Medium – High | Negligible | Negligible | | Negligible | Not Significant | * | * | Minor | | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | Atlantic Rock (Scenario 1)<br>VER G Sublittoral Coarse Sediment (Scenario 1)<br>VER K Ocean quahog | | | | | | | | | | | | |
| | OAA and Offshore ECC | Co14<br>Co12<br>Co10 | VER B Infralittoral Rock (Scenario 2)<br>VER C Circalittoral Rock (Scenario 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 2)<br>VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER G Sublittoral Coarse Sediment (Scenario 2)<br>VER H Littoral Sand<br>VER I Sublittoral Sand<br>VER J Circalittoral Mud | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| Increased risk and introduction and spread of INNS | OAA and Offshore ECC | Co10<br>Co13<br>Co44 | VER B Infralittoral Rock (Scenario 1)<br>VER C Circalittoral Rock (Scenario 1)<br>VER D Sabellaria on Atlantic Rock (Scenario 1)<br>VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER G Sublittoral | Low – High | Negligible – Low | Negligible | | Negligible | Not Significant | * | * | Minor | | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | Coarse Sediment (Scenario 1)<br>VER H Littoral Sand<br>VER I Sublittoral Sand<br>VER J Circalittoral Mud<br>VER K Ocean quahog | | | | | | | | | | | | |
| | OAA and Offshore ECC | Co10<br>Co13<br>Co44 | VER B Infralittoral Rock (Scenario 2)<br>VER C Circalittoral Rock (Scenario 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 2)<br>VER G Sublittoral Coarse Sediment (Scenario 2) | Medium – High | Low | Minor | | Minor | Not Significant | Medium – High | Low | Minor | | Minor | Not Significant |
| Impact of habitats or species as a result of pollution or accidental discharge | OAA and Offshore ECC | Co10<br>Co7 | VER A Littoral Rock<br>VER B Infralittoral Rock (Scenario 1 & 2)<br>VER C Circalittoral Rock (Scenario 1 & 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 1 &2)<br>VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER G Sublittoral Coarse Sediment (Scenario 1 & 2)<br>VER H Littoral Sand<br>VER I Sublittoral Sand | Low – Medium | Negligible | Negligible | | Negligible | Not Significant | * | * | Minor | | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | VER J Circalittoral Mud<br>VER K Ocean quahog | | | | | | | | | | | | |
| Impact of habitats or species as a result of pollution or accidental discharge | OAA and Offshore ECC | Co10<br><br>Co7 | VER A Littoral Rock<br>VER B Infralittoral Rock (Scenario 1 & 2)<br>VER C Circalittoral Rock (Scenario 1 & 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 1 &2)<br>VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER G Sublittoral Coarse Sediment (Scenario 1 & 2)<br>VER H Littoral Sand<br>VER I Sublittoral Sand<br>VER J Circalittoral Mud<br>VER K Ocean quahog | Low – Medium | Negligible | Negligible | | Negligible | Not Significant | * | * | Minor | | Minor | Not Significant |
| Hydrodynamic changes leading to scour around subsea infrastructure | OAA and Offshore ECC | N/A | VER B Infralittoral Rock (Scenario 1)<br>VER C Circalittoral Rock (Scenario 1)<br>VER D Sabellaria on Atlantic Rock (Scenario 1)<br>VER G Sublittoral Coarse Sediment (Scenario 1) | Medium – High | Negligible | Negligible | | Negligible | Not Significant | * | * | Minor | | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | VER K Ocean quahog | | | | | | | | | | | | |
| | OAA and Offshore ECC | N/A | VER B Infralittoral Rock (Scenario 2)<br>VER C Circalittoral Rock (Scenario 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 2)<br>VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 and 2)<br>VER G Sublittoral Coarse Sediment (Scenario 2)<br>VER I Sublittoral Sand<br>VER J Circalittoral Mud | Medium – High | Low | Minor | | Minor | Not Significant | Medium – High | Low | Minor | | Minor | Not Significant |
| Colonisation of hard structures | OAA and Offshore ECC | N/A | VER A Littoral Rock<br>VER B Infralittoral Rock (Scenario 1 & 2)<br>VER C Circalittoral Rock (Scenario 1 & 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 1 &2)<br>VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER G Sublittoral Coarse Sediment (Scenario 1 & 2)<br>VER H Littoral Sand | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | VER I Sublittoral Sand<br>VER J Circalittoral Mud<br>VER K Ocean quahog | | | | | | | | | | | | |
| Impact of cable thermal load or EMF on benthic ecology | OAA and Offshore ECC | N/A | VER A Littoral Rock<br>VER B Infralittoral Rock (Scenario 1 & 2)<br>VER C Circalittoral Rock (Scenario 1 & 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 1 &2)<br>VER G Sublittoral Coarse Sediment (Scenario 1)<br>VER K Ocean quahog | Low – Medium | Negligible – Low | Negligible | | Negligible | Not Significant | * | * | Minor | | Minor | Not Significant |
| | OAA and Offshore ECC | N/A | VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER G Sublittoral Coarse Sediment (Scenario 2)<br>VER H Littoral Sand<br>VER I Sublittoral Sand<br>VER J Circalittoral Mud | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| *Decommissioning* | | | | | | | | | | | | | | | |
| Removal of Artificial Hard Substrate | OAA and Offshore ECC | Co28 | VER B Infralittoral Rock (Scenario 1 & 2) | Medium – High | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3,** | Minor | Not Significant | Medium – High | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume** | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | VER C Circalittoral Rock (Scenario 1 & 2)<br>VER D Sabellaria on Atlantic Rock (Scenario 1 &2)<br>VER E Circalittoral Mixed Sediment<br>VER F Sabellaria on Mixed Sediment (Scenario 1 & 2)<br>VER G Sublittoral Coarse Sediment (Scenario 1 & 2)<br>VER H Littoral Sand<br>VER I Sublittoral Sand<br>VER J Circalittoral Mud<br>VER K Ocean quahog | | | | **Chapter 9: Benthic and Intertidal Ecology**. as it was concluded that the effect was Not Significant | | | | | | **ER.A.3, Chapter 9: Benthic and Intertidal Ecology** . as it was concluded that the effect was Not Significant | | |

### 23.2.4 Fish and Shellfish Ecology

**Table 23-4 Summary of Fish and Shellfish Ecology Impacts and Mitigation**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Fish and Shellfish Ecology** | | | | | | | | | | | | | | | |
| *Construction / Decommissioning* | | | | | | | | | | | | | | | |
| Damage or disturbance to sensitive species due to underwater noise generated from construction activities<br><br>(Separate magnitude and significance scores are provided for UXO, impact piling, and other noise-producing activities) | OAA and Offshore ECC | Co14<br><br>Co15 | Fish with a swim bladder-inner ear connection used in hearing | Medium | Low (Impact Piling)<br><br>Negligible (UXO and Other Noise-Producing Activities) | Minor (Impact Piling) | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 10: Fish and Shellfish Ecology** as it was concluded that the effect was Not Significant | Minor (Impact Piling) | Not Significant | * | * | Moderate | Co58 | Minor | Not Significant |
| | | | | | | Negligible (UXO and Other Noise-Producing Activities) | | Negligible (UXO and Other Noise-Producing Activities) | | | | Moderate | | Minor | Not Significant |
| | | | Fish with a swim bladder not used in hearing | Low | | Negligible | | Negligible | Not Significant | No potential Significant Cumulative Impacts. | | | | | |
| | | | Fish without a swim bladder | | | | | | | | | | | | |
| | | | Eggs and larvae | | | | | | | | | | | | |
| | | | Shellfish | | | | | | | | | | | | |
| Temporary habitat loss or disturbance during the installation of all infrastructure and placement of vessel anchors on the seabed | OAA and Offshore ECC | Co9<br><br>Co14 | Elasmobranchs | Low | Low | Negligible | | Negligible | Not Significant | No potential Significant Cumulative Impacts. | | | | | |
| | | | Demersal Fish | Low | | | | | | | | | | | |
| | | | Sandeel | Medium | | Minor | | Minor | Not Significant | | | | | | |
| | | | Pelagic Fish | Negligible | | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Atlantic herring | Medium | | Minor | | Minor | Not Significant | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | Diadromous Fish | Negligible | | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Shellfish | Low | | | | | | | | | | | |
| Temporary increases in suspended sediment concentrations and potential sedimentation/ smothering of fish and shellfish | OAA and Offshore ECC | Co14 | Elasmobranchs | Negligible | Low | Negligible | | Negligible | Not Significant | * | * | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 10: Fish and Shellfish Ecology** as it was concluded that the effect was Not Significant | Minor | Not Significant |
| | | | Demersal Fish | Medium | | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| | | | Pelagic Fish | | | | | | | | | Minor | | Minor | Not Significant |
| | | | Diadromous Fish | Negligible | | Negligible | | Negligible | Not Significant | * | * | Minor | | Minor | Not Significant |
| | | | Shellfish | Medium | | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |
| Disturbance or damage to sensitive species due to underwater noise generated from operation and maintenance activities | OAA and Offshore ECC | N/A | Fish with a swim bladder-inner ear connection used in hearing | Medium | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 10: Fish and Shellfish Ecology** as it was concluded that the effect was Not Significant | Negligible | Not Significant | Medium | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 10: Fish and Shellfish Ecology** as it was concluded that the effect was Not Significant | Negligible | Not Significant |
| | | | Fish with a swim bladder not used in hearing | Low | | | | | | Low | | | | | |
| | | | Fish without a swim bladder | | | | | | | | | | | | |
| | | | Eggs and larvae | | | | | | | | | | | | |
| | | | Shellfish | | | | | | | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Habitat loss due to the presence of infrastructure on the seabed and associated scour protection | OAA and Offshore ECC | Co14 | Elasmobranchs | Low | Low | Negligible | | Negligible | Not Significant | No potential Significant Cumulative Impacts. | | | | | |
| | | | Demersal Fish | | | | | | | | | | | | |
| | | | Sandeel | Medium | | Minor | | Minor | Not Significant | | | | | | |
| | | | Pelagic Fish | Low | | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Atlantic herring | Medium | | Minor | | Minor | Not Significant | | | | | | |
| | | | Diadromous Fish | Low | | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Shellfish | | | | | | | | | | | | |
| Effects of thermal load and EMFs from subsea and dynamic cables on sensitive species | OAA and Offshore ECC | No further mitigation is proposed to reduce the effects of EMF. However, it is noted that cable route selection and burial is expected to have a beneficial secondary effect by reducing the volume of water or the likelihood of sensitive species from being exposed to EMF. | Elasmobranchs | Low | Low | Negligible | | Negligible | Not Significant | No potential Significant Cumulative Impacts. | | | | | |
| | | | Demersal Fish | Negligible | | | | | | | | | | | |
| | | | Pelagic Fish | | | | | | | | | | | | |
| | | | Diadromous Fish | | | | | | | | | | | | |
| | | | Shellfish | | | | | | | | | | | | |
| Fish aggregation around the floating substructures and associated infrastructure | OAA | N/A | Elasmobranchs | Negligible | Negligible | Negligible | | Negligible | Not Significant | No potential Significant Cumulative Impacts. | | | | | |
| | | | Demersal Fish | Low | | | | | | | | | | | |
| | | | Pelagic Fish | | | | | | | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | Diadromous Fish | | | | | | | | | | | | |
| | | | Shellfish | | | | | | | | | | | | |
| Ghost fishing due to lost fishing gear becoming entangled in installed infrastructure | OAA | Co10 | Elasmobranchs | Medium | Negligible | Negligible | | Negligible | Not Significant | * | * | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 10: Fish and Shellfish Ecology** as it was concluded that the effect was Not Significant | Minor | Not Significant |
| | | | Demersal Fish | | | | | | | * | * | Minor | | Minor | Not Significant |
| | | | Pelagic Fish | | | | | | | * | * | Minor | | Minor | Not Significant |
| | | | Diadromous Fish | | | | | | | * | * | Minor | | Minor | Not Significant |
| | | | Shellfish | | | | | | | * | * | Minor | | Minor | Not Significant |

### 23.2.5 Marine Mammals

**Table 23-5 Summary of Marine Mammals Impacts and Mitigation**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Marine Mammals** | | | | | | | | | | | | | | | |
| *Construction* | | | | | | | | | | | | | | | |
| Auditory Injury (PTS) from pre-construction geophysical surveys | Offshore ECC and OAA | Co16 | All marine mammals | Negligible to Low | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 11: Marine Mammals** as it was concluded that the effect was Not Significant. | Negligible | Not Significant | Cumulative effects for Marine Mammals have been assessed separately and evaluated below. | | | | | |
| Disturbance from pre-construction geophysical surveys | Offshore ECC and OAA | N/A | All marine mammals | Negligible to Low | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| Auditory Injury (PTS) from UXO clearance | Offshore ECC and OAA | Co16 | Porpoise, dolphins and seals | Low | Negligible with UXO MMMP | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Minke whale | Medium | | | | | | | | | | | |
| Disturbance from UXO clearance (26km EDR, 5km EDR and TTS) | Offshore ECC and OAA | N/A | All marine mammals | Low | Low | Negligible | | Negligible | Not Significant | | | | | | |
| Auditory Injury (PTS) from piling of anchors | OAA | Co16 | Porpoise, dolphins and seals | Low | Negligible with Piling MMMP | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Minke whale | Medium | | | | | | | | | | | |
| Disturbance from piling of anchors | OAA | N/A | Harbour porpoise | Low | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Bottlenose dolphin | Low | Negligible | | | | | | | | | | |
| | | | White-beaked dolphin | Low | Low | | | | | | | | | | |
| | | | Minke whale | Low | Low | | | | | | | | | | |
| | | | Harbour seal | Medium | Negligible | | | | | | | | | | |
| | | | Grey seal | Negligible | Negligible | | | | | | | | | | |
| Auditory Injury (PTS) from other construction activities | Offshore ECC and OAA | N/A | Porpoise, dolphins and seals | Low | Negligible | Negligible | | Negligible | Not Significant | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | Minke whale | Medium | Negligible | | | | | | | | | | |
| Disturbance from other construction activities | Offshore ECC and OAA | Co11 | Porpoise, dolphins and minke whale | Low | Low | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Seals | Negligible | Low | | | | | | | | | | |
| Disturbance from vessels | Offshore ECC and OAA | Co11 | All marine mammals | Low | Low with VMP | Negligible | | Negligible | Not Significant | | | | | | |
| Indirect impacts on prey | Offshore ECC and OAA | N/A | All marine mammals | Low | Low | Negligible | | Negligible | Not Significant | | | | | | |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |
| Auditory Injury (PTS) from pre-construction geophysical surveys | Offshore ECC and OAA | Co16 | All marine mammals | Negligible to Low | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 11: Marine Mammals** as it was concluded that the effect was Not Significant. | Negligible | Not Significant | Cumulative effects for Marine Mammals have been assessed separately and evaluated below. | | | | | |
| Disturbance from pre-construction geophysical surveys | Offshore ECC and OAA | N/A | All marine mammals | Negligible to Low | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| Risk of injury resulting from entanglement (Direct/Primary) | OAA | N/A | All marine mammals | High | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| Risk of injury resulting from entanglement (Indirect/Secondary) | OAA | Co17 | All marine mammals | High | Low | Minor | | Minor | Not Significant | | | | | | |
| Risk of injury resulting from marine mammal collisions with WTG substructures | OAA | N/A | Porpoise, dolphins and seals | Negligible | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Minke whale | Low | Low | | | | | | | | | | |
| Operational noise impacts from operational floating WTGs | OAA | N/A | Porpoise, dolphins and seals | Negligible | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Minke whale | Low | | | | | | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Displacement or barrier effects resulting from the physical presence of Offshore Array infrastructure | Offshore ECC and OAA | N/A | All marine mammals | Negligible | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| Long-term habitat change due to dynamic cable EMF emissions and indirect impacts on prey | Offshore ECC and OAA | N/A | All marine mammals | Low | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| *Decommissioning* | | | | | | | | | | | | | | | |
| Auditory injury (PTS) from decommissioning activities | Offshore ECC and OAA | Co16 | All marine mammals | Low | Low | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 11: Marine Mammals** as it was concluded that the effect was Not Significant. | Negligible | Not Significant | Cumulative effects for Marine Mammals have been assessed separately and evaluated below. | | | | | |
| Disturbance from decommissioning activities and vessels | Offshore ECC and OAA | Co11 | Porpoise | Medium | Low | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Dolphins, minke whale and seals | Low | | | | | | | | | | | |
| Indirect impacts on prey | Offshore ECC and OAA | N/A | All marine mammals | Low | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| **Cumulative Effect Assessment on individual receptors** | | | | | | | | | | | | | | | |
| Potential disturbance from underwater noise during Construction (piling) | Offshore ECC and OAA | N/A | Harbour Porpoise | Offshore Development impacts in isolation have been assessed separately and included above. | | | | | | Low | Medium | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 11: Marine Mammals** as it was concluded that the effect was Not Significant | Minor | Not Significant |
| | | | Minke Whale | | | | | | | Low | Medium | Minor | | Minor | Not Significant |
| | | | Bottlenose Dolphin | | | | | | | Low | Medium | Minor | | Minor | Not Significant |
| | | | White-beaked Dolphin | | | | | | | Low | Medium | Minor | | Minor | Not Significant |
| | | | Harbour Seal | | | | | | | Medium | Low | Minor | | Minor | Not Significant |
| | | | Grey Seal | | | | | | | Negligible | Medium | Negligible | | Negligible | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Potential for indirect/secondary entanglement with mooring lines and dynamic cables | | | All marine mammals | | | | | | | High | Low | Minor | | Minor | Not Significant |

### 23.2.6 Offshore and Intertidal Ornithology

**Table 23-6 Summary of Offshore and Intertidal Ornithology Impacts and Mitigation**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Offshore Ornithology** | | | | | | | | | | | | | | | |
| *Construction* | | | | | | | | | | | | | | | |
| Disturbance (vessel-related) | OAA and Offshore ECC | Co9<br>Co11 | Common Guillemot (*Uria aalge*) | Low | Low | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 12: Offshore Ornithology** as it was concluded that the effect was Not Significant. | Negligible | Not Significant | No potential for Significant Cumulative Impact | | | | | |
| | | | Razorbill (*Alca torda*) | Medium | Low | Minor | | Minor | Not Significant | | | | | | |
| | | | Atlantic Puffin (*Fratercula arctica*) | Low | Low | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Intertidal Birds | High | Low | Minor | | Minor | Not Significant | | | | | | |
| Temporary Habitat Loss (Short-term) | OAA and Offshore ECC | Co14 | Black-legged Kittiwake (*Rissa tridactyla*) | Medium | Negligible | Negligible | | Negligible | Not Significant | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 12: Offshore Ornithology** as it was concluded that the effect was Not Significant. | Minor | Not Significant |
| | | | Common Guillemot (*Uria aalge*) | Medium | Low | Minor | | Minor | Not Significant | | | | | | Not Significant |
| | | | Razorbill (*Alca torda*) | Medium | Low | Minor | | Minor | Not Significant | | | | | | Not Significant |
| | | | Atlantic Puffin (*Fratercula arctica*) | Medium | Low | Minor | | Minor | Not Significant | | | | | | Not Significant |
| Turbidity (Suspended Sediment) | OAA and Offshore ECC | N/A | Common Guillemot (*Uria aalge*) | Medium | Low | Minor | | Minor | Not Significant | No potential for Significant Cumulative Impact | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | Razorbill (*Alca torda*) | Medium | Low | Minor | | Minor | Not Significant | | | | | | |
| | | | Atlantic Puffin (*Fratercula arctica*) | Medium | Low | Minor | | Minor | Not Significant | | | | | | |
| | | | Northern Gannet (*Morus bassanus*) | Low | Low | Negligible | | Negligible | Not Significant | | | | | | |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |
| Disturbance (Vessel-related) | OAA and Offshore ECC | Co10<br>Co11 | Common Guillemot (*Uria aalge*) | Low | Low | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 12: Offshore Ornithology** as it was concluded that the effect was Not Significant. | Negligible | Not Significant | No potential for Significant Cumulative Impact | | | | | |
| | | | Razorbill (*Alca torda*) | Medium | Low | Minor | | Minor | Not Significant | | | | | | |
| | | | Atlantic Puffin (*Fratercula arctica*) | Low | Low | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Intertidal Birds | High | Low | Minor | | Minor | Not Significant | | | | | | |
| Distributional Responses (Displacement and Barrier Effects) | OAA | N/A | Black-legged Kittiwake (*Rissa tridactyla*) | Low | Low | Negligible | | Negligible | Not Significant | Low | Medium | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 12: Offshore Ornithology** as it was concluded that the effect was Not Significant. | Minor | Not Significant |
| | | | Common Guillemot (*Uria aalge*) | Medium | Low | Minor | | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| | | | Razorbill (*Alca torda*) | Medium | Negligible | Negligible | | Negligible | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| | | | Atlantic Puffin (*Fratercula arctica*) | Low | Negligible | Negligible | | Negligible | Not Significant | Low | Medium | Minor | | Minor | Not Significant |
| | | | Northern Gannet (*Morus bassanus*) | Low | Negligible | Negligible | | Negligible | Not Significant | Low | Medium | Minor | | Minor | Not Significant |
| Collision | OAA and Offshore ECC | N/A | Black-legged Kittiwake (*Rissa tridactyla*) | High | Low | Minor | | Minor | Not Significant | High | Low | Minor | | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | Great Black-backed Gull (*Larus marinus*) | High | Negligible | Negligible | | Negligible | Not Significant | High | Low | Minor | | Minor | Not Significant |
| | | | European Herring Gull (*Larus argentatus*) | High | Low | Minor | | Minor | Not Significant | High | Low | Minor | | Minor | Not Significant |
| | | | Northern Gannet (*Morus bassanus*) | High | Negligible | Negligible | | Negligible | Not Significant | High | Low | Minor | | Minor | Not Significant |
| Temporary Habitat Loss (Long-term) | OAA and Offshore ECC | Co14 | Black-legged Kittiwake (*Rissa tridactyla*) | Negligible | Negligible | Negligible | | Negligible | Not Significant | Negligible to low | Low to Medium | Minor | | Minor | Not Significant |
| | | | Common Guillemot (*Uria aalge*) | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible to low | Low to Medium | | | | Not Significant |
| | | | Razorbill (*Alca torda*) | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible to low | Low to Medium | | | | Not Significant |
| | | | Atlantic Puffin (*Fratercula arctica*) | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible to low | Low to Medium | | | | Not Significant |
| Entanglement | OAA | Co17 | Common Guillemot (*Uria aalge*) | Medium | Negligible | Negligible | | Negligible | Not Significant | No potential for Significant Cumulative Impact | | | | | |
| | | | Razorbill (*Alca torda*) | Medium | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Atlantic Puffin (*Fratercula arctica*) | Medium | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Northern Gannet (*Morus bassanus*) | Low | Negligible | Negligible | | Negligible | Not Significant | | | | | | |

### 23.2.7 Commercial Fisheries

**Table 23-7 Summary of Commercial Fisheries Impacts and Mitigation**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Commercial Fisheries** | | | | | | | | | | | | | | | |
| *Construction and Decommissioning* | | | | | | | | | | | | | | | |
| Loss or restricted access to fishing grounds | OAA and Offshore ECC | Co14<br>Co9<br>Co11<br>Co18<br>Co19<br>Co24<br>Co34<br>Co36 | Potters | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 13: Commercial Fisheries** as it was concluded that the effect was **Not Significant.** | Minor | Not Significant | Medium | Medium | Moderate | Co51 | Minor | Not Significant |
| | | | Handliners and fishers using gear with hooks | Low | Low | Negligible | | Negligible | Not Significant | Low | Medium | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 13: Commercial Fisheries** as it was concluded that the effect was **Not Significant.** | Minor | Not Significant |
| | | | Scallop dredgers | Low | Low | Negligible | | Negligible | Not Significant | Low | Medium | Minor | | Minor | Not Significant |
| | | | Otter trawls | Low | Low | Negligible | | Negligible | Not Significant | Low | Medium | Minor | | Minor | Not Significant |
| | | | Pelagic trawls | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible | Medium | Negligible | | Negligible | Not Significant |
| Displacement of fishing activity into other areas | OAA and Offshore ECC | Co14<br>Co9<br>Co11<br>Co18<br>Co19<br>Co24<br>Co34<br>Co36 | Potters | Medium | Low | Minor | | Minor | Not Significant | Medium | Medium | Moderate | Co51 | Minor | Not Significant |
| | | | Handliners and fishers using gear with hooks | Low | Low | Negligible | | Negligible | Not Significant | Low | Medium | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 13: Commercial Fisheries** as it was concluded that the effect was **Not Significant.** | Minor | Not Significant |
| | | | Scallop dredgers | Low | Low | Negligible | | Negligible | Not Significant | Low | Medium | Minor | | Minor | Not Significant |
| | | | Otter trawls | Low | Low | Negligible | | Negligible | Not Significant | Low | Medium | Minor | | Minor | Not Significant |
| | | | Pelagic trawls | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible | Medium | Negligible | | Negligible | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Safety considerations of fishing vessels (via loss or damage to gear due to snagging or entanglement with offshore and floating infrastructure) | OAA and Offshore ECC | Co14<br>Co9<br>Co11<br>Co18<br>Co19<br>Co24<br>Co34<br>Co36 | Potters | Low | No change | Negligible | | Negligible | Not Significant | Low | No Change | Negligible | | Negligible | Not Significant |
| | | | Handliners and fishers using gear with hooks | Low | No change | Negligible | | Negligible | Not Significant | Low | No Change | Negligible | | Negligible | Not Significant |
| | | | Scallop dredgers | High | No change | Negligible | | Negligible | Not Significant | High | No Change | Negligible | | Negligible | Not Significant |
| | | | Otter trawls | High | No change | Negligible | | Negligible | Not Significant | High | No Change | Negligible | | Negligible | Not Significant |
| | | | Pelagic trawls | Medium | No change | Negligible | | Negligible | Not Significant | Medium | No Change | Negligible | | Negligible | Not Significant |
| Interference with fishing activity as a result of increased vessel traffic | OAA and Offshore ECC | Co14<br>Co9<br>Co11<br>Co18<br>Co19<br>Co24<br>Co34<br>Co36 | Potters | Medium | Low | Minor | | Minor | Not Significant | Medium | Medium | Moderate | Co51 | Minor | Not Significant |
| | | | Handliners and fishers using gear with hooks | Low | Low | Negligible | | Negligible | Not Significant | Low | Medium | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 13: Commercial Fisheries.** | Minor | Not Significant |
| | | | Scallop dredgers | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible | Medium | Negligible | | Negligible | Not Significant |
| | | | Otter trawls | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible | Medium | Negligible | | Negligible | Not Significant |
| | | | Pelagic trawls | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible | Medium | Negligible | | Negligible | Not Significant |
| Increased steaming times | OAA and Offshore ECC | Co14<br>Co9<br>Co11<br>Co18<br>Co19<br>Co24 | Potters | Low | Low | Negligible | | Negligible | Not Significant | Low | Medium | Minor | | Minor | Not Significant |
| | | | Handliners and fishers using gear with hooks | Low | Low | Negligible | | Negligible | Not Significant | Low | Medium | Minor | | Minor | Not Significant |
| | | | Scallop dredgers | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible | Medium | Minor | | Minor | Not Significant |
| | | | Otter trawls | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible | Medium | Minor | | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | Co34<br>Co36 | Pelagic trawls | Negligible | Low | Negligible | | Negligible | Not Significant | Negligible | Medium | Minor | | Minor | Not Significant |
| Potential impacts on commercially important fish and shellfish resources | OAA and Offshore ECC | Co14<br>Co9<br>Co11<br>Co18<br>Co19<br>Co24<br>Co34<br>Co36 | N/A | N/A | N/A | N/A | | N/A | Not significant | N/A | N/A | N/A | | N/A | Not Significant |
| Supply chain opportunities for local fishing vessels | OAA and Offshore ECC | Co14<br>Co9<br>Co11<br>Co18<br>Co19<br>Co24<br>Co34<br>Co36 | Potters | Negligible | Negligible | Negligible | | Negligible | Not significant | Negligible | Medium | Negligible | | Negligible | Not Significant |
| | | | Handliners and fishers using gear with hooks | Negligible | Negligible | Negligible | | Negligible | Not significant | Negligible | Medium | Negligible | | Negligible | Not Significant |
| | | | Scallop dredgers | Medium | Low (Beneficial) | Minor Beneficial | | Minor Beneficial | Not significant | Medium | Medium | Moderate Beneficial | | Moderate Beneficial | Significant (Beneficial) |
| | | | Otter trawls | Medium | Low (Beneficial) | Minor Beneficial | | Minor Beneficial | Not significant | Medium | Medium | Moderate Beneficial | | Moderate Beneficial | Significant (Beneficial) |
| | | | Pelagic trawls | Medium | Low (Beneficial) | Minor Beneficial | | Minor Beneficial | Not significant | Medium | Medium | Moderate Beneficial | | Moderate Beneficial | Significant (Beneficial) |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |
| Loss or restricted access to fishing grounds | OAA and Offshore ECC | Co14<br>Co9<br>Co11 | Potters | Medium | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed | Negligible | Not Significant | No potential for Cumulative Impact. | | | | | |
| | | | Handliners and fishers using gear with hooks | Low | Negligible | Negligible | | Negligible | Not Significant | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | Co18<br>Co19<br>Co24<br>Co34<br>Co36 | Scallop dredgers | Low | Negligible | Negligible | in **Volume ER.A.3, Chapter 13: Commercial Fisheries** as it was concluded that the effect was **Not Significant.** | Negligible | Not Significant | | | | | | |
| | | | Otter trawls | Low | Low | Negligible | | Negligible | Not Significant | Low | Low | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 13: Commercial Fisheries** as it was concluded that the effect was **Not Significant.** | Negligible | Not Significant |
| | | | Pelagic trawls | Negligible | Negligible | Negligible | | Negligible | Not Significant | No potential for Significant Cumulative Impact. | | | | | |
| Displacement of fishing activity into other areas | OAA and Offshore ECC | Co14<br>Co9<br>Co11<br>Co18<br>Co19<br>Co24<br>Co34<br>Co36 | Potters | Medium | Negligible | Negligible | | Negligible | Not significant | Medium | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 13: Commercial Fisheries** as it was concluded that the effect was **Not Significant.** | Negligible | Not Significant |
| | | | Handliners and fishers using gear with hooks | Low | Low (beneficial) | Negligible | | Negligible | Not significant | Low | Low (beneficial) | Negligible | | Negligible | Not Significant |
| | | | Scallop dredgers | Low | Low | Negligible | | Negligible | Not significant | Low | Medium | Minor | | Minor | Not Significant |
| | | | Otter trawls | Low | Low | Negligible | | Negligible | Not significant | Low | Medium | Minor | | Minor | Not Significant |
| | | | Pelagic trawls | Negligible | Negligible | Negligible | | Negligible | Not significant | Negligible | Low | Negligible | | Negligible | Not Significant |
| Safety considerations to fishing vessels (via loss or damage to gear due to snagging or entanglement with offshore and floating infrastructure) | OAA and Offshore ECC | Co14<br>Co9<br>Co11<br>Co18 | Potters | Low | Negligible | Negligible | | Negligible | Not Significant | Low | Negligible | Negligible | | Negligible | Not Significant |
| | | | Handliners and fishers using gear with hooks | Low | Negligible | Negligible | | Negligible | Not Significant | Low | Negligible | Negligible | | Negligible | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | Co19<br>Co24<br>Co34 | | | | | | | | | | | | | |
| | | Co36 | Scallop dredgers (Offshore Array) | High | No change | Negligible | | Negligible | Not Significant | High | Negligible | Negligible | | Negligible | Not Significant |
| | | | Scallop dredgers (Offshore ECC) | High | Low | Minor | | Minor | Not Significant | High | Low | Minor | | Minor | Not Significant |
| | | | Otter trawls (Offshore Array) | High | No Change | Negligible | | Negligible | Not Significant | High | No change | Negligible | | Negligible | Not Significant |
| | | | Otter trawls (Offshore ECC) | High | Low | Minor | | Minor | Not Significant | High | Low | Minor | | Minor | Not Significant |
| | | | Pelagic trawls (Offshore Array) | Medium | No Change | Negligible | | Negligible | Not Significant | Medium | No change | Negligible | | Negligible | Not Significant |
| | | | Pelagic trawls (Offshore ECC) | Medium | Negligible | Negligible | | Negligible | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| Interference with fishing activity as a result of increased vessel traffic | OAA and Offshore ECC | Co14<br>Co9<br>Co11<br>Co18<br>Co19<br>Co24<br>Co34<br>Co36 | Potters | Medium | Negligible | Negligible | | Negligible | Not Significant | Medium | Medium | Moderate | Co51 | Minor | Not Significant |
| | | | Handliners and fishers using gear with hooks | Low | Negligible | Negligible | | Negligible | Not Significant | Low | Medium | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 13: Commercial Fisheries** as it was concluded that the effect was **Not Significant.** | Minor | Not Significant |
| | | | Scallop dredgers | Negligible | Negligible | Negligible | | Negligible | Not Significant | Negligible | Medium | Negligible | | Negligible | Not Significant |
| | | | Otter trawls | Negligible | Negligible | Negligible | | Negligible | Not Significant | Negligible | Medium | Negligible | | Negligible | Not Significant |
| | | | Pelagic trawls | Negligible | Negligible | Negligible | | Negligible | Not Significant | Negligible | Medium | Negligible | | Negligible | Not Significant |
| Increased steaming times | OAA and Offshore ECC | Co14 | Potters | Low | Negligible | Negligible | | Negligible | Not Significant | Low | Low | Negligible | | Negligible | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | Co9<br>Co11 | Handliners and fishers using gear with hooks | Low | Negligible | Negligible | | Negligible | Not Significant | Negligible | Low | Negligible | | Negligible | Not Significant |
| | | Co18 | Scallop dredgers | Negligible | Negligible | Negligible | | Negligible | Not Significant | Negligible | Low | Negligible | | Negligible | Not Significant |
| | | Co19<br>Co24 | Otter trawls | Negligible | Negligible | Negligible | | Negligible | Not Significant | Negligible | Low | Negligible | | Negligible | Not Significant |
| | | Co34<br>Co36 | Pelagic trawls | Negligible | Negligible | Negligible | | Negligible | Not Significant | Negligible | Low | Negligible | | Negligible | Not Significant |
| Potential impacts on commercially important fish and shellfish resources | OAA and Offshore ECC | Co14<br>Co9<br>Co11<br>Co18<br>Co19<br>Co24<br>Co34<br>Co36 | N/A | N/A | N/A | N/A | | N/A | Not significant | N/A | N/A | N/A | | N/A | Not Significant |
| Supply chain opportunities for local fishing vessels | OAA and Offshore ECC | Co14<br>Co9 | Potters | Negligible | Negligible | Negligible | | Negligible | Not significant | Negligible | Negligible | Negligible | | Negligible | Not Significant |
| | | Co11 | Handliners and fishers using gear with hooks | Negligible | Negligible | Negligible | | Negligible | Not significant | Negligible | Negligible | Negligible | | Negligible | Not Significant |
| | | Co18<br>Co19 | Scallop dredgers | Medium | Negligible | Negligible | | Negligible | Not significant | Medium | Negligible | Negligible | | Negligible | Not Significant |
| | | Co24 | Otter trawls | Medium | Negligible | Negligible | | Negligible | Not significant | Medium | Negligible | Negligible | | Negligible | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | Co34<br><br>Co36 | Pelagic trawls | Medium | Negligible | Negligible | | Negligible | Not significant | Medium | Negligible | Negligible | | Negligible | Not Significant |

### 23.2.8 Shipping and Navigation

**Table 23-8 Summary of Shipping and Navigation Impacts and Mitigation**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Shipping and Navigation** | | | | | | | | | | | | | | | |
| *Construction* | | | | | | | | | | | | | | | |
| Vessel Displacement | OAA and Offshore ECC | Co11<br>Co34<br>Co53 | All Vessels | Reasonably Probable | Negligible | Broadly Acceptable | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 14: Shipping and Navigation** as it was concluded that the effect was Not Significant. | Broadly Acceptable | Not Significant | Reasonably Probable | Negligible | Broadly Acceptable | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 14: Shipping and Navigation** as it was concluded that the effect was Not Significant. | Broadly Acceptable | Not Significant |
| Increased vessel to vessel collision risk between third-party vessels | OAA and Offshore ECC | Co11<br>Co31<br>Co33<br>Co34<br>Co53<br>Co9 | All Vessels | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant |
| Increased vessel to vessel collision risk between a third-party vessel and a Salamander Project vessel | OAA and Offshore ECC | Co24<br>Co11<br>Co36<br>Co31<br>Co33<br>Co34<br>Co53<br>Co9 | All Vessels | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Vessel to structure allision risk | OAA | Co53<br>Co24<br>Co11<br>Co36<br>Co31<br>Co33<br>Co34<br>Co53<br>Co9<br>Co18 | All Vessels | Remote | Serious | Tolerable and ALARP | | Tolerable and ALARP | Not Significant | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant |
| Reduced access to local ports | OAA and Offshore ECC | Co11<br>Co18 | Vessels and Port Services | Extremely unlikely | Minor | Broadly Acceptable | | Broadly Acceptable | Not Significant | Extremely unlikely | Minor | Broadly Acceptable | | Broadly Acceptable | Not Significant |
| Interaction with wet stored subsea infrastructure | OAA | Co36<br>Co34<br>Co18 | All Vessels | Extremely Unlikely | Serious | Tolerable | Co38 | Tolerable and ALARP | Not Significant | No potential for Cumulative Impact. | | | | | |
| Reduction of emergency response capability | OAA and Offshore ECC | Co11<br>Co36<br>Co31<br>Co33<br>Co53<br>Co9<br>Co18 | Emergency Response Resources | Extremely unlikely | Moderate | Broadly Acceptable | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 14: Shipping and Navigation** as it was concluded that the effect was Not Significant | Broadly Acceptable | Not Significant | Extremely unlikely | Moderate | Broadly Acceptable | | Broadly Acceptable | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |
| Vessel Displacement | OAA and Offshore ECC | Co11<br>Co34<br>Co53 | All Vessels | Remote | Negligible | Broadly Acceptable | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 14: Shipping and Navigation** as it was concluded that the effect was Not Significant | Broadly Acceptable | Not Significant | Reasonably Probable | Negligible | Broadly Acceptable | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 14: Shipping and Navigation** as it was concluded that the effect was Not Significant. | Broadly Acceptable | Not Significant |
| Increased vessel to vessel collision risk between third-party vessels | OAA and Offshore ECC | Co11<br>Co31<br>Co33<br>Co34<br>Co53<br>Co10 | All Vessels | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant |
| Increased vessel to vessel collision risk between a third-party vessel and a Salamander Project vessel | OAA and Offshore ECC | Co24<br>Co11<br>Co36<br>Co31<br>Co33<br>Co34<br>Co53<br>Co10 | All Vessels | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant |
| Vessel to structure allision risk | OAA | Co35<br>Co24<br>Co11<br>Co36 | All Vessels | Remote | Serious | Tolerable and ALARP | | Tolerable and ALARP | Not Significant | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | Co31<br>Co33<br>Co34<br>Co53<br>Co10<br>Co18 | | | | | | | | | | | | | |
| Reduced access to local ports | OAA and Offshore ECC | Co11<br>Co18 | Vessels and Port Services | Extremely Unlikely | Minor | Broadly Acceptable | | Broadly Acceptable | Not Significant | Extremely unlikely | Minor | Broadly Acceptable | | Broadly Acceptable | Not Significant |
| Reduction of under keel clearance from cable protection | OAA and Offshore ECC | Co14<br>Co34<br>Co18<br>Co45 | All Vessels | Extremely Unlikely | Moderate | Broadly Acceptable | | Broadly Acceptable | Not Significant | Extremely Unlikely | Moderate | Broadly Acceptable | | Broadly Acceptable | Not Significant |
| Interaction with subsea infrastructure | OAA | Co34<br>Co53<br>Co18<br>Co45 | All Vessels | Extremely Unlikely | Serious | Tolerable | Co37 | Tolerable and ALARP | Not Significant | No potential for Cumulative Impact. | | | | | |
| Loss of station | OAA | Co31<br>Co33<br>Co18 | All Vessels | Negligible | Serious | Broadly Acceptable | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 14: Shipping and Navigation** as it was concluded that the effect was Not Significant | Broadly Acceptable | Not Significant | | | | | | |
| Anchor interaction with subsea cables | OAA and Offshore ECC | Co14<br>Co34<br>Co18 | Anchored Vessels | Extremely Unlikely | Moderate | Broadly Acceptable | | Broadly Acceptable | Not Significant | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | Co45 | | | | | | | | | | | | | |
| Reduction of emergency response capability | OAA and Offshore ECC | Co11;<br>Co36 | Emergency Response Resources | Extremely unlikely | Moderate | Broadly Acceptable | | Broadly Acceptable | Not Significant | Extremely unlikely | Moderate | Broadly Acceptable | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 14: Shipping and Navigation** as it was concluded that the effect was Not Significant. | Broadly Acceptable | Not Significant |
| *Decommissioning* | | | | | | | | | | | | | | | |
| Vessel Displacement | OAA and Offshore ECC | Co11<br>Co34<br>Co53 | All Vessels | Reasonably Probable | Negligible | Broadly Acceptable | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 14: Shipping and Navigation** as it was concluded that the effect was Not Significant | Broadly Acceptable | Not Significant | Reasonably Probable | Negligible | Broadly Acceptable | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 14: Shipping and Navigation** as it was concluded that the effect was Not Significant. | Broadly Acceptable | Not Significant |
| Increased vessel to vessel collision risk between third-party vessels | OAA and Offshore ECC | Co11<br>Co31<br>Co33<br>Co34<br>Co53<br>Co9<br>Co10 | All Vessels | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant |
| Increased vessel to vessel collision risk between a third-party vessel and a Salamander Project vessel | OAA and Offshore ECC | Co24<br>Co11<br>Co36 | All Vessels | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | Co31<br>Co33<br>Co34<br>Co53<br>Co9<br>Co10 | | | | | | | | | | | | | |
| Vessel to structure allision risk | OAA | Co35<br>Co24<br>Co11<br>Co36<br>Co31<br>Co33<br>Co34<br>Co53<br>Co9<br>Co10<br>Co18 | All Vessels | Remote | Serious | Tolerable and ALARP | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 14: Shipping and Navigation** as it was concluded that the effect was Not Significant | Tolerable and ALARP | Not Significant | Negligible | Serious | Broadly Acceptable | | Broadly Acceptable | Not Significant |
| Reduced access to local ports | OAA and Offshore ECC | Co11<br>Co18 | Vessels and Port Services | Extremely unlikely | Minor | Broadly Acceptable | | Broadly Acceptable | Not Significant | Extremely unlikely | Minor | Broadly Acceptable | | Broadly Acceptable | Not Significant |
| Reduction of emergency response capability | OAA and Offshore ECC | Co11<br>Co36 | Emergency Response Resources | Extremely unlikely | Moderate | Broadly Acceptable | | Broadly Acceptable | Not Significant | Extremely unlikely | Moderate | Broadly Acceptable | | Broadly Acceptable | Not Significant |

### 23.2.9 Aviation and Radar

**Table 23-9 Summary of Aviation and Radar Impacts and Mitigation**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Aviation and Radar** | | | | | | | | | | | | | | | |
| *Construction* | | | | | | | | | | | | | | | |
| Creation of physical obstacle to aircraft operations | OAA | Co31<br>Co39<br>Co40<br>Co41<br>Co54 | MOD, NATS and ATC service providers<br>Low flying operations | Medium | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 15: Aviation and Radar** as it was concluded that the effect was Not Significant. | Negligible | Not Significant | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 15: Aviation and Radar** as it was concluded that the effect was Not Significant. | Minor | Not Significant |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |
| Creation of physical obstacle to aircraft operations | OAA | Co31<br>Co39<br>Co40<br>Co41<br>Co54 | MOD, NATS and ATC service providers<br>Low flying operations | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 15: Aviation and Radar** as it was concluded that the effect was Not Significant. | Minor | Not Significant | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 15: Aviation and Radar** as it was concluded that the effect was Not Significant. | Minor | Not Significant |
| Wind turbines causing interference on civil and military PSR systems | OAA | Co20 | MOD, NATS and ATC service providers | High | Medium | Moderate | Co42<br>Radar blanking, infill and a TMZ will be implemented, if required, to reduce wind turbine impact to NATS radar systems. | Minor | Not Significant | High | Medium | Moderate | Co42<br>Radar blanking, infill and a TMZ will be implemented, if required, to reduce wind turbine impact to NATS radar systems. | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | | | | | Co43<br><br>The Salamander Project is in the process of agreeing a solution with the MOD that will mitigate the impact that the Salamander WTGs will have upon the performance of the ADR located at RRH Buchan. | | | | | | Co43<br><br>The Salamander Project is in the process of agreeing a solution with the MOD that will mitigate the impact that the Salamander WTGs will have upon the performance of the ADR located at RRH Buchan. | | |
| Wind turbines causing interference on rainfall radar systems | OAA | Co20 | Met Office | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 15: Aviation and Radar** as it was concluded that the effect was Not Significant. | Minor | Not Significant | Medium | Low | Minor | | Minor | Not Significant |
| *Decommissioning* | | | | | | | | | | | | | | | |
| Creation of physical obstacle to aircraft operations | OAA | Co31<br><br>Co39<br><br>Co40<br><br>Co41<br><br>Co54 | MOD, NATS and ATC service providers<br><br>Low flying operations | Medium | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 15: Aviation and Radar** as it was concluded that the effect was Not Significant. | Negligible | Not Significant | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 15: Aviation and Radar** as it was concluded that the effect was Not Significant. | Minor | Not Significant |

### 23.2.10 Seascape, Landscape and Visual Amenity

**Table 23-10 Summary of Seascape, Landscape and Visual Amenity**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Seascape, Landscape and Visual Amenity** | | | | | | | | | | | | | | | |
| *Coastal Character* | | | | | | | | | | | | | | | |
| Impact on characteristics and qualities of coastal (seascape) and landscape receptors during operation and maintenance of the Offshore Array | OAA | Co20 | Cairnbulg Point to South Inch (LCCA 4) | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 16: Seascape, Landscape and Visual Impact Assessment** as it was concluded that the effect was Not Significant | Minor | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | South Inch to Peterhead (LCCA 5) | Medium-high | Low along the coastline.<br><br>Negligible within the hinterland. | Moderate / minor along the coastline.<br><br>Minor within the hinterland. | | Moderate / minor along the coastline.<br><br>Minor within the hinterland. | Not Significant | | | | | | |
| | | Co20 | Peterhead and Sandford Bay (LCCA 6) | Low | Negligible along the urban coastline within Peterhead and north of Boddam, extending up to 1 km from the coast | Negligible | | Negligible | Not Significant | | | | | | |
| | | Co20 | Beaches, Dunes and Links – Aberdeenshire (LCT 12) | Medium-high | Low along the coastline north of Peterhead and along the urban coastline within Peterhead | Moderate / minor along the coastline north of Peterhead.<br><br>Minor along the coastline within Peterhead, | | Moderate / minor along the coastline north of Peterhead.<br><br>Minor along the coastline within Peterhead, | Not Significant | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | | | and north of Boddam, extending up to 1 km from the coast.<br><br>Negligible south of Rockend.<br><br>Negligible within the hinterland. | south of Rockend and within the hinterland. | | south of Rockend and within the hinterland. | | | | | | | |
| | | Co20 | Boddam to Stirling Craig and The Skares to Rockend (LCCA 7) | Medium-high | Negligible | Minor | | Minor | Not Significant | | | | | | |
| | OAA | Co20 | Fragmented Rocky Coast (LCT 11) | Medium-high | Negligible | Minor | | Minor | Not Significant | | | | | | |
| *Inland Landscape Character* | | | | | | | | | | | | | | | |
| Impact on characteristics and qualities of landscape receptors during operation and maintenance of the Offshore Array | OAA | Co20 | Coastal Agricultural Plain – Aberdeenshire (LCT 17) | Low | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 16: Seascape, Landscape and Visual Impact Assessment** as it was concluded that the effect was Not Significant. | Negligible | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| *Landscape Designations* | | | | | | | | | | | | | | | |
| Impact on characteristics and qualities of landscape receptors during operation and maintenance of the Offshore Array | OAA | Co20 | North East Aberdeenshire Coast SLA | Medium-high | Low along the coastline.<br><br>Negligible inland | Moderate / minor along the coastline.<br><br>Minor inland. | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 16: Seascape, Landscape and Visual Impact Assessment** as it was concluded that the effect was Not Significant | Moderate / minor along the coastline.<br><br>Minor inland. | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| *Viewpoints* | | | | | | | | | | | | | | | |
| Impact on visual receptors during operation and maintenance of the Offshore Array | OAA | Co20 | Walkers on the coastal route (VP01 Kinnaird Head Lighthouse, Fraserburgh) | Medium-high | Low | Moderate / minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 16: Seascape, Landscape and Visual Impact Assessment** as it was concluded that the effect was Not Significant | Moderate / minor | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Recreational visitors to the beach and promenade (VP02 Fraserburgh Beach) | Medium-high | Low | Moderate / minor | | Moderate / minor | Not Significant | | | | | | |
| | | Co20 | Residents (VP03 Inverallochy) | Medium-high | Low | Moderate / minor | | Moderate / minor | Not Significant | | | | | | |
| | | Co20 | Recreational visitors to the beach and residents (VP04 St Combs) | High | Low | Moderate | | Moderate | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Recreational visitors to the beach and walkers on the coastal path (VP05 Rattray Head) | High | Medium-low | Moderate | | Moderate | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Recreational visitors to the beach and walkers | High | Medium-low | Moderate | | Moderate | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | on the coastal path (VP06 Scotstown Head) | | | | | | | | | | | | |
| | | Co20 | Recreational visitors to the beach and promenade and residents (VP07 Peterhead, Gadle Braes) | Medium-high | Medium-low | Moderate | | Moderate | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Residents, recreational visitors to the beach (VP08 Peterhead Bay (South Road)) | Medium | Low | Minor | | Minor | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Tower visitors and recreational visitors (VP09 Peterhead, Reform Tower) | Medium | Low | Minor | | Minor | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Residents and recreational visitors (VP10 Boddam) | Medium-high | Low | Moderate / minor | | Moderate / minor | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Residents and walkers (VP11 Stirling Hill) | Medium-high | Low | Moderate / minor | | Moderate / minor | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Walkers (VP12 Bullers of Buchan) | High | Low | Moderate | | Moderate | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Castle visitors (VP13 Slains Castle) | High | Low | Moderate | | Moderate | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Residents (VP14 Cruden Bay (East Sandend)) | Medium-high | Low | Moderate / minor | | Moderate / minor | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Walkers and visitors to Forvie NNR (VP15 Forvie National Nature Reserve, near Collieston) | Medium-high | Negligible | Minor | | Minor | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| *Night Viewpoints* | | | | | | | | | | | | | | | |
| Impact on visual receptors during operation and maintenance of the Offshore Array | OAA | Co53<br><br>Co54 | Residents and recreational visitors to the beach and promenade at VP03 Inverallochy | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 16: Seascape, Landscape and Visual Impact Assessment** as it was concluded that the effect was Not Significant | Minor | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | OAA | Co53<br><br>Co54 | Residents and recreational visitors to the beach and promenade at VP07 Peterhead, Gadle Braes | Medium | Low | Minor | | Minor | Not Significant | | | | | | |
| *Settlements* | | | | | | | | | | | | | | | |
| Impact on visual receptors during operation and maintenance of the Offshore Array | OAA | Co20 | Peterhead | Medium | Low along the coastline.<br><br>Negligible within the town's interior. | Moderate / minor along the coastline.<br><br>Minor within the town's interior. | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 16: Seascape, Landscape and Visual Impact Assessment** as it was concluded that the effect was Not Significant | Moderate / minor along the coastline.<br><br>Minor within the town's interior. | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Fraserburgh | Medium-high | Low along the coastline.<br><br>Negligible within the town's interior. | Moderate / minor along the coastline.<br><br>Minor within the town's interior. | | Moderate / minor along the coastline.<br><br>Minor within the town's interior. | | | | | | | |
| | | Co20 | Inverallochy | Medium-high | Low along the coastline.<br><br>Negligible within the hinterland. | Moderate / minor along the coastline. | | Moderate / minor along the coastline.<br><br>Minor within the hinterland. | | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | | | | Minor within the hinterland. | | | | | | | | | |
| | | Co20 | St Combs | Medium-high | Low along the coastline.<br><br>Negligible within the village's interior. | Moderate / minor along the coastline.<br><br>Minor within the village's interior. | | Moderate / minor along the coastline.<br><br>Minor within the village's interior. | | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | Boddam | Medium-high | Low along the coastline.<br><br>Negligible within the village's interior. | Moderate / minor along the coastline.<br><br>Minor within the hinterland. | | Moderate / minor along the coastline.<br><br>Minor within the village's interior. | | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| *Long-Distance Recreational Routes* | | | | | | | | | | | | | | | |
| Impact on visual receptors during operation and maintenance of the Offshore Array | OAA | Co20 | Formartine and Buchan Way | Medium-high | Negligible | Minor | | Minor | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| *Major Road Routes* | | | | | | | | | | | | | | | |
| Impact on visual receptors during operation and maintenance of the Offshore Array | OAA | Co20 | A90 | Medium | Negligible to zero | Minor to No Effect | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 16: Seascape, Landscape and Visual Impact Assessment** as it was concluded that the effect was Not Significant | Minor to No Effect | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | A950 | Medium | Negligible to zero | Minor to No Effect | | Minor to No Effect | | Any potential additional cumulative effects are unlikely to be significant. | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| *Recreational Routes* | | | | | | | | | | | | | | | |
| Impact on visual amenity including impacts of turbine lighting at night during operation and maintenance of the Offshore Array | OAA | Co20 | Aberdeenshire Coastal Trail | Medium-high | Negligible to zero | Minor to No Effect | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 16: Seascape, Landscape and Visual Impact Assessment** as it was concluded that the effect was Not Significant | Minor to No Effect | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |
| | | Co20 | North East 250 | Medium-high | Negligible to zero | Minor to No Effect | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed as it was concluded that the effect was Not Significant. | Minor to No Effect | | | | | | | |
| *Offshore Receptors* | | | | | | | | | | | | | | | |
| Impact on visual amenity during operation and maintenance of the Offshore Array | OAA | Co20 | Aberdeen to Orkney route | Medium-low | Medium-low along the closest parts of the route.<br><br>Low over the majority of the wider and more distant parts of the route | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 16: Seascape, Landscape and Visual Impact Assessment** as it was concluded that the effect was Not Significant | Minor | Not Significant | Any potential additional cumulative effects are unlikely to be significant. | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | Co20 | Aberdeen and Shetland route | Medium-low | Medium along the closest parts of the route.<br><br>Medium-low to low over the majority of the wider and more distant parts of the route. | Moderate / Minor along the closest parts of the route.<br><br>Minor over the majority of the wider and more distant parts of the route. | | Moderate / Minor | Not Significant | | | | | | |

### 23.2.11 Marine Archaeology and Cultural Heritage

**Table 23-11 Summary of Marine Archaeology and Cultural Heritage Impacts and Mitigations**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Marine Archaeology and Cultural Heritage** | | | | | | | | | | | | | | | |
| *Construction* | | | | | | | | | | | | | | | |
| Construction activities resulting in sub-seabed impacts, including site preparation, cable burial, foundations and anchoring. | OAA and Offshore ECC | Co21<br>Co22<br>Co23 | Submerged palaeo-environmental remains | Medium | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 17: Marine Archaeology and Cultural Heritage** as it was concluded that the effect was **Not Significant**. | Minor | Not significant | Cumulative effects for Marine Archaeology and Cultural Heritage have been assessed by defined groups based on direct physical impacts, indirect physical impacts and settings impacts, and evaluated below. | | | | | |
| | OAA and Offshore ECC | | Potential submerged prehistoric remains – *in situ* | High | Negligible | Negligible | | Negligible | Not significant | | | | | | |
| | OAA and Offshore ECC | | Potential submerged prehistoric remains – redeposited | Medium | Negligible | Minor | | Minor | Not significant | | | | | | |
| | OAA and Offshore ECC | | Known wrecks and high potential geophysical anomalies (as identified through the additional survey) | High | No change | No change | | No change | Not significant | | | | | | |
| | OAA and Offshore ECC | | Medium potential geophysical anomalies | Medium | No change | No change | | No change | Not significant | | | | | | |
| | OAA and Offshore ECC | | Low potential geophysical anomalies | Low | Low | Minor | | Minor | Not significant | | | | | | |
| | OAA and Offshore ECC | | Potential maritime and aviation remains | High | No change | No change | | No change | Not significant | | | | | | |
| | OAA and Offshore ECC | | Potential intertidal sites | Low to high | Negligible | Negligible | | Negligible | Not significant | | | | | | |
| | OAA and Offshore ECC | | Buried magnetic anomalies | Negligible to high | Negligible | Negligible | | Negligible | Not significant | | | | | | |
| | OAA and Offshore ECC | | | | | | | | Not significant | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |
| O&M activities which result in impacts beyond extent of construction impacts. | OAA and Offshore ECC | Co21<br>Co22<br>Co23 | Wrecks, high and medium potential geophysical anomalies | Medium to high | No change | No change | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 17: Marine Archaeology and Cultural Heritage** as it was concluded that the effect was **Not Significant.** | No change | Not significant | Cumulative effects for Marine Archaeology and Cultural Heritage have been assessed by defined group based on direct physical impacts, indirect physical impacts and settings impacts, and evaluated below. | | | | | |
| | OAA and Offshore ECC | | Potential prehistoric remains (*in situ* or redeposited) and potential palaeo-environmental evidence | Medium to high | Negligible | Negligible | | Negligible | Not significant | | | | | | |
| | OAA and Offshore ECC | | Potential intertidal sites | Low to high | Negligible | Negligible | | Negligible | Not significant | | | | | | |
| | OAA and Offshore ECC | | Low potential geophysical anomalies, magnetic anomalies and unidentified maritime or aviation remains | Negligible to high | Negligible | Negligible | | Negligible | Not significant | | | | | | |
| Operation and Maintenance of Offshore Development Area:<br><br>Setting Impacts | OAA | N/A | LB3042 Rattray Head Lighthouse, LB16367 Buchan Ness Lighthouse and LB31888 Kinnaird Head Lighthouse, Fraserburgh | Medium | Low | Minor beneficial | | Minor beneficial | Not significant | | | | | | |
| | OAA | N/A | LB39733 Peterhead Harbour and LB31879 Harbour Works Office, Fraserburgh.<br><br>LB39733 Peterhead Harbour and LB31879 Harbour Works Office, Fraserburgh. | Medium | Low | Minor beneficial | | Minor beneficial | Not significant | | | | | | |
| | | N/A | SM11315, SM11314, SM11320, SM11313, SM11316, SM11317, | Medium to Low | Negligible/ None | Negligible/None | | Negligible | Not significant | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | SM11318, SM11319, SM11307, SM11308, SM11311, SM5622, SM116, SM97, SM3259, SM3252, SM90344<br><br>CA425, CA426, CA427, CA417, CA428, CA414, CA663<br><br>LB16536, LB3042, LB3038, LB3039, LB3040, LB3041, LB3036, LB39733, LB39734, LB39735, LB39736, LB39737, LB39847, LB16362, LB16364<br><br>LB16365, LB16367, LB16366, LB3060, LB3061, LB3062, LB3074, LB31888, LB31879, LB31901 | | | | | | | | | | | | |
| *Decommissioning* | | | | | | | | | | | | | | | |
| Decommissioning activities which result in impacts beyond extent of construction or O&M impacts. | OAA and Offshore ECC | Co21<br><br>Co22<br><br>Co23 | Wrecks, high and medium potential geophysical anomalies | Medium to high | No change | No change | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 17: Marine Archaeology and Cultural Heritage** as it was concluded that the effect was **Not Significant**. | No change | Not significant | Cumulative effects for Marine Archaeology and Cultural Heritage have been assessed by defined group based on direct physical impacts, indirect physical impacts and settings impacts, and evaluated below. | | | | | |
| | OAA and Offshore ECC | | Potential prehistoric remains (*in situ* or redeposited) and potential palaeo-environmental evidence | Medium to high | Negligible | Negligible | | Negligible | Not significant | | | | | | |
| | OAA and Offshore ECC | | Low potential geophysical anomalies, magnetic anomalies and unidentified | Negligible to high | Negligible | Negligible | | Negligible | Not significant | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | maritime or aviation remains | | | | | | | | | | | | |
| | OAA and Offshore ECC | | Potential intertidal sites | Low to high | Negligible | Negligible | | Negligible | Not significant | | | | | | |
| **Cumulative Effects Assessment** | | | | | | | | | | | | | | | |
| Direct Physical Impacts | OAA and Offshore ECC | Co21<br>Co22<br>Co23 | Offshore Development impacts in isolation have been assessed separately and included above. | | | | | | | Negligible to High | No change to Low | Negligible or Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 17: Marine Archaeology and Cultural Heritage** as it was concluded that the effect was **Not Significant**. | Negligible | Not Significant |
| Indirect Physical Impacts | OAA and Offshore ECC | Co21<br>Co22<br>Co23 | | | | | | | | Negligible to High | No change to Low | Negligible or Minor | | Negligible | Not Significant |
| Setting Impacts | OAA and Offshore ECC | N/A | | | | | | | | Negligible to High | No change to Low | Minor beneficial | | Minor Beneficial | Not Significant |

### 23.2.12 Other Users of the Marine Environment

**Table 23-12 Summary of Other Marine Users of the Marine Environment Impacts and Mitigation**

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Other Users of the Marine Environment** | | | | | | | | | | | | | | | |
| *Construction* | | | | | | | | | | | | | | | |
| Impact C1: Obstruction of marine renewable energy activities due to the presence of safety zones and construction vessels during installation activities | Offshore ECC and OAA | Co9<br>Co11<br>Co18<br>Co19<br>Co24<br>Co25<br>Co26<br>Co27 | Hywind Scotland | High | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 18: Other Users of the Marine Environment** as it was concluded that the effect was **Not Significant**. | Minor | Not Significant | Cumulative effects for Other Users of the Marine Environment have been assessed separately for individual receptors and combined receptor groups and evaluated below. | | | | | |
| Impact C2: Obstruction of other electricity cable installation and/or maintenance activities due to the presence of safety zones and construction vessels during installation activities | Offshore ECC and OAA | | TAMPNET Fibre Optic | High | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| Impact C3: Obstruction of oil and gas activities due to the presence of safety zones and construction vessels during installation activities | Offshore ECC and OAA | | Oil and gas leasing rounds and licenced blocks | Low | Low | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Gas pipeline crossings | High | Low | Minor | | Minor | Not Significant | | | | | | |
| | | | Other gas pipelines | High | Low | Minor | | Minor | Not Significant | | | | | | |
| | | | Oil pipelines | High | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| Impact C4: Obstruction of recreational and tourism activities | Offshore ECC and OAA | | Recreational Users | Low | Low | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Ports and Harbours | Medium | Low | Minor | | Minor | Not Significant | | | | | | |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Impact O&M1: Obstruction of marine renewable energy activities due to the presence of safety zones and maintenance vessels during the operation and maintenance phase | Offshore ECC and OAA | Co11<br>Co18<br>Co19<br>Co24<br>Co25<br>Co26<br>Co27 | Hywind Scotland | High | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed, as it was concluded that the effect was **Not Significant**. | Minor | Not Significant | Cumulative effects for Other Users of the Marine Environment have been assessed separately for individual receptors and combined receptor groups and evaluated below. | | | | | |
| Impact O&M2: Obstruction of electricity cable installation and maintenance activities due to the presence of safety zones and maintenance vessels during the operation and maintenance phase | Offshore ECC and OAA | | TAMPNET Fibre Optic | High | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| Impact O&M3: Obstruction of oil and gas activities due to the presence of safety zones and construction vessels during installation activities | Offshore ECC and OAA | | Oil and gas leasing rounds and licenced blocks | Low | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Gas pipeline crossing | High | Low | Minor | | Minor | Not Significant | | | | | | |
| | | | Other Gas pipelines | High | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Oil pipelines | High | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| Impact O&M4: Obstruction of recreational and tourism activities due to the presence of safety zones and construction vessels during the operation and maintenance phase | Offshore ECC and OAA | | Recreational Users | Low | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Ports and Harbours | Medium | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| *Decommissioning* | | | | | | | | | | | | | | | |
| Impact D2: Obstruction of electricity cable installation and maintenance activities due to the presence of safety zones and vessels during decommissioning activities | Offshore ECC and OAA | Co11<br>Co18<br>Co19 | TAMPNET Fibre Optic | High | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter** | Negligible | Not Significant | Cumulative effects for Other Users of the Marine Environment have been assessed separately for individual receptors and combined receptor groups and evaluated below. | | | | | |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Impact D3: Obstruction of oil and gas activities due to the presence of safety zones and vessels during decommissioning activities | Offshore ECC and OAA | Co24<br>Co25<br>Co26<br>Co27<br>Co28 | Oil and gas leasing rounds and licenced blocks | Low | Low | Negligible | **18: Other Users of the Marine Environment** as it was concluded that the effect was **Not Significant**. | Negligible | Not Significant | | | | | | |
| | | | Gas pipeline crossing | High | Low | Minor | | Minor | Not Significant | | | | | | |
| | | | Other Gas pipelines | High | Low | Minor | | Minor | Not Significant | | | | | | |
| | | | Oil pipelines | High | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| Impact D4: Obstruction of recreational and tourism activities due to the presence of safety zones and vessels during decommissioning activities | Offshore ECC and OAA | | Recreational Users | Low | Negligible | Negligible | | Negligible | Not Significant | | | | | | |
| | | | Ports and Harbours | Medium | Low | Minor | | Minor | Not Significant | | | | | | |

**Cumulative Effect Assessment on individual receptors during Construction**

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cumulative Impact C1: Obstruction of marine renewable energy activities due to the presence of safety zones and construction vessels during installation activities | Offshore ECC | Co9<br>Co11<br>Co18<br>Co19<br>Co24<br>Co25<br>Co26<br>Co27 | Green Volt Offshore Windfarm Indicative ECC | Offshore Development impacts in isolation have been assessed separately and included above. | | | | | | Low | High | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 18: Other Users of the Marine Environment** as it was concluded that the effect was **Not Significant**. | Minor | Not Significant |
| | | | Cenos Floating Offshore Wind Farm Indicative ECC | | | | | | | Low | High | Minor | | Minor | Not Significant |
| | | | MarramWind Indicative ECC | | | | | | | Low | High | Minor | | Minor | Not Significant |
| | | | Muir Mhòr Indicative ECC | | | | | | | Low | High | Minor | | Minor | Not Significant |
| | | | Buchan Floating Offshore Wind Indicative ECC | | | | | | | Low | High | Minor | | Minor | Not Significant |
| Cumulative Impact C2: Obstruction of other electricity cable | Offshore ECC | Co9 | Eastern Green Link 2 | | | | | | | Low | High | Minor | | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| installation and/or maintenance activities due to the presence of safety zones and construction vessels during installation activities | | Co11<br>Co18<br>Co19<br>Co24<br>Co25<br>Co26<br>Co27 | CNSE | | | | | | | Low | High | Minor | | Minor | Not Significant |
| | | | NorthConnect | | | | | | | Low | High | Minor | | Minor | Not Significant |
| **Cumulative Effect Assessment on individual receptors during Operation and Maintenance** | | | | | | | | | | | | | | | |
| Cumulative Impact O&M1: Obstruction of marine renewable energy activities due to the presence of safety zones and maintenance vessels during the operation and maintenance phase | Offshore ECC | Co11<br>Co18<br>Co19<br>Co24<br>Co25<br>Co26<br>Co27 | Green Volt Offshore Windfarm Indicative ECC | Offshore Development impacts in isolation have been assessed separately and included above. | | | | | | Low | High | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 18: Other Users of the Marine Environment** as it was concluded that the effect was **Not Significant**. | Minor | Not Significant |
| | | | Cenos Floating Offshore Wind Farm Indicative ECC | | | | | | | Low | High | Minor | | Minor | Not Significant |
| | | | MarramWind Indicative ECC | | | | | | | Low | High | Minor | | Minor | Not Significant |
| | | | Muir Mhòr Indicative ECC | | | | | | | Low | High | Minor | | Minor | Not Significant |
| | | | Buchan Floating Offshore Wind Indicative ECC | | | | | | | Low | High | Minor | | Minor | Not Significant |
| **Cumulative Effects Assessment on Combined Receptor Groups during Construction** | | | | | | | | | | | | | | | |
| Cumulative Impact C1: Obstruction of marine renewable energy activities due to the presence of safety zones and construction vessels during installation activities | Offshore Development impacts in isolation have been assessed separately and included above. | | | | | | | | | High | Low | Minor | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation | Minor | Not Significant |

| Project Activity and Impact | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Cumulative Impact C2: Obstruction of other electricity cable installation and/or maintenance activities due to the presence of safety zones and construction vessels during installation activities | | | | | | | | | | High | Low | Minor | listed in **Volume ER.A.3, Chapter 18: Other Users of the Marine Environment** as it was concluded that the effect was **Not Significant**. | Minor | Not Significant |
| Cumulative Impact C4: Obstruction of recreational and tourism activities | | | | | | | | | | Low | Low | Negligible | | Negligible | Not Significant |
| **Cumulative Effects Assessment on Combined Receptor Groups during Operation and Maintenance** | | | | | | | | | | | | | | | |
| Cumulative Impact O&M1: Obstruction of marine renewable energy activities due to the presence of safety zones and maintenance vessels during the Operation and Maintenance phase | Offshore Development impacts in isolation have been assessed separately and included above. | | | | | | | | | High | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 18: Other Users of the Marine Environment** as it was concluded that the effect was **Not Significant**. | Negligible | Not Significant |

### 23.2.13 Socio-economics, Tourism and Recreation

**Table 23-13 Summary of Socio-economic, Tourism and Recreation Impacts and Mitigation**

| Project Activity and Impact | Study Area | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Socio-economics, Tourism and Recreation** | | | | | | | | | | | | | | | | |
| *Construction* | | | | | | | | | | | | | | | | |
| Socio-economic impacts:<br><br>Employment during the construction phase | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | Co57 | Residents / Businesses | Low | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond embedded mitigation listed in **Volume ER.A.3, Chapter 19: Socio-economics, Tourism and Recreation** as it was concluded that the effect was Not Significant | Negligible | Not-Significant | It is currently difficult to accurately measure the cumulative effect of construction on socio-economic factors. The cumulative significance of effect is not anticipated to be different from the project alone, therefore the assessment concludes that the cumulative effect is expected to be **Not Significant** in EIA terms. | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | Co57 | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | Co57 | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | Co57 | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Socio-economic impacts:<br><br>Economic productivity (GVA) during the construction phase | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | Co49 | Residents / Businesses | Medium | Negligible | Minor Beneficial | | Minor Beneficial | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | Co49 | | Medium | Negligible | Minor Beneficial | | Minor Beneficial | Not-Significant | | | | | | |
| | National: Scotland | | Co49 | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | Co49 | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Wider socio-economic effects:<br><br>Commercial Fisheries<br><br>Agriculture<br><br>Tourism | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Businesses, economy | Medium | Negligible | Negligible | | Negligible | Not-Significant | It is currently difficult to accurately measure the cumulative effect of construction on wider socio-economic factors. The cumulative significance of effect is not anticipated to be different from the project alone, therefore the assessment concludes that the cumulative effect is expected to be **Not Significant** in EIA terms. | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | Negligible | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Negligible | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |

| Project Activity and Impact | Study Area | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | National: UK | | N/A | | Negligible | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Socio-cultural effects:<br><br>Population change | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Residents / Salamander Project workers | High | Negligible | Negligible | | Negligible | Not-Significant | No potential Significant Cumulative Impacts. | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Socio-cultural effects:<br><br>Demand for housing during the construction phase | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Residents / Salamander Project workers | High | Low | Minor | | Negligible | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | High | Low | Minor | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Socio-cultural effects:<br><br>Demand for healthcare during the construction phase | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Residents / Salamander Project workers | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |

| Project Activity and Impact | Study Area | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Socio-cultural effects:<br><br>Demand for education during the construction phase | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Residents / Salamander Project workers | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Recreation and tourism effects:<br><br>Visitor access and experience during the construction phase | Neighbourhood: Buchan & NE SMR | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Tourists / recreational users | Medium | Low | Minor | | Minor | Not-Significant | It is currently difficult to accurately measure the cumulative effect of construction on recreation and tourism. The cumulative significance of effect is not anticipated to be different from the project alone, therefore the assessment concludes that the cumulative effect is expected to be **Not Significant** in EIA terms. | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | Medium | Low | Minor | | Minor | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Recreation and tourism effects:<br><br>Effect on tourist accommodation during the construction phase | Neighbourhood: Buchan & NE SMR | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Tourists / recreational users / workers | Medium | Low | Minor beneficial | | Minor beneficial | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | Medium | Low | Minor beneficial | | Minor beneficial | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |

| Project Activity and Impact | Study Area | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| *Operation and Maintenance* | | | | | | | | | | | | | | | | |
| Socio-economic impacts:<br><br>Employment during the operation and maintenance phase | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Residents / Businesses | Medium | Negligible | Negligible | No additional mitigation measures have been identified for this effect above and beyond embedded mitigation listed in **Volume ER.A.3, Chapter 19: Socio-economics, Tourism and Recreation** as it was concluded that the effect was Not Significant | Negligible | Not-Significant | No potential Significant Cumulative Impacts. | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Socio-economic impacts:<br><br>Economic productivity (GVA) during the Operation and Maintenance phase | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | Co49 | Residents / Businesses | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | Co49 | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | Co49 | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | Co49 | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Wider socio-economic effects:<br><br>Commercial Fisheries<br><br>Agriculture<br><br>Tourism | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Businesses, economy | Negligible | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | Negligible | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Negligible | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Negligible | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |

| Project Activity and Impact | Study Area | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Socio-cultural effects:<br><br>Population change | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Residents / Salamander Project workers | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Socio-cultural effects:<br><br>Demand for housing during the operation and maintenance phase | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Residents / Salamander Project workers | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Socio-cultural effects:<br><br>Demand for healthcare during the operation and maintenance phase | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Residents / Salamander Project workers | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Socio-cultural effects: | Neighbourhood: Buchan | OAA, Offshore ECC, Intertidal | N/A | | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |

| Project Activity and Impact | Study Area | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Receptor | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Demand for schools during the operation and maintenance phase | Local: Aberdeen City and Aberdeenshire | ECC, Onshore<br>ECC, Onshore Substation | N/A | Residents / Salamander Project workers | High | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Recreation and tourism effects:<br><br>Access and experience during the operation and maintenance phase | Neighbourhood: Buchan & NE SMR | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Tourists / recreational users | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| Recreation and tourism effects:<br><br>Effects on tourist accommodation during the operation and maintenance phase | Neighbourhood: Buchan & NE SMR | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation | N/A | Tourists / recreational users and Salamander Project workers | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | Local: Aberdeen City and Aberdeenshire | | N/A | | Medium | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: Scotland | | N/A | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |
| | National: UK | | N/A | | Low | Negligible | Negligible | | Negligible | Not-Significant | | | | | | |

### 23.2.14 Climate Change and Carbon

**Table 23-14 Summary of Climate Change Impacts and Mitigation**

| Receptor | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Climate Change Variable | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| **Climate Change and Carbon** | | | | | | | | | | | | | | | |
| *Operation and Maintenance* | | | | | | | | | | | | | | | |
| Assets of the Salamander Project | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Storms | Medium | Low | **Minor:** Assets will likely be exposed to storm events but are designed to withstand storm conditions. | No additional mitigation measures required | Minor | Not significant | GHG emissions result in impacts on a global scale, such as contributions to climate change, and therefore any potential impacts are by their nature cumulative. IEMA guidance (2022) supports the principle that a GHG assessment is cumulative in its approach, and there is no requirement for additional assessments of individual specific projects. | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Extreme temperature events | | Low | **Minor:** Assets will likely be exposed to extreme temperature events if/when they occur. Extreme weather could damage assets and require maintenance activities. Maintenance activities are expected to occur across the lifecycle of the Salamander Project. | | Minor | Not significant | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Sea level rise/flooding | | Low | **Minor:** Changes to sea conditions may result in increased wave height, or risk of flooding to assets. Scale of events are expected to be similar to existing climate events to which the Salamander Project design will appropriately addresses. | | Minor | Not significant | | | | | | |

| Receptor | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Climate Change Variable | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Landslides/unstable ground in coastal areas | | Low | **Minor:** Unstable land may impact the viability of asset infrastructure, particularly in areas such as the export cable landfall. However, Salamander Project design will consider extensively the suitability of ground conditions. | | Minor | Not significant | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Changes to temperature (averages) | | Negligible | **Negligible:** Changing temperatures over an average during the Salamander Project lifecycle will not change to a level that will present a risk to assets, which will be designed to operate within predicted temperature averages. | | Negligible | Not significant | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Increased rainfall | | Negligible | **Negligible:** Changing rainfall averages will not change to a level within the Salamander Project lifecycle that will present a risk to assets, which will be designed to operate within predicted rainfall averages. | | Negligible | Not significant | | | | | | |

| Receptor | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Climate Change Variable | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Energy generation<br><br>(note, this is not an evaluation of the project's energy generating capacity over its lifecycle in response to anticipated climate changes, but rather an analysis of how energy generation might respond, i.e. its sensitivity as a receptor, to potential extreme future climatic conditions.) | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Storms | Medium | Low | **Minor:** Changes in wind speeds and storm likelihood are challenging to predict in future baselines. However, generation of energy through wind power is limited by the automatic cut-out of the WTGs when excessive wind speeds are reached. | | Minor | Not significant | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Extreme temperature events | | Low | **Minor**: Assets will likely be exposed to extreme weather events if/when they occur. Extreme weather could damage assets and require maintenance activities, that will hinder energy generation.<br>Maintenance activities are expected to occur across the lifecycle of the Salamander Project. | | Minor | Not significant | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Sea level rise/flooding | | Low | **Minor:** Overall changes in sea level, including changes to wave height or occurrence, are not expected to occur on a scale (across an average) that will inhibit energy generation. | | Minor | Not significant | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore | Co29 | Landslides/unstable ground in coastal areas | | Low | **Minor:** Unstable land may impact the viability of asset infrastructure, | | Minor | Not significant | | | | | | |

| Receptor | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Climate Change Variable | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | ECC, Onshore Substation and EBI | | | | | particularly in areas such as the export cable landfall. However, Salamander Project design will consider extensively the suitability of ground conditions. | | | | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Changes to temperature (averages) | | Negligible | **Negligible:** Changing temperatures over an average will not change to a level within the Salamander Project lifecycle that will present a risk to energy generation, as turbines for the Salamander Project will be designed to operate within predicted temperature averages. | | Negligible | Not significant | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Increased rainfall | | Negligible | **Negligible:** Changing rainfall averages will not change to a level within the Salamander Project lifecycle that will present a risk to energy generation, as turbines for the Salamander Project will be designed to operate within predicted rainfall averages. | | Negligible | Not significant | | | | | | |
| Human health and safety | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore | Co29 | Storms | Medium | Low | **Minor:** Exposure of workforce to storm events has the potential to impact health and | | Minor | Not significant | | | | | | |

| Receptor | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Climate Change Variable | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | Substation and EBI | | | | | safety of individuals and a workforce. The risk of storms is currently present and adherence to relevant health and safety legislations will manage a safe working environment, which includes not working in unsuitable conditions. | | | | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Extreme temperature events | | Low | **Minor:** Exposure of workforce to extreme temperatures, either summer heatwaves or freezing conditions, has potential to impact health and safety, including an increased risk of accidents. The risk of extreme temperature events is currently present and adherence to relevant health and safety legislations will manage a safe working environment, which includes not working in unsuitable conditions. | | Minor | Not significant | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | Co29 | Sea level rise/flooding | | Low | **Minor:** Sea condition changes over the lifecycle of the Salamander Project are not expected to be at a level where significant changes will occur that | | Minor | Not significant | | | | | | |

| Receptor | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Climate Change Variable | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | | | | will impact the workforce.<br><br>The risk of floods is currently present and adherence to relevant health and safety legislations will manage a safe working environment, which includes not working in unsuitable conditions. | | | | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | N/A | Landslides/unstable ground in coastal areas | | Low | **Minor:** The risk of landslides/unstable ground is currently present and adherence to relevant health and safety legislations will manage a safe working environment, which includes not working in unsuitable conditions. If future baselines change, working practices will be consistently reviewed to address changing conditions. | | Minor | Not significant | | | | | | |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | N/A | Changes to temperature (averages) | | Negligible | **Negligible:** Changing temperature averages will not change to a level within the Salamander Project lifecycle that will present a risk to health and safety conditions outside of what is currently expected for project activities. | | Negligible | Not significant | | | | | | |

| Receptor | Project Aspect | Embedded Mitigation | Assessment of Offshore Development in isolation | | | | | | | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Climate Change Variable | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | OAA, Offshore ECC, Intertidal ECC, Onshore ECC, Onshore Substation and EBI | N/A | Increased rainfall | | Negligible | **Negligible:** Changing rainfall averages will not change to a level within the Salamander Project lifecycle that will present a risk to health and safety conditions outside of what is currently expected for Salamander Project activities. | | Negligible | Not significant | | | | | | |

### 23.2.15 Major Accidents and Disasters

**Table 23-15 Summary of Major Accidents and Disasters Impacts and Mitigation**

| Group Risk Event | Source and/or pathway(s) | Receptor | Reasonable worst consequence if event did occur | Embedded Mitigation | Risk Ranking * | | | Additional Mitigation | Risk Ranking After Additional Mitigation | | | Residual Significance of Risk | Significance of Effect in EIA Terms | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *L* | *C* | *S* | | *L* | *C* | *S* | | | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| Construction, Operation, Maintenance and Decommissioning - Major Industrial Accidents | Explosion, electrical malfunction, or fire at the Offshore Development | People including site personnel and mariners at sea | Any explosion, electrical malfunction or fire at the Offshore Development could lead to injury or death of personnel on site or nearby mariners at sea | Co31, Co11, Co9, Co28, Co32, Co47 and Co46 | 1 | 4 | | No additional mitigation measures have been identified for this effect above and beyond the embedded mitigation listed in **Volume ER.A.3, Chapter 21 Major Accidents and Disasters (Offshore)** as it was concluded that the effect was **Not Significant.** | 1 | 4 | | Minor | Not Significant | No potential Significant Cumulative Impacts. | | | | | |
| | Explosion, electrical malfunction, or fire at the Offshore Development | Environment | Any explosion, electrical malfunction or fire at the Offshore Development could result in the loss of components into the sea which could lead to the environment being polluted and biodiversity being impacted | Co9, Co10, Co47 and Co3 | 2 | 3 | | | 2 | 3 | | Minor | Not Significant | | | | | | |
| | Explosion, electrical malfunction, or fire at the Offshore Development | Offshore Development components | Any explosion, electrical malfunction or fire at the Offshore Development could result in damage leading to the loss of components such as a turbine blade stopping all operations. | Co31, Co9, Co28, Co47 and Co32 | 2 | 4 | | | 2 | 4 | | Moderate | Not Significant | | | | | | |
| Operation and Maintenance - System Failure | A system failure leading to an electrical fault, explosion or fire | People including site personnel and mariners at sea | If there is a system failure that results in an electrical failure, explosion or fire this could directly result in injury or death of site personnel working on the Offshore | Co31, Co10, Co32, Co11, Co46, Co47 and Co3 | 2 | 4 | | | 2 | 4 | | Moderate | Not Significant | | | | | | |

| Group Risk Event | Source and/or pathway(s) | Receptor | Reasonable worst consequence if event did occur | Embedded Mitigation | Risk Ranking * | | | Additional Mitigation | Risk Ranking After Additional Mitigation | | | Residual Significance of Risk | Significance of Effect in EIA Terms | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *L* | *C* | *S* | | *L* | *C* | *S* | | | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | | | Development as well as cause damage to the components that could impact people. | | | | | | | | | | | | | | | | |
| | A system failure leading to an electrical fault, explosion or fire | Environment | If there is a system failure that results in an electrical failure, explosion or fire could result in the loss of components such as a turbine blade into the marine environment possibly polluting the habitat and impacting the biodiversity | Co10, Co47 and Co3 | 2 | 3 | | | 2 | 3 | | Minor | Not Significant | | | | | | |
| | A system failure leading to an electrical fault, explosion or fire | Offshore Development components | If there is a system failure that results in an electrical failure, explosion or fire, the Offshore Development and other material assets could be damaged, and operations could be stopped temporarily or permanently | Co31, Co10, Co47 and Co32 | 2 | 4 | | | 2 | 4 | | Moderate | Not Significant | | | | | | |
| Construction, Operation, and Maintenance - Major Fires | External source i.e. lightning strike on a WTG | People including site personnel and mariners at sea | A lightning strike can damage the WTG resulting in an electrical failure or explosion leading to a major fire, this could directly cause injury and/or death of site personnel and mariners nearby. | Co9, Co31, Co11, Co46, Co47 and Co18 | 1 | 4 | | | 1 | 4 | | Minor | Not Significant | | | | | | |

| Group Risk Event | Source and/or pathway(s) | Receptor | Reasonable worst consequence if event did occur | Embedded Mitigation | Risk Ranking * | | | Additional Mitigation | Risk Ranking After Additional Mitigation | | | Residual Significance of Risk | Significance of Effect in EIA Terms | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *L* | *C* | *S* | | *L* | *C* | *S* | | | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | External source i.e. lightning strike on a WTG | Environment | A lightning strike can damage the WTG resulting in an electrical failure or explosion resulting in the loss of components such as a turbine blade into the marine environment possibly polluting the habitat and impacting the biodiversity | Co9, Co10, Co47 and Co3 | 2 | 3 | | | 2 | 3 | | Minor | Not Significant | | | | | | |
| | External source i.e. lightning strike on a WTG | Offshore Development components | A lightning strike can damage the Offshore Development components resulting in an electrical failure or explosion directly damaging the components and/or nearby other material assets. This would lead to operations could be stopped temporarily or permanently | Co9, Co47 and Co31 | 2 | 4 | | | 2 | 4 | | Moderate | Not Significant | | | | | | |
| Construction and decommissioning - UXO Presence | Accidental Detonation | People including site personnel and mariners at sea | Accidental detonation of UXO could result in injury of site personnel or other mariners nearby. | Co11, Co18, Co46, Co47 and Co19 | 1 | 5 | | | 1 | 5 | | Moderate | Not Significant | | | | | | |
| | Accidental Detonation | Environment | Accidental detonation of UXO could lead to damage of the seabed and harm to nearby marine animals | Co11, Co18, Co46, Co47 and Co19 | 1 | 4 | | | 1 | 4 | | Minor | Not Significant | | | | | | |

| Group Risk Event | Source and/or pathway(s) | Receptor | Reasonable worst consequence if event did occur | Embedded Mitigation | Risk Ranking * | | | Additional Mitigation | Risk Ranking After Additional Mitigation | | | Residual Significance of Risk | Significance of Effect in EIA Terms | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *L* | *C* | *S* | | *L* | *C* | *S* | | | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| | Accidental Detonation | Offshore Development components | Accidental detonation of UXO could lead to damage of survey equipment and vessel | Co11, Co18, Co46, Co47 and Co19 | 1 | 5 | | | 1 | 5 | | Moderate | Not Significant | | | | | | |
| Construction, Operation and Maintenance, Decommissioning - Marine SIMOPS | An increased potential for collision of Salamander Project vessels | Offshore Development component | Damage to vessels and equipment and delays in construction activities. | Co30, Co32, Co18, Co3, Co11, Co46, Co47 and Co19 | 2 | 3 | | | 2 | 3 | | Minor | Not Significant | | | | | | |
| Construction, Operation and Maintenance, Decommissioning - Interference/ contact with subsea assets during offshore operations | carrying out works at the wrong locations leading to interference/cont act with subsea assets and shallow gas | Offshore Development and other marine assets and infrastructure | Any interference/contact with subsea assets during offshore operations has potential to cause equipment damage, delays in operation and damage to charted pipelines within the Offshore ECC. | Co11, Co18, Co47 and Co19 | 2 | 3 | | | 2 | 3 | | Minor | Not Significant | | | | | | |
| Construction - Equipment accidents during offshore operations | Dropping equipment on subsea assets and uncontrolled pay out of equipment | Offshore Development and other marine assets and infrastructure | Dropping equipment on subsea assets and uncontrolled pay out of equipment has potential cause equipment damage, delays in operation and damage to charted pipelines within the Offshore ECC. | Co11, Co18, C09, Co47 and Co19 | 2 | 3 | | | 2 | 3 | | Minor | Not Significant | | | | | | |
| Construction, Operation and Maintenance, Decommissioning - Launch and | Launch and recovery of equipment exposing site personnel to potential | People including site personnel and mariners at sea | Activities involving the launch and recovery of equipment could lead to accidents resulting in injury to site personnel, man overboard when the | Co11, Co18, Co46, Co47 and Co19 | 2 | 3 | | | 2 | 3 | | Minor | Not Significant | | | | | | |

| Group Risk Event | Source and/or pathway(s) | Receptor | Reasonable worst consequence if event did occur | Embedded Mitigation | Risk Ranking * | | | Additional Mitigation | Risk Ranking After Additional Mitigation | | | Residual Significance of Risk | Significance of Effect in EIA Terms | Cumulative assessment with other relevant projects | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | *L* | *C* | *S* | | *L* | *C* | *S* | | | Sensitivity | Magnitude | Significance of Effect | Additional Mitigation | Residual Significance of Effect | Significance in EIA Terms |
| recovery of equipment | dangerous situations and increased collision risk due to reduced manoeuvrability | | deck is open and reduced manoeuvrability for the vessel increasing collision risk potentially inuring other mariners | | | | | | | | | | | | | | | | |
| | Mishandling of equipment and increased collision risk due to reduced manoeuvrability during launch and recovery of equipment | Offshore Development components | Activities involving the launch and recovery of survey equipment could lead to damage to equipment, delay in operations and damage to third party assets. | Co11, Co18, Co46, Co19 and Co47 | 2 | 3 | | | 2 | 3 | | Minor | Not Significant | | | | | | |
| Operation and Maintenance – Mooring Lines Breaking | One or more mooring lines breaking damaging the Inter-array Cable(s) | Offshore Development components | The broken mooring lines leads to an engineering offset that is greater than designed for the Offshore Development, resulting in damage to the Inter-array Cable(s) | Co31, Co11, Co47, Co55 and Co56 | 2 | 4 | | | 2 | 4 | | Moderate | Not Significant | | | | | | |

## 23.3 Summary of impacts assessed cumulatively with the Onshore Development

23.3.1.1 The Onshore Development components are summarised in **Volume ER.A.2, Chapter 4: Project Description**. These Project aspects have been considered in relation to the impacts assessed within each of the Offshore EIA Chapters (**Volume ER.A.2, Chapters 7 – 21**). **Sections 23.3.2** to **23.3.13** summarise the result of the Offshore Development cumulatively with the Onshore Development.

### 23.3.2 Marine Physical Processes

23.3.2.1 The Onshore Development will undertake trenchless cable installation operations from above mean high water spring tide, with an exit point occurring no closer than 200 m from MHWS. The impacts from the installation of the Offshore Export Cable(s) (including the landfall activities) have been assessed in full in **Volume ER.A.3, Chapter 7: Marine Physical Process.** It is not anticipated that there will be any additional impacts from the Onshore Development on Marine Physical Processes receptors as all other activities from the Onshore Development are fully terrestrial.

### 23.3.3 Water and Sediment Quality

23.3.3.1 The main components of the Onshore Development which have the potential to disturb receptors of Water and Sediment Quality and WFD include activities taking place just above MHWS or within the intertidal zone such as trenchless cable installation, trenching at the landfall location, installation of the onshore cables and onshore substation and any additional temporary construction areas.

23.3.3.2 Receptors detailed within the impact assessment of the Water and Sediment Quality Chapter primarily at risk of interactions with the Onshore Development include:

- Water Quality;
- Sediment Quality; and
- Water quality within designated WFD water bodies.

23.3.3.3 The impacts originated from the Onshore activities have been fully assessed within the Offshore impacts, **Volume ER.A.3, Chapter 8: Water and Sediment Quality**, and it is not anticipated that there will be any additional impacts from the construction and operation activities of the Onshore Development on the identified receptors. Overall, the sensitivity of the receptors is considered **Low** and the magnitude of the impacts was assessed as **Medium** to **Low** therefore resulting in **Minor** to **Negligible** effects. No significant cumulative effects are expected during Construction and Operation and Maintenance phases of Onshore and Offshore activities of the Salamander Project, and therefore the overall impact is assessed as **Not Significant** in EIA terms. Therefore, there is no requirement for additional mitigation measures above the embedded measures proposed in **Volume ER.A.3, Chapter 8: Water and Sediment Quality**.

### 23.3.4 Benthic and Intertidal Ecology

23.3.4.1 The main components of the Onshore Development which have the potential to disturb receptors of Benthic and Intertidal Ecology include trenchless installation at the Landfall.

23.3.4.2 Receptors detailed within the impact assessment of this chapter primarily at risk of interactions with the Onshore Development include Receptor groups VER A littoral rock, VER B infralittoral rock, VER G sublittoral coarse sediment, VER H littoral sand and VER I sublittoral sand.

23.3.4.3 The impacts associated with trenchless installation at the Landfall with potential to impact Benthic and Intertidal Ecology receptors (i.e. below MHWS) have been assessed in **Volume ER.A.3, Chapter 9: Benthic and Intertidal Ecology**.

23.3.4.4 It is not anticipated that there will be any additional impacts from the Onshore Development on Benthic and Intertidal Ecology receptors as all other activities from the Onshore Development are fully terrestrial.

### 23.3.5 Fish and Shellfish Ecology

23.3.5.1 The main components of the Onshore Development which have the potential to disturb receptors of Fish and Shellfish Ecology are the trenchless operations at the Landfall.

23.3.5.2 Receptors detailed within the impact assessment of this chapter primarily at risk of interactions with the Onshore Development include the demersal fish and shellfish receptor groups.

23.3.5.3 The impacts associated with trenchless operations at the Landfall with potential to impact Fish and Shellfish Ecology receptors (i.e. below MHWS) have been assessed in **Volume ER.A.3, Chapter 10: Fish and Shellfish Ecology**.

23.3.5.4 It is not anticipated that there will be any additional impacts from the Onshore Development on Fish and Shellfish Ecology receptors as all other activities from the Onshore Development are fully terrestrial.

### 23.3.6 Marine Mammals

23.3.6.1 The main components of the Onshore Development which have the potential to disturb receptors of Marine Mammals include trenchless operations at the Landfall.

23.3.6.2 The impacts associated with trenchless operations at the Landfall with potential to impact Marine Mammal receptors (i.e. below MHWS) have been assessed in **Volume ER.A.3, Chapter 11: Marine Mammals**.

23.3.6.3 It is not anticipated that there will be any additional impacts from the Onshore Development on Marine Mammal receptors as all other activities from the Onshore Development are fully terrestrial.

### 23.3.7 Offshore and Intertidal Ornithology

23.3.7.1 In respect of Offshore and Intertidal Ornithology receptors, this will include species which make use of the coast and intertidal environment for roosting, feeding, and / or nesting. The Onshore Development and Offshore Development are very different developments in terms of their size, structure, and context which, in turn, affects the extents and magnitude to which their respective Ornithology Study Areas will be affected. The assessment of the Offshore Development presented in **Volume ER.A.3, Chapter 12: Offshore and Intertidal Ornithology** concludes that significant effects on Offshore and Intertidal Ornithology will not occur. The effects of the Onshore Development will be of a notably lower magnitude, largely owing to the relatively small scale of the Onshore Development. Interaction between the Onshore Development and Offshore and Intertidal Ornithology receptors will be limited to the coastal works at the landfall site.

23.3.7.2 The Onshore Development will involve trenchless operations from above MHWS, with an exit point no closer than 200 m from MHWS offshore. During the trenchless operations, the presence of personnel and construction equipment will result in disturbance of birds in the immediate vicinity of the ongoing works. Although disturbance is expected to occur, this will be temporary in nature, and will cover a limited spatial extent, thus significant effects are not expected to occur. The only potential impact to Offshore and Intertidal Ornithology receptors in response to the Onshore Development is temporary disturbance.

23.3.7.3 The very limited potential for significant effects to arise on any of the Offshore and Intertidal Ornithology receptors as a result of the Onshore Development means that in considering the cumulative impacts of these developments, impacts will relate almost entirely to the effects of the Offshore Development and not the cumulative effects of the Offshore Development and Onshore Development.

### 23.3.8 Commercial Fisheries

23.3.8.1 Due to the nature of the potential impacts identified for commercial fisheries, and following consideration of the onshore project components, it has been concluded there is no pathway for impacts or resultant effects on commercial fisheries receptors cumulatively with the Onshore Development activities due to lack of interaction.

### 23.3.9 Shipping and Navigation

23.3.9.1 Due to the wholly offshore nature of the potential impacts identified for Shipping and Navigation it has been concluded that no impacts or resultant effects are expected on Shipping and Navigation receptors cumulatively with the Onshore Development activities.

### 23.3.10 Aviation and Radar

23.3.10.1 It is not anticipated that there will be any additional impacts from the Onshore Development on Aviation and Radar receptors as the Landfall is over 40 km from the proposed Offshore Array Area Generation Assets and there are no above ground associated high-speed moving parts to affect aviation PSR.

### 23.3.11 Seascape, Landscape and Visual Amenity

23.3.11.1 There is potential for the OAA to have impacts cumulatively with the Onshore Development from locations where their Zone of Theoretical Visibility (ZTV) overlap.

23.3.11.2 The seascape, landscape and visual receptors that may be affected cumulatively by both the OAA and the Onshore Development include the South Inch to Peterhead (LCCA 5), which characterizes the closest section of coastline from which the Offshore Development may be visible, while also adjoining the Onshore Development Area; and the Beaches, Dunes and Links - Aberdeenshire (LCT 12), that will host the Onshore Development, including the Onshore Substation (OnSS), Energy Balancing Infrastructure (EBI) and Battery Storage Area.

23.3.11.3 No significant project alone effects on coastal (seascape) character, landscape character or visual receptors as a result of the Offshore Development have been assessed. This is primarily due to its small scale, limited visibility and long distance offshore from this coastline, and the presence of similar development within baseline (Hywind Scotland) and the influence of other terrestrial energy developments within the coastal character.

23.3.11.4 While there is potential for in-combination cumulative effects to occur from receptors in the locality of the Onshore Development Area, the lack of potential significant project alone effects from the Offshore Development on any of the coastal (seascape), landscape and visual receptors means that any potential additional cumulative effects are also unlikely to be significant (as an addition to effects arising from the Onshore Development) given the factors assessed (its small scale, limited visibility and long distance offshore).

### 23.3.12 Marine Archaeology and Cultural Heritage

23.3.12.1 The Assessment of Impacts Cumulatively with the Onshore Development considers the effects of the Offshore Development cumulatively with the Onshore Development for the Marine Archaeology and Cultural Heritage receptors, as well as onshore archaeology and cultural heritage receptors in relation to effects on setting from the Offshore Development.

23.3.12.2 The potential for cumulative effects will arise in respect of those Cumulative direct and indirect physical impacts, principally between MHWS and MLWS, where the Offshore Development Area overlaps with the Onshore Development Area. Cumulative direct and indirect physical impacts are most likely to result from construction-related direct physical impacts. Transition Joint Bays will be located above MHWS, beyond the Offshore Development Area, as assessed in the Onshore EIAR and exit pits will be outside of this intertidal area. Only further survey, such as core sampling would provide overlap. Therefore, there is limited potential overlap within this area for the Salamander Project, as proposed. The worst-case design scenario is given within **Volume ER.A.3, Chapter 17: Marine Archaeology and Cultural Heritage**.

23.3.12.3 Known Marine Archaeology and Cultural Heritage receptors have been identified and appropriate mitigation recommended will ensure that no direct physical impacts will occur during Salamander Project

lifecycle, and indirect physical impacts may be reduced and monitored. Continued use of the mitigation ensures impacts are limited to a **Minor** significance.

23.3.12.4 Potential cumulative direct and indirect physical impacts on unknown Marine Archaeology and Cultural Heritage receptors may arise through trenchless cable laying. The assessment within **Volume ER.A.3, Chapter 17: Marine Archaeology and Cultural Heritage** identified a potential for subsurface remains within the intertidal zone, most likely relating to the Second World War defensive structures identified slightly above MHWS. Impacts to any such remains would be mitigated by the adherence to the WSI and PAD. Further detail can be found within **Volume ER.A.6, Plan P.6 Written Scheme of Investigation and Protocol for Archaeological Discoveries – Archaeology (Offshore)**. Any subsequent impacts would not carry greater than **Minor** significance.

23.3.12.5 The potential for cumulative effects on settings may arise in respect of those onshore archaeology and cultural heritage receptors that will be affected by both the Onshore and Offshore Development. These will include the designated assets, St Fergus old parish church and churchyard (SM5622 and LB16536), and Castle Hill Motte (SM3259) upon which visibility of the Onshore Development and Offshore Development will have direct effects.

23.3.12.6 The Onshore Development and Offshore Development, namely the OAA, are very different developments in terms of their size, structure and context which in turn affects the extents and magnitude taken into account within each of the individual assessments. The assessment of the OAA presented in **Volume ER.A.3, Chapter 17: Marine Archaeology and Cultural Heritage** concludes that negligible or no significant effects will occur from the OAA, largely owing to the distance and scale of the WTGs; minor beneficial significance will occur to Rattray Head Lighthouse (LB3042), Buchan Ness Lighthouse (LB16367) and Kinnaird Head Lighthouse (LB31888), for which there is no overlap with the onshore.

23.3.12.7 The lack of potential significant effects on the receptors identified within the settings assessments as a result of the OAA and Onshore Development means that any potential for cumulative effects of both developments will be due to the effects of the Onshore Development alone and not the cumulative effects of the Offshore Development and Onshore Development.

### 23.3.13 Other Users of the Marine Environment

23.3.13.1 The main components of the Onshore Development which have the potential to disturb receptors of Other Users of the Marine Environment include installation works at the landfall location, installation of the onshore cables and onshore substation and any additional temporary construction areas.

23.3.13.2 Receptors detailed within the impact assessment of this chapter primarily at risk of interactions with the Onshore Development include any onshore activities of mobile recreational users, as described within **Volume ER.A.3, Chapter 18: Other Users of the Marine Environment**. Additionally, there is potential for cumulative impacts during the Construction phase of the Onshore Development with the onshore elements of the proposed Green Volt, MarramWind and Muir Mhòr OWFs.

23.3.13.3 Impacts from the Offshore Development on recreational users and cumulative impacts with other OWFs have been assessed as **Not Significant**. It is anticipated that any disruption caused by the Onshore Development will be mitigated in a similar manner to that of the Offshore Development. For example, relevant onshore stakeholders will be consulted in relation to the Salamander Project; all works will comply with health and safety regulations and adhere to standard industry good practice methods; and notices of the commencement of works will be disseminated via appropriate media outlets.

23.3.13.4 In light of the above mitigations and given the localised and temporary nature of Construction activities, **No Significant Effects** from the Onshore Development are predicted to occur on receptors of the Other Users of the Marine Environment. The Onshore Development is not expected to change the magnitude or the

significance of effect of the potential impacts assessed in **Volume ER.A.3, Chapter 18: Other Users of the Marine Environment**.