

A photograph of an offshore wind farm at sunset. The sky is a mix of orange, yellow, and grey, with a few clouds. The sea is dark with white-capped waves in the foreground. Several wind turbines are visible, their silhouettes against the bright sky. The overall mood is serene and powerful.

Salamander Offshore Wind Farm

Offshore EIA Report

Volume ER.A.4, Annex 6.2: Cumulative Effects
Assessment Technical Annex



Powered by Ørsted and
Simply Blue Group

Document Title:	Cumulative Effects Assessment Technical Annex
Document no:	08614343
Project:	Salamander Offshore Wind Farm
Revision	00
Originator	ERM
Date	April 2024

Revision History:

Revision	Date	Status	Originator	Reviewed	Approved
00	19 April 2024	Final	ERM	Salamander	Hugh Yendole

Table of Contents

1	Introduction	1
1.1	Project Background.....	1
1.2	Purpose	1
2	Methodology.....	3
2.1	Cumulative Effects Assessment Project List.....	3
2.2	Cut-off date for Cumulative Effects Assessment.....	3
2.3	Zones of Influence.....	3
2.4	Developments Included in Cumulative Long List	4
2.5	Cumulative Assessment of Projects at Different Development Stages.....	4
2.6	Cumulative Effects Framework	5
3	Consultation.....	6
4	Cumulative Short List	15
4.1	Refining the Long List.....	15
4.2	Receptors not included in Short List	15
4.3	Topic-Specific Cumulative and In-Combination Assessments.....	15
5	References	54
	Appendix A – Cumulative Assessment Long List.....	55

List of Tables

Table 2.1 Different Development Stages used to Determine Projects Included in the Cumulative or In-Combination Assessments for the Salamander Project	5
Table 3.1 Consultation Responses Specific to Cumulative Effects Assessment - Salamander Offshore Wind Farm	7
Table 4.1 Marine Physical Processes, Water and Sediment Quality and Benthic Ecology	16
Table 4.2 Fish and Shellfish Ecology.....	18
Table 4.3 Offshore Ornithology	22



Table 4.4 Marine Mammals	31
Table 4.5 Commercial Fisheries	36
Table 4.6 Shipping and Navigation	39
Table 4.7: Aviation and Radar	41
Table 4.8 Seascape, Landscape and Visual	42
Table 4.9 Marine Archaeology and Cultural Heritage.....	43
Table 4.10: Other Users of the Marine Environment	45
Table 4.11 Socio-economics, tourism and recreation.....	47

List of Figures

Figure 1-1 Project Location	2
-----------------------------------	---

Glossary

Term	Definition
Cumulative effects	The combined effect of Salamander Project in combination 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.
Offshore Development Area	The total area comprising the Offshore Array Area and the Offshore Export Cable Corridor.
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.
Habitats Regulations Appraisal (HRA)	A process which helps determine likely significant effects and (where appropriate) assesses adverse impacts on the integrity of European conservation sites and Ramsar sites (when these are also an SPA or SAC). The process consists of a multi stage assessment which incorporates screening, appropriate assessment, assessment of alternative solutions and assessment of imperative reasons of overriding public interest (IROPI) and compensatory measures.
INTOG Leasing Round	The Innovation and Targeted Oil and Gas (INTOG) leasing round where developers apply for the rights to build offshore wind farms specifically for the purpose of providing low carbon electricity to power oil and gas installations and help to decarbonise the sector.
Landfall	The generic term applied to the entire landfall corridor between Mean Low Water Spring (MLWS) tide and the Transition Joint Bay (TJB) inclusive of all construction works, including the offshore and onshore Export Cable Corridor, and landfall compound, where the offshore cables come ashore north of Peterhead.
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 Salamander Project (WTGs, Inter-array and Offshore Export Cable(s), floating substructures, mooring lines and anchors, and all other associated offshore infrastructure) required across all Salamander Project phases from development to decommissioning, for which the Applicant is seeking consent.

Term	Definition
Offshore Export Cable(s)	The export cable(s) that will bring electricity from the Offshore Array Area to the Landfall. The cable(s) will include fibre optic cable(s).
Offshore Export Cable Corridor	The area that will contain the Offshore Export Cable(s) between the boundary of the Offshore Array Area and Mean High Water Springs.
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.
Safety zones	A marine area declared for the purposes of safety around a renewable energy installation or works/ construction area under the Energy Act 2004.
Salamander Project	The proposed Salamander Offshore Wind Farm. The term covers all elements of both the offshore and onshore aspects of the Salamander Project.
Wind Turbine Generator	All the components of a wind turbine, including the tower, nacelle, and rotor.

Acronyms

Term	Definition
CCS	Carbon Capture and Storage
CEA	Cumulative Effects Assessment
CEF	Cumulative Effects Framework
CNSE	Central North Sea Electrification
ECC	Export Cable Corridor
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EGL2	Eastern Green Link 2
ERM	Environmental Resources Management Limited

EOWDC	European Offshore Wind Deployment Centre
HES	Historic Environment Scotland
HVDC	High Voltage Direct Current
HRA	Habitats Regulations Appraisal
INTOG	Innovation and Targeted Oil and Gas
JV	Joint Venture
km	kilometres
LSE	Likely Significant Effect
MCA	Maritime and Coastguard Agency
MD-LOT	Marine Directorate – Licensing Operations Team
MU	Management Units
MW	megawatts
nm	Nautical Miles
OAA	Offshore Array Area
Offshore ECC	Offshore Export Cable Corridor
OWF	Offshore Wind Farm
SWPC	Salamander Wind Project Company Ltd
TCE	The Crown Estate
TTS	Temporary Threshold Shift
UXO	Unexploded Ordnance
WTG	Wind Turbine Generator
ZOI	Zone of Influence

1 Introduction

1.1 Project Background

1.1.1.1 Salamander Wind Project Company Limited (SWPC) a joint venture (JV) partnership between Ørsted, Simply Blue Group and Subsea7, is proposing the development of the Salamander Offshore Wind Farm (hereafter 'Salamander Project'). The Salamander Project will consist of the installation of a floating offshore wind farm (up to 100 megawatts (MW) capacity) approximately 35 kilometres (km) east of Peterhead. It will consist of both offshore and onshore infrastructure, including an offshore generating station (wind farm), export cables to landfall, and connection to the electricity transmission network.

1.1.1.2 The main offshore components will include:

- Up to seven offshore wind turbine generators (WTGs);
- Floating substructures to support the WTGs;
- Mooring and anchoring systems to connect the structures to the seabed;
- Inter-array cables (including both dynamic and static cable sections) to collect the power from the WTGs;
- Connection hub(s)/joint(s) on the seabed, and their associated foundations; and
- Up to two static export cable(s) either from the connection hubs or as a continuation of the dynamic inter-array cables to bring power ashore.

1.1.1.3 The proposed Salamander Project is shown in **Figure 1-1**.

1.1.1.4 At the time of first consultation for this document the Salamander Project intended to submit Offshore and Onshore Applications at the same time, however, it has been decided to submit the Offshore Application in Q2 2024, followed by the Onshore Application in Q3 2024. Consequently, the list of projects considered below has been developed with only the Offshore Application in mind.

1.2 Purpose

1.2.1.1 The primary purpose of this document is to set out the proposed Cumulative Effects Assessment (CEA) methodology and list of plans or projects which will be considered in the Environmental Impact Assessment (EIA) and Habitats Regulations Appraisal (HRA) cumulative or in-combination assessments. SWPC are currently progressing the EIA and HRA for the Salamander Project Offshore Development. As set out in the EIA Regulations¹ it is necessary to specify effects from the project alone and cumulatively with other plans, projects and activities. The Habitats Regulations² state that Likely Significant Effects (LSEs) or adverse effects on the integrity of a European Site should be determined for the project alone or in-combination with other plans or projects.

1.2.1.2 When the effects from the Salamander Project interact with effects from other plans or projects, this may lead to cumulative or in-combination effects.

¹ The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 and The Marine Works (Environmental Impact Assessment) Regulations 2017.

² The Conservation (Natural Habitats, &c.) Regulations 1994, The conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species Regulations 2017.

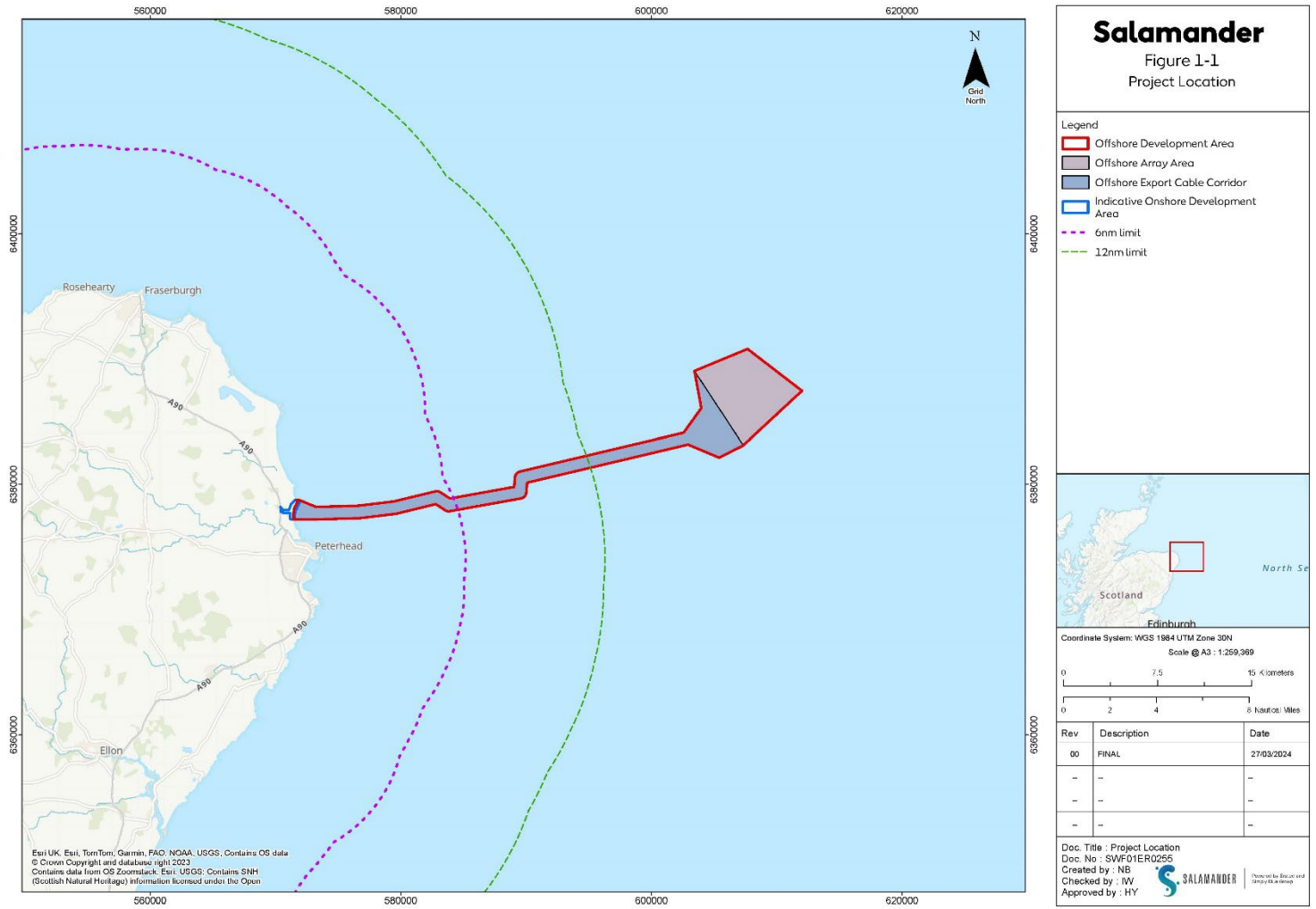


Figure 1-1 Project Location

2 Methodology

2.1 Cumulative Effects Assessment Project List

- 2.1.1.1 When producing a list of plans or projects which will be considered cumulatively and in-combination for the EIA and HRA, a two staged approach has been followed. Initially, a long list of plans or projects was produced whose effects have the potential to interact with the effects of the Salamander Project. The long list, as shown in **Appendix A – Cumulative Assessment Long List**, has been produced using Zones of Influence (ZOIs) for each receptor.
- 2.1.1.2 The long list of plans or projects which have the potential to interact with effects from the Salamander Project's Offshore (including inter-array and export cable corridor areas) or Onshore Development Areas has then been refined into a cumulative short list. The cumulative short list is provided below for consultation with the Marine Directorate – Licensing Operations Team (MD-LOT) and Aberdeenshire Council to confirm a complete list of plans or projects to be taken forward in the cumulative assessments.
- 2.1.1.3 The short list has been used by topic specific CEAs in the EIA and HRA as the basis for assessment. A further review of the receptor-specific cumulative short list was undertaken by the topic authors and specialists when finalising their assessments based on the latest cumulative project information and feedback to this note.

2.2 Cut-off date for Cumulative Effects Assessment

- 2.2.1.1 As discussed with MD-LOT and Aberdeenshire Council in the Salamander Project's quarterly meeting on 9 June 2023 and then agreed with MD-LOT on the 20 June 2023, cumulative assessments will be undertaken for new projects submitting consent and scoping applications up to six months before the Salamander Project's application submission.
- 2.2.1.2 It is proposed that projects submitting an application between six and two months before submission will be acknowledged but not assessed and projects submitting scoping within one month before Salamander Project's application submission will not be included in any assessment. This approach will be taken to allow sufficient time for an assessment to be included in the EIAR's CEA.
- 2.2.1.3 The Salamander Project is planning an offshore application submission in April 2024. This application submission date would lead to a six month cut-off for assessment at the end of October 2023. As noted, the cut-off date for cumulative assessment of new projects submitting consent and scoping applications was up to six months before the Salamander Project's offshore application submission; six months prior is the end of October 2023. Projects submitting an application or scoping report between six and two months before submission will be acknowledged but not assessed in the EIAR. A review of projects was undertaken in early March (i.e. less than two months prior to submission) and the projects that have submitted a scoping report between October and March are Stromar Offshore Wind Farm and the Broadshore Hub (Broadshore, Sinclair and Scaraben Projects) in January 2024.

2.3 Zones of Influence

- 2.3.1.1 Topic specific authors and specialists were consulted to develop the ZOIs for each of the receptors. The ZOIs were based on the nature and the scale of potential effects from the Salamander Project on specific

receptors with a precautionary distance applied at which those effects could interact with those from another plan or project.

2.4 Developments Included in Cumulative Long List

2.4.1.1 Developments most likely to cause cumulative or in-combination effects with the Salamander Project are other nearby offshore wind farms. However, other types of plans or projects could also cause a cumulative or in-combination effect with the Salamander Project and the following types of development have been included in the cumulative long-list of projects:

- Offshore and onshore wind farms and all associated infrastructure;
- Offshore and Onshore Cable installations;
- Carbon Capture and Storage (CCS);
- Oil and Gas installations and pipelines;
- Seismic Surveys;
- Coastal developments (i.e. Ports and Harbours);
- Solar farms;
- Onshore electrical infrastructure (i.e. electrical substations);
- Aggregate extraction areas; and
- Licensed dredging disposal sites.

2.5 Cumulative Assessment of Projects at Different Development Stages

2.5.1.1 For some receptors (e.g. offshore ornithology and marine mammals) it will be necessary for the Salamander Project to undertake more than one type of cumulative or in-combination assessment (dependent on the information available) and present a range of results. As the availability of information necessary to conduct the CEA will depend on the current status of the other plans or projects, the status of these other plans or projects will be recorded as set out in **Table 2.1**. By assigning each project to one of the four development stages, this will clearly illustrate the level of certainty the Salamander Project has assigned to the information available. Any quantitative assessment will require detailed information from the other projects, and this level of information will likely only be available from those projects at a more advanced development stage.

2.5.1.2 This approach will enable Scottish Ministers to consider the Salamander Project along with plans and projects which may not have received consent or have not submitted an application at the time of the Salamander application but which do so during the determination period.

2.5.1.3 The proposed cumulative and in-combination assessment development stages and details of how the assessment will be undertaken are set out in **Table 2.1**.

Table 2.1 Different Development Stages used to Determine Projects Included in the Cumulative or In-Combination Assessments for the Salamander Project

Development Stage	Details of how the Cumulative Assessment will be undertaken
1. Plans or projects which are operational or in construction	The impacts from Salamander will be considered alongside impacts from all relevant projects which are operational or in construction at least 6 months before Salamander's application submission
2. Plans or projects which have been granted a consent	The impacts from Salamander will be considered alongside impacts from all relevant projects which are operational or in construction or have been granted consent at least 6 months before Salamander's application submission
3. Plans or projects with an application submitted	The impacts from Salamander will be considered alongside impacts from all relevant projects which are operational or in construction or have been granted consent or have submitted an application at least 6 months before Salamander's application submission
4. Projects which have submitted a scoping request	Will consider impacts from all relevant identified projects at all consent development stages (up to submission of a scoping request) cumulatively with the Salamander Project

2.5.1.4 As already agreed with MD-LOT, projects which do not have detailed impact data available at scoping or which have not submitted scoping requests or consent applications up to six months before Salamander's application submission will not be considered part of any in-depth cumulative or in-combination assessment. These projects will need to include any impacts from the Salamander Project in their cumulative effect assessments when they submit a consent application.

2.5.1.5 There are currently limited project details for some offshore wind farms sites awarded Option Agreements within the ScotWind leasing round or Exclusivity Agreements within the INTOG (Innovation and Targeted Oil and Gas) leasing round in Scotland or for some of the Offshore Wind Leasing Round 4 Projects in English waters. However, considering the scale of these developments and the potential for cumulative effects to arise with the Salamander Project, where appropriate they will be noted within the EIA and HRA. Particular focus will be placed on the sites located within the northeast and east of Scotland, such as the sites located within the NE2, NE3, NE4, NE6, NE7, NE8, E1, E2 and E3 ScotWind areas.

2.6 Cumulative Effects Framework

2.6.1.1 The Cumulative Effects Framework (CEF) is a project funded by MD-LOT and the European Maritime and Fisheries Fund, and delivered by a consortium of researchers lead by the UK Centre for Ecology and Hydrology. The framework aims to assess the impacts of planned and constructed offshore renewables developments on seabirds and marine mammals over seasons, years, and multiple population scales.

2.6.1.2 During consultation it was agreed that if available at least six months before the submission of the EIA and HRA, the CEF would be used to assess cumulative effects on seabirds and marine mammals in parallel with the more established approach to CEA set out in this document. However, it should be noted that this tool was not released within this timeframe and therefore was not used in assessment.

3 Consultation

- 3.1.1.1 An initial draft of this note was shared with MD-LOT, NatureScot and other key stakeholders on 26 September 2023. **Table 3.1** details the responses received to this consultation, and the measures that have been taken to address those within this updated draft.

Table 3.1 Consultation Responses Specific to Cumulative Effects Assessment - Salamander Offshore Wind Farm

Consultee	Date and Forum	Comment	Where it is addressed in the EIAR
Marine Directorate - Marine Analytical Unit	10th October 2023 / Email	<p>We have reviewed the document and require a clarification of how cumulative effects will be assessed with regards to the socio-economic receptor. Socioeconomics are mentioned twice in the document.</p> <p>In para 3.2. it is mentioned that socio-economics will not be included in the short list because “socio-economic supply chain impacts are considered at a countrywide scale (and in some cases even wider), therefore it is not considered useful to list all projects and plans potentially impacted at these scales. The cumulative effects will be considered in the relevant EIA chapters.”</p> <p>In a different place in the document (para 3.3.11), it is mentioned that “The cumulative effects assessment for socio-economic impacts from the Salamander Project will review the plans or projects identified in the other users of the marine environment, commercial fisheries, shipping and navigation and the seascape, landscape and visual amenity impact assessments in addition to the onshore projects identified for the onshore CEA (see section 3.3.12). Any additional impacts on tourism assets such as coastal paths and coastal views will also be considered. The full methodology for the socio-economic CEA will be set out in the EIA chapter.”</p>	<p>Offshore projects within Scotland that have the potential to overlap with construction of the Salamander Project have been considered in relation to socio-economic impacts. This is primarily due to competition for labour and supply chain.</p> <p>In addition, onshore projects within 50 km of the Onshore Development Area have been considered for cumulative socio-economic impacts. This 50 km radius has been determined to be the onshore socio-economics Zone of Influence (ZOI). The consideration of which projects to include within the socio-economics ZOI was based on the nature and the scale of potential effects from the Salamander Project on specific socio-economics, tourism and recreational receptors as well as expert judgement of the socio-economics specialist consultant.</p>

Consultee	Date and Forum	Comment	Where it is addressed in the EIAR
		<p>Does this mean that cumulative effects will not be considered for socioeconomics?</p> <p>We advise that potential impacts from offshore projects have potential to interact with those from other developments, plans and activities, resulting in cumulative impacts on socio-economic receptors. This needs to be considered in the EIA application.</p>	
Marine Directorate – Licensing Operations Team (MD-LOT)	16th October 2023 / Email	We advise including the Buchan Offshore Wind farm and the Morven Offshore wind farm within the assessment as both have submitted scoping requests to MD-LOT.	Both projects have been included in assessment and have been brought into topic-specific short lists where these fall within the screening criteria.
Marine Directorate – Licensing Operations Team (MD-LOT)	16th October 2023 / Email	Marine licences have been granted for the NorthConnect HVDC project – please find the link to these here. MD-LOT have been in discussions with the developer about potential changes to the project, however no requests have been received to vary the marine licences. As such, I think it would be best to include the project in the cumulative assessment as is, as well as Cenos ECC.	Both NorthConnect and Cenos have been included within the project long list and topic-specific short lists where these fall within the screening criteria.
Marine Directorate – Science, Evidence, Data and Digital	13th October 2023 / Email	<p>Commercial fisheries</p> <p>MD-SEDD are content with the methods and list of projects to be included in the cumulative effects assessment. For commercial fisheries MD-SEDD advise also considering MPAs and fisheries management areas as potential projects that could cause cumulative effects through loss of fishing area.</p>	<p>All Fisheries Management Areas and Marine Protected Areas within 100 km of the Salamander Project are well established and the associated effects on fishing stocks and associated fisheries are considered to be well understood.</p> <p>With respect to fisheries management areas, these were implemented following the Inshore Fishing (Prohibition of Fishing and Fishing Methods) (Scotland) Order in 2004. All MPAs within 100 km of the Salamander Project were implemented in 2014, with the exception of</p>

Consultee	Date and Forum	Comment	Where it is addressed in the EIAR
			<p>the Southern Trench MPA, which was designated in 2020. As such, all of these areas are classified as part of the baseline environment.</p> <p>This approach aligns with Planning Inspectorate guidance (Advice Note 17, Cumulative Effect Assessment, PINS 2015) that:</p> <p><i>“Where other projects are expected to be completed before construction of the proposed NSIP and the effects of those projects are fully determined, effects arising from them should be considered as part of the baseline and may be considered as part of both the construction and operational assessment.”</i></p>
Marine Directorate – Science, Evidence, Data and Digital	13th October 2023 / Email	<p>Physical environment / coastal processes</p> <p>MD-SEDD are content with the proposed methods and the proposed zone of influence for physical processes assessments given the small scale of the development (up to 7 turbines).</p>	Acknowledged.
Maritime & Coastguard Agency	6th October 2023 / Email	<p>We understand that the developer is seeking to identify plans, projects and activities that should be included in the in-combination assessment of the CEA of the Environmental Impact Assessment (EIA) Report.</p> <p>On the understanding that the Shipping and Navigation aspects are undertaken in accordance with MGN 654 and its annexes, the MCA is likely to be content with the approach as presented.</p>	Acknowledged. All relevant aspects of assessment within Volume ER.A.3, Chapter 14: Shipping and Navigation have been carried out in alignment with MGN 654.

Consultee	Date and Forum	Comment	Where it is addressed in the EIAR
Natural England	13th October 2023 / Email	<p>Natural England advises that all major inshore and offshore development projects likely to result in cumulative impacts within the Northern North Sea area be included in the initial assessment process, including:</p> <ul style="list-style-type: none"> • Blyth Offshore Demonstrator OWF Projects • Dogger Bank A OWF • Dogger Bank B OWF • Dogger Bank C OWF • Dogger Bank D OWF • Dogger Bank South OWF • Eastern Green Links 1-4 • Sofia OWF • Northern Endurance (Net Zero Teeside) <p>If these projects are then scoped out during your assessment process then Natural England has no further comments to make.</p>	<p>Long list updated; all projects listed are now included in Appendix A – Cumulative Assessment Long List.</p>
NatureScot	10 th October 2023 / Email	<p>Methodology</p> <p>Section 2 describes the process taken to refine a short list of projects for the cumulative and in-combination impact assessment from a longer list. It would have been useful to include the long list of projects in an appendix so it was clear whether any projects had been missed when it was being reviewed or had been considered as part of the long list and then screened out. For example, it's not clear whether the NorthConnect HVDC Link project, Acorn CCUS project or the</p>	<p>This comment is acknowledged. The long-list of all projects within the defined zones of influence, and the rationale for each being included or excluded from short-lists for each receptor group, is included at application as part of this note. All of the projects referenced were captured within the overall long-list as shown in Appendix A – Cumulative Assessment Long List.</p>

Consultee	Date and Forum	Comment	Where it is addressed in the EIAR
		dredging and disposal sites – North Buchan Ness and Peterhead are being included? In our view these projects should be included.	
NatureScot	10th October 2023 / Email	<p>Cumulative short list</p> <p>In considering cumulative issues, consideration should be given to activities operating at a similar spatial and / or temporal period where impacts could occur coincidentally or sequentially (without compensation measures) to the same environmental receptor i.e. it could be one impact pathway during the construction phase of Salamander but another impact pathway during the operational and/or decommissioning periods from other projects. Therefore, our view of the text in Section 3.1.1.2 is incorrect where it states that ‘if cumulative or in-combination effects are only predicted to occur in the construction phase of the Project, then only projects with overlapping construction periods are considered’. It may be that we have incorrectly interpreted the meaning as to what will be considered so further clarity may need to be provided and discussed when coming to an agreement with MD-LOT.</p>	<p>Consideration is given to all projects which have activities, of any phase, that coincide with Salamander Project activities, and where there is a pathway for cumulative effect, e.g. the construction phase of another project during the O&M phase of the Salamander Project. To clarify this point, text has been amended to note that “<i>if the pathway for cumulative or in-combination effects is only associated with one Project Phase, then only that phase will be considered.</i>” For example, where cumulative and in-combination effects are only associated with construction phase activities, the project duration will be defined by the expected timeline for construction activities. This will avoid identifying temporal overlap where other developments only coincide with operation and maintenance activities, for which there is no pathway for cumulative or in-combination effects.</p>
NatureScot	10th October 2023 / Email	<p>Offshore Ornithology</p> <p>It is stated in Section 3.3.4 that following geospatial review of the long list and comparing the locations of projects, regional seas, the results of the apportioning analysis and the SOSS 05 report into consideration, projects outside of the northern North Sea</p>	<p>For the EIAR, the cumulative projects list is based on a regional approach. The regional population area, or zone of influence, is determined based on seabird foraging ranges (typically mean maximum plus 1 SD (Woodward <i>et al.</i>, 2019), but also considering exceptions outlined by NatureScot and RSPB and those in the most recent NatureScot guidance) from the Salamander Project, thus</p>

Consultee	Date and Forum	Comment	Where it is addressed in the EIAR
		<p>were screened out. It is noted within this section that following this approach allows the long list to be reduced to a manageable length.</p> <p>As we have not seen the results of the preliminary modelling or the long list it is not clear how projects outside of the northern North Sea have actually been screened out. Therefore, we question this approach. As per our Guidance Note 6: Guidance to support Offshore Wind Applications – Marine Ornithology Impact Pathways for Offshore Wind Developments³ we advise that for the breeding season, the colonies affected by a development should be determined (based on mean-max foraging range+1SD) then determine all other developments within mean-max foraging range+1SD of those colonies. The cumulative assessment should consider effects from projects with mean-max +1SD foraging range of the designated sites under consideration, based on Woodward et al. (2019). Our concern is that some other ScotWind projects may be screened out, such as West of Orkney, where we consider there to be potential for cumulative impacts for certain species / colonies.</p> <p>Cumulative assessment in the non-breeding season should include all developments agreed for inclusion in any assessment</p>	<p>considers the mobility of species. When considering other plans and projects, the same regional population is assessed. Therefore impacts associated with other developments that may affect the same regional populations (as defined in Volume ER.A.4, Annex 12.8 Offshore Ornithology Regional Populations Report) as the Salamander Project are considered, as specific individual colonies are not assessed in the EIAR. As such, this can include projects up to two times the species-specific foraging range from the Salamander Project Offshore Array Area.</p> <p>The full list of cumulative projects includes recent Scottish projects such as West of Orkney Offshore Wind Farm and Green Volt Floating Offshore Wind Farm. Additionally, as per the Scoping Opinion, two quantitative cumulative assessments have been undertaken for offshore ornithology, one including Berwick Bank in its impacts and one excluding Berwick Bank.</p> <p>For the Offshore Report to Inform Appropriate Assessment (RIAA), the in-combination list of plans and projects includes plans and projects with a public domain, quantified impact to the sites and species taken forward in the Salamander Project ornithology in-combination assessment. The approach is therefore compliant with NatureScot Guidance Note 6, as such projects apply the specified foraging ranges in the breeding season and the Biologically Defined Minimum Population Scales (BDMPS) or other agreed approach in the</p>

³ Guidance Note 6: Guidance to support Offshore Wind Applications – Marine Ornithology Impact Pathways for Offshore Wind Developments <https://www.nature.scot/doc/guidance-note-6-guidancesupport-offshore-wind-applications-marine-ornithology-impact-pathways>

Consultee	Date and Forum	Comment	Where it is addressed in the EIAR
		<p>within the region defined for the species, either by BDMPS or other agreed approach (i.e. for guillemots and razorbills).</p> <p>It is noted in Table 3-3 that the Berwick Bank Offshore Wind Farm has been included for cumulative assessment. As per our advice at scoping, we recommend that a cumulative/in-combination assessment is undertaken with and without Berwick Bank.</p>	<p>non-breeding season. The documents used to source the information are referenced in the Offshore RIAA.</p>
NatureScot	10 th October 2023 / Email	<p>Marine Mammals</p> <p>It is noted in Section 3.3.5 that marine mammals will be considered in terms of Marine Mammal Management Units and that the relevant Management Units have been identified as the North Sea and the Greater North Sea. It isn't clear which species are being considered in the assessment. However, the Coastal East Scotland Management Unit will also need to be considered (in addition to the Greater North Sea), for bottlenose dolphin and minke whale, which utilise this area and in which part of the Export Cable Corridor and Landfall for the Project will be located. For other cetacean species the relevant Management Units would be the Celtic and Greater North Sea.</p>	<p>Relevant Management Units (MUs) for each species considered within the assessment of Salamander Project effects alone have been applied to identify projects for inclusion in the cumulative effects assessment. Paragraph 4.3.5.1 of this CEA technical note has been amended to recognise that all relevant MUs are included; this now captures all MUs specified by NatureScot.</p>
Northern Lighthouse Board	26 th September 2023 / Email	<p>With reference to Section 3.3.7 (Shipping and Navigation) NLB have no objection to list of projects to be included within the CEA, and no suggestions for additional projects/receptors for inclusion.</p>	<p>Noted.</p>

Consultee	Date and Forum	Comment	Where it is addressed in the EIAR
Historic Environment Scotland (HES)	04 th October 2023 / Email	We have reviewed the content of the document and have no additional projects to raise or comments to add.	Noted.

4 Cumulative Short List

4.1 Refining the Long List

- 4.1.1.1 The cumulative short list was refined from the long list by taking into consideration potential impact pathways and the potential for spatial or temporal overlap of effects from the other plans or projects and the Salamander Project.
- 4.1.1.2 If the pathway for cumulative or in-combination effects is only associated with one Project Phase, then only that phase will be considered. To be precautionary, any projects with a construction period between 2025 and 2030 were considered to overlap with the anticipated Salamander Project's construction period.
- 4.1.1.3 Operational projects were refined into the shortlist if there was potential for an ongoing impact from that development type (e.g. bird collision risk). However, it should be noted that the offshore ornithology EIA chapter considers a lot of these projects as part of the ornithological baseline. This is also applied to other relevant topics and is described in more detail in those chapters.
- 4.1.1.4 Projects with insufficient project-level details or construction timelines were excluded from the short list in order to ensure the assessment remains fit for purpose.

4.2 Receptors not included in Short List

- 4.2.1.1 Some EIA topics may have impacts which are generally treated as standalone or only occurring within the footprint of the project. For example, socio-economic supply chain impacts are considered at a country-wide scale (and in some cases even wider), therefore it is not considered useful to list all projects and plans potentially impacted at these scales. The cumulative effects are considered in the relevant EIA chapters.

4.3 Topic-Specific Cumulative and In-Combination Assessments

- 4.3.1.1 The short list of cumulative and in-combination projects to be considered in the CEA of the EIA and HRA have been set out in the receptor-specific tables below.
- 4.3.1.2 Each of the technical chapter authors will further review the short list and if necessary, remove or add to the named projects below as the detailed impact assessment process progresses.

4.3.2 Marine Physical Processes, Water and Sediment Quality and Benthic Ecology

- 4.3.2.1 The list of projects for consideration in the marine physical processes, water and sediment quality and benthic ecology CEA are presented in the table below, alongside the reasons they are deemed to interact with the Salamander Project.
- 4.3.2.2 Physical processes affecting sediment suspension/deposition, transport and hydrodynamics will be limited to the extent of the tidal ellipse within the vicinity of the Salamander Project. The magnitude of these impacts will be greatest during the construction phase, where projects which overlap with the construction timeline of the Salamander Project will have the greatest cumulative significance. Impacts to sediment transport and scour will still be observed during the operational phases, however these will be to a lesser extent.
- 4.3.2.3 The ZOI has therefore been defined as a 20 km buffer around the Offshore Development Area, which encompasses the area influenced by the tidal ellipse (15 km), plus an additional precautionary 5 km to include any potential for extreme events. This ZOI is also relevant to water and sediment quality and benthic ecology receptors which have the potential to be impacted by sediment suspension/deposition and hydrodynamic regime.

Table 4.1 Marine Physical Processes, Water and Sediment Quality and Benthic Ecology

Development	Type	Project Phase	Reasons for inclusion
Eastern Green Link 2 (EGL2)	Interconnector	Consented	There is potential for temporal overlap of construction timelines and the EGL2 project is 26.78 km and 2.86 km from the Offshore Array Area and Offshore ECC respectively.
Green Volt Floating Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Consent Application Submitted	The Green Volt project is included as it is scheduled to be operational by 2027. The Green Volt ECC is 0.3 km from the Offshore Array Area and overlaps the Offshore ECC respectively.
Cenos Floating Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The Cenos Floating Offshore Wind Farm project is included as it is scheduled to be operational by 2028. This project is currently considering three export cable route options, one of which would also pass through the north of the Offshore Array Area and Offshore ECC.
Central North Sea Electrification (CNSE) Project	Platform Electrification	Scoping Submitted	The CNSE project is included as it is scheduled to be operational by 2028. The CNSE project’s cable route is 18.1 and 4.6 km from the Offshore Array Area and Offshore ECC respectively.



Development	Type	Project Phase	Reasons for inclusion
MarramWind Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The MarramWind project is included as its ECC search area is 1.5 km from the Offshore Array Area and overlaps with the Offshore ECC ⁴ .
Muir Mhòr Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The Muir Mhòr project is included as the construction period could overlap with the Salamander Project. The Muir Mhòr project's ECC is 5.53 km from the Offshore Array Area and overlaps the Offshore ECC.
Hywind Scotland Pilot Park	Floating Offshore Wind Farm	Operational	The Hywind project's array is located 11.7 km and 8.1 km from the Offshore Array Area and Offshore ECC respectively. The Hywind project's ECC is located 14.3 km and 0.1 km from the Offshore Array Area and Offshore ECC respectively.
Buchan Floating Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The Buchan project's ECC search area is 1.44 km from the Offshore Array Area and overlaps with the Offshore ECC.
NorthConnect	Interconnector	Consented	The NorthConnect Project overlaps with the Offshore Array Area and Offshore ECC respectively.
Peterhead (CR070)	Dredge Disposal Spoil	Operational	Disposal ground located within 3.1 km of the Offshore ECC.
North Buchan Ness (CR080)	Dredge Disposal Spoil	Operational	Disposal ground located within 1.7 km of the Offshore ECC.

⁴ Distances provided for MaramWind are based on the ECC area of search, and should not be considered necessarily indicative of the route that will subsequently be proposed.

4.3.3 Fish and Shellfish Ecology

- 4.3.3.1 The list of projects for consideration in the fish and shellfish ecology CEA are presented in the table below, alongside the reasons they are deemed to interact with the Salamander Project.
- 4.3.3.2 Underwater noise impacts from piling during the construction phase will have the widest range of potential impacts to fish and shellfish ecology. Additionally increased suspended sediments and water quality will also pose potential cumulative effects to fish and shellfish ecology, this is based on the extent of the tidal ellipse within the vicinity of the Salamander Project. The magnitude of these impacts will be greatest during the construction phase, where projects which overlap with the construction timeline of the Salamander Project will have the greatest cumulative significance. Impacts to sediment transport and scour will still be observed during the operational phases, however these will be to a lesser extent.
- 4.3.3.3 The ZOI has therefore been defined as a 100 km buffer around the Offshore Development Area to account for underwater noise impacts and the predicted cumulative range of Temporary Threshold Shift (TTS) to fish and shellfish receptors. This ZOI also includes a 20 km buffer, which encompasses the area influenced by the tidal ellipse (15 km), plus an additional precautionary 5 km to include any potential for extreme events.

Table 4.2 Fish and Shellfish Ecology

Development	Type	Project Phase	Reasons for inclusion
Eastern Green Link 2 (EGL2)	Interconnector	Consented	There is potential for temporal overlap of construction timelines and the EGL2 project is 26.78 km and 2.86 km of the Offshore Array Area and Offshore ECC respectively.
Green Volt Floating Offshore Wind Farm	Floating Offshore Wind Farm	Consent Application Submitted	The Green Volt project is included as it is scheduled to be operational by 2027. The Green Volt array is 33.6 km and 38.9 km from the Offshore Array Area and Offshore ECC respectively. The Green Volt export cable is 0.3 km from the Offshore Array Area and overlaps the Offshore ECC respectively.
MarramWind Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The MarramWind project was included as the MarramWind ECC search area is 1.5 km from the Offshore Array Area and overlaps with the Offshore ECC.

Development	Type	Project Phase	Reasons for inclusion
Muir Mhòr Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Muir Mhòr project is included as the construction period could overlap with Salamander. The Muir Mhòr project's array is 28.4 km and 30.9 km from the Offshore Array Area and Offshore ECC respectively. The Muir Mhòr project's ECC is 5.53 km from the Offshore Array Area and overlaps the Offshore ECC.
Caledonia Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Caledonia project's array is 80.3 km and 62.9 km from the Offshore Array Area and Offshore ECC respectively.
Ossian Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Ossian project's array is 79.5 km from both the Offshore Array Area and Offshore ECC respectively.
Cenos Floating Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The Cenos Floating Offshore Wind Farm project is included as it is scheduled to be operational by 2028. This project is currently considering three export cable route options, one of which would also pass through the north of the Offshore Array Area and Offshore ECC.
Buchan Floating Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Buchan project's array is 66.3 km and 69.3 km from the Offshore Array Area and Offshore ECC respectively. The Buchan project's ECC is 1.44 km from the Offshore Array Area and overlaps with the Offshore ECC.
Central North Sea Electrification (CNSE) Project	Platform Electrification	Scoping Submitted	The CNSE project is included as it is scheduled to be operational by 2028. The CNSE project's cable route is 18.1 and 4.6 km from the Offshore Array Area and Offshore ECC respectively.
NorthConnect	Interconnector	Consented	The NorthConnect Project overlaps with the Offshore Array Area and Offshore ECC respectively.
Peterhead (CR070)	Dredge Spoil Disposal	Operational	Disposal ground located 3.1 km and 33.9 km from the Offshore ECC and Offshore Array Area respectively.



Development	Type	Project Phase	Reasons for inclusion
North Buchan Ness (CR080)	Dredge Spoil Disposal	Operational	Disposal ground located 1.7 km and 29.9 km from the Offshore ECC and Offshore Array Area respectively.
Hywind Scotland Pilot Park	Floating Offshore Wind Farm	Operational	The Hywind project's array is located 11.7 km and 8.1 km from the Offshore Array Area and Offshore ECC respectively. The Hywind project's ECC is located 14.3 km and 0.1 km from the Offshore Array Area and Offshore ECC respectively.
Morven Offshore Wind Farm	Offshore Wind Farm	Scoping Submitted	This project's array is 74.9 km and 74.2 km from the Offshore Array Area and Offshore ECC respectively.

4.3.4 Offshore Ornithology

- 4.3.4.1 Offshore Ornithological receptors are considered on a species-by-species basis, utilizing mean maximum foraging ranges taken from Woodward *et al.*, (2019). Additional consideration has been given to effect-receptor-pathways and spatial scales to select projects to be taken forward for cumulative assessment. It is determined that, except where projects are in the local region, all sectors excluding marine renewables can be screened out of cumulative assessment due to absence of effect pressure pathway.
- 4.3.4.2 Following geospatial review of the long list and comparing the locations of projects, regional seas, the results of the apportioning analysis, and taking the SOSS 05 report (Wright *et al.*, 2012) into consideration, projects outside the northern North Sea were screened out. Connectivity between projects out with this region, and the seabird colonies or populations, or migratory routes, that may interact with the Salamander Project, is deemed to be very low.
- 4.3.4.3 Following the above approach allows identification of all projects that must be considered within the CEA, whilst allowing the long list to be reduced to manageable length, thus keeping the assessment “*proportionate*” and “[not] *any longer than is necessary to identify and assess any likely significant cumulative effects*”, as per PINS Advice Note 17 (PINS, 2019) and referenced in the Institute of Environmental Management and Assessment (IEMA) Cumulative Effects impact assessment journal (IEMA Impact Assessment Outlook Journal, Volume 7, 2020).
- 4.3.4.4 For the Offshore RIAA, the approach applied is focused on the sites and species carried forward to in-combination assessment and specifically the identification of public domain information for plans and projects with a quantified impact to these sites and species.
- 4.3.4.5 Cumulative effects to offshore ornithology will be present throughout the construction and operational phases of the projects identified. Where these phases overlap with the Salamander Project timeline, the magnitude of impact will be greatest.
- 4.3.4.6 Preliminary modelling has highlighted key species of interest, including Kittiwake, Great Black-backed Gull, Herring Gull, Northern Fulmar and Northern Gannet. Species identified as a displacement risk include the Auks, (Guillemot, Razorbill and Puffin) which are also considered below.

Table 4.3 Offshore Ornithology

Development	Type	Project Phase	Reasons for Inclusion
European Offshore Wind Deployment Centre (EOWDC); also known as Aberdeen Offshore Wind Farm	Offshore Wind Farm (OWF)	Operational	Project may affect the regional population of black-legged kittiwake (<i>Rissa tridactyla</i>) through distributional responses and collision, the regional population of common guillemot (<i>Uria aalge</i>) through distributional responses, the regional population of razorbill (<i>Alca torda</i>) through distributional responses, and the regional population of northern gannet (<i>Morus bassanus</i>) through distributional responses and collision.
Beatrice Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of guillemot and razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Berwick Bank Offshore Wind farm	OWF	Consent Submitted Application	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of guillemot and razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Blyth Floating Offshore Wind Farm: Demonstration Site	OWF	Operational	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of razorbill through distributional responses, and the regional population of gannet through collision.



Development	Type	Project Phase	Reasons for Inclusion
Dogger Bank A & B Offshore Wind Farm	OWF	Under Construction	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Dogger Bank C & Sofia Offshore Wind Farm	OWF	Pre-construction	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Dudgeon Offshore Wind Farm	OWF	Operational	Project may affect the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Dudgeon Extension Offshore Wind Farm	OWF	Consent Application Submitted	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
East Anglia One Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
East Anglia One NORTH Offshore Wind Farm	OWF	Consented	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.



Development	Type	Project Phase	Reasons for Inclusion
East Anglia Two Offshore Wind Farm	OWF	Consented	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
East Anglia Three Offshore Wind Farm	OWF	Pre-construction	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
ForthWind Offshore Wind Demonstration Project	OWF	Consented	Project may affect the regional population of kittiwake through collision, the regional population of guillemot and razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Galloper Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Greater Gabbard Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.



Development	Type	Project Phase	Reasons for Inclusion
Green Volt Offshore Wind Farm	OWF	Consent Application Submitted	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of guillemot and razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Gunfleet Sands Offshore Wind Farm	OWF	Operational	Project may affect the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Hornsea Project One Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Hornsea Project Two Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Hornsea Three Offshore Wind Farm	OWF	Consented	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Hornsea Four Offshore Wind Farm	OWF	Consented	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.



Development	Type	Project Phase	Reasons for Inclusion
Humber Gateway Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through collision.
Hywind Scotland Pilot Park	OWF	Operational	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of guillemot and razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Inch Cape Offshore Wind Farm	OWF	Consented	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of guillemot and razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Kentish Flats Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through collision.
Kincardine Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of guillemot and razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.



Development	Type	Project Phase	Reasons for Inclusion
Lincs, Lynn and Inner Dowsing Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through collision.
London Array Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through collision.
Methil Offshore Wind Demonstration Zone	OWF	Operational	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Moray East Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of guillemot and razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Moray West Offshore Wind Farm	OWF	Under Construction	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of guillemot and razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.



Development	Type	Project Phase	Reasons for Inclusion
Neart na Gaoithe (NNG) Offshore Wind Farm	OWF	Under Construction	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Norfolk Boreas Offshore Wind Farm	OWF	Consented	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Norfolk Vanguard Offshore Wind Farm	OWF	Consented	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Pentland Floating Offshore Wind Farm	OWF	Consented/Variation Application Submitted	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Race Bank Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, and the regional population of gannet through distributional responses and collision.
Rampion Offshore Wind Farm	OWF	Operational	Project may affect the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Scroby Sands Offshore Wind Farm	OWF	Operational	Project may affect the regional population of gannet through collision.



Development	Type	Project Phase	Reasons for Inclusion
Seagreen Alpha and Bravo Offshore Wind Farms	OWF	Operational; Screening Report submitted for proposed increase in height of remaining consented, but not constructed, 36 turbines.	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of guillemot and razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Sheringham Shoal Project Offshore Wind Farm	OWF	Operational	Project may affect the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Sheringham Shoal Extension Offshore Wind Farm	OWF	Consent Application Submitted	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Teeside Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Thanet Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.



Development	Type	Project Phase	Reasons for Inclusion
Triton Knoll Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
West of Orkney Offshore Wind Farm	OWF	Consent Submitted Application	Project may affect the regional population of kittiwake through distributional responses and collision, the regional population of razorbill through distributional responses, and the regional population of gannet through distributional responses and collision.
Westermost Rough Offshore Wind Farm	OWF	Operational	Project may affect the regional population of kittiwake through collision, the regional population of razorbill through distributional responses, and the regional population of gannet through collision.
Central North Sea Electrification (CNSE) Project	Interconnector	Scoping Submitted	Projects scoped in for assessment of habitat loss during the Salamander Project construction phase and operation and maintenance phase, considering the Benthic Ecology Far-field Study Area (Volume ER.A.3, Chapter 9 Benthic and Intertidal Ecology (Section 9.13)).
Eastern Green Link 2 (EGL2)	Interconnector	Consented	
Dredge Disposal Site CR070	Disposal Site	Operational	
Dredge Disposal Site CR080	Disposal Site	Operational	

4.3.5 Marine Mammals

- 4.3.5.1 These receptors will be considered in terms of Marine Mammal Management Units (MUs) for key species with the potential for an adverse impact from the Salamander Project. The Marine Mammal Management Units relevant to the Salamander Project have been identified as the North Sea MU (harbour porpoise), the Coastal East Scotland MU and the Greater North Sea MU (bottlenose dolphin), the Celtic and Greater North Sea MU (minke whale, white beaked dolphin), the East Scotland seal MU (harbour seal, grey seal) and Moray Firth seal MU and North Coast & Orkney seal MU (grey seal). Potential impacts where construction timelines of other projects overlap with the proposed construction dates for the Salamander Project will be taken into consideration with respect to cumulative underwater noise. Floating offshore wind projects which are currently operational are also considered with respect to secondary/indirect entanglement.
- 4.3.5.2 Potential impacts from underwater noise from the clearance of unexploded ordnance (UXO) will be assessed in the underwater noise report which will accompany the EIAR. As the level of UXO located in the Salamander Project area is unknown, a separate UXO clearance Marine Licence will be submitted pre-construction. However, potential underwater noise impacts from UXO clearance will be referenced in the Salamander Project EIAR as it is a potential impact associated with the Project. UXO impacts from other plans or projects will not be considered in the CEA given that they represent a single noise event with a low risk of effect on vital rates and a low proportion of the Management Unit will be affected.

Table 4.4 Marine Mammals

Development	Type	Project Stage	Reasons for inclusion
Rampion 2 Wind Farm	OWF	Consent application submitted	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Dogger Bank C	OWF	Pre-construction	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.



Development	Type	Project Stage	Reasons for inclusion
East Anglia Three	OWF	Pre-construction	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Sofia Offshore Wind Farm	OWF	Pre-construction	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Inch Cape Offshore Wind Farm	OWF	Consented	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Pentland Floating Offshore Wind Farm	Floating Offshore Wind Farm	Consented/Variation application submitted	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Blyth Offshore Demonstrator (Phase 2)	OWF	Consented	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
East Anglia ONE North	OWF	Consented	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.



Development	Type	Project Stage	Reasons for inclusion
East Anglia Two	OWF	Consented	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Hornsea Four	OWF	Consented	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Hornsea Three	OWF	Consented	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Norfolk Vanguard Offshore Wind Farm	OWF	Consented	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Berwick Bank Wind Farm	OWF	Consent application submitted	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Dudgeon Extension and Sheringham Shoal Extension Projects	OWF	Consent application submitted	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.



Development	Type	Project Stage	Reasons for inclusion
Muir Mhòr Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Green Volt Floating Offshore Wind Farm	Floating Offshore Wind Farm	Consent Application Submitted	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
MarramWind Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Caledonia Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Cenos Floating Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Seismic surveys for oil and gas and CCS developments	Seismic Surveys	Various	Seismic surveys may overlap with the expected construction period for the Salamander Project.



Development	Type	Project Stage	Reasons for inclusion
Neart Na Gaoithe (NNG) Offshore Wind Farm	OWF	Under Construction	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Seagreen Alpha and Bravo Offshore Wind Farms	OWF	Operational; Screening Report submitted for proposed increase in height of remaining consented, but not constructed, 36 turbines.	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Moray West Offshore Wind Farm	OWF	Under Construction	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap of construction timelines with the Salamander Project. This raises risk of cumulative underwater noise impacts on marine mammals.
Hywind Scotland Pilot Park	Floating Offshore Wind Farm	Operational	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap with the operations and maintenance phase of the Salamander Project. This raises risk of cumulative indirect/secondary entanglement impacts on marine mammals.
Kincardine Offshore Wind Farm	Floating Offshore Wind Farm	Operational	Located within the relevant Marine Mammal Management Units and identified as having potential for temporal overlap with the operations and maintenance phase of the Salamander Project. This raises risk of cumulative indirect/secondary entanglement impacts on marine mammals.

4.3.6 Commercial Fisheries

- 4.3.6.1 Commercial fisheries will utilise set distances to consider cumulative effects from other projects in the vicinity, here a blanket approach of 100 km is taken to understand the potential for additive loss of fishing grounds within the region. Cumulative effects to commercial fisheries will be present throughout the construction and operational phases of the projects identified. Where these phases overlap with the Salamander Project timeline, the magnitude of impact will be greatest.
- 4.3.6.2 It should be noted that although there is a pathway for cumulative effects from fisheries management areas and Marine Protected Areas (MPAs) (via loss of fishing area), all sites located within the 100 km search area have been in place for ≥ 4 years. As such, effects on commercial fisheries receptors are considered to be well established and these sites are classed as part of the baseline environment and are not considered further within cumulative assessment.

Table 4.5 Commercial Fisheries

Development / Site	Type	Project Stage	Reasons for inclusion
Hywind Scotland Pilot Park	Floating Offshore Wind Farm	Operational	The Hywind project's array is located 11.7 km and 8.1 km from the Offshore Array Area and Offshore ECC respectively. The Hywind project's ECC is located 14.3 km and 0.1 km from the Offshore Array Area and Offshore ECC respectively.
European Offshore Wind Deployment Centre	OWF	Operational	This project was included as it is operational and the project's array is 57.3 km and 32.4 km from the Offshore Array Area and Offshore ECC respectively.
Beatrice Offshore Wind Farm	OWF	Operational	This project was included as it is operational and the project's array is 114.1 km and 97 km from the Offshore Array Area and Offshore ECC respectively.
Kincardine Offshore Wind Farm	Floating Offshore Wind Farm	Operational	This project is operational and its array is 71.3 km and 54.8 km from the Offshore Array Area and Offshore ECC respectively.



Development / Site	Type	Project Stage	Reasons for inclusion
Moray East Offshore Wind Farm	OWF	Operational	This project’s array is 95.3 km and 80 km from the Offshore Array Area and Offshore ECC respectively
Seagreen Alpha and Bravo Offshore Wind Farms	OWF	Operational; Screening Report submitted for proposed increase in height of remaining consented, but not constructed, 36 turbines.	The Seagreen Alpha and Bravo projects’ arrays are 103.1 km and 95.6 km from the Offshore Array Area and Offshore ECC respectively.
Moray West Offshore Wind Farm	OWF	Under Construction	This project is under construction and scheduled to be operational by 2025. This project’s array is 107.7 km and 87.8 km from the Offshore Array Area and Offshore ECC respectively.
Eastern Green Link 2 (EGL2)	Interconnector	Consented	There is potential for temporal overlap of construction timelines and the EGL2 project is 26.78 km and 2.86 km of the Offshore Array Area and Offshore ECC.
NorthConnect	Interconnector	Consented	The NorthConnect Project overlaps with the Offshore Array Area and Offshore ECC respectively.
Cenos Floating Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The Cenos Floating Offshore Wind Farm project is included as it is scheduled to be operational by 2028. This project is currently considering three export cable route options, one of which would also pass through the north of the Offshore Array Area and Offshore ECC.
Morven Offshore Wind Farm	OWF	Scoping Submitted	This project’s array is 74.9 km and 74.2 km from the Offshore Array Area and Offshore ECC respectively.
Central North Sea Electrification (CNSE) Project	Platform Electrification	Scoping Submitted	This proposed development was included as it is scheduled to be operational by 2028 and its cable route is 4.1 km from the Offshore ECC. The cable landfall is also within 20 km of the Salamander Project.



Development / Site	Type	Project Stage	Reasons for inclusion
Muir Mhòr Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Muir Mhòr project is included as the construction period could overlap with Salamander. The Muir Mhòr project’s array is 28.4 km and 30.9 km from the Offshore Array Area and Offshore ECC respectively. The Muir Mhòr project’s ECC is 5.53 km from the Offshore Array Area and overlaps the Offshore ECC.
Green Volt Floating Offshore Wind Farm	Floating Offshore Wind Farm	Consent Application Submitted	The Green Volt project is included as it is scheduled to be operational by 2027. The Green Volt array is 33.6 km and 38.9 km from the Offshore Array Area and Offshore ECC respectively. The Green Volt export cable is 0.3 km from the Offshore Array Area and overlaps the Offshore ECC.
MarramWind Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The MarramWind project’s array is 47 km and 59 km of the Offshore Array Area and Offshore ECC respectively. The MarramWind ECC search area is 1.5 km from the Offshore Array Area and overlaps with the Offshore ECC.
Ossian Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Ossian project’s array is 79.5 from both the Offshore Array Area and Offshore ECC respectively.
Caledonia Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Caledonia project’s array is 80.3 km and 62.9 km from the Offshore Array Area and Offshore ECC respectively.
Buchan Floating Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Buchan project’s array is 66.3 km and 69.3 km from the Offshore Array Area and Offshore ECC respectively. The Buchan project’s ECC is 1.44 km from the Offshore Array Area and overlaps with the Offshore ECC.

4.3.7 Shipping and Navigation

4.3.7.1 Shipping and navigation will utilise set distances to consider cumulative effects from other projects in the vicinity, here a blanket approach of 50 nm (92.6 km) is taken to understand the potential for additive collision risk, navigational safety, vessel route displacement and vessel interactions within the region. This 50 nm threshold is used to identify offshore wind array areas; a more localised extent (2nm; 3.7 km) is applied to identify areas of subsea cable installation works that may potentially result in cumulative impacts. Cumulative effects to shipping and navigation will be present throughout the construction and operational phases of the projects identified. Where these phases overlap with the Salamander Project timeline, the magnitude of impact will be greatest.

Table 4.6 Shipping and Navigation

Development	Type	Project Stage	Reasons for inclusion
Eastern Green Link 2 (EGL2)	Interconnector	Consented	There is potential for temporal overlap of construction timelines and the EGL2 project is 26.78 km and 2.86 km of the Offshore Array Area and Offshore ECC.
NorthConnect	Interconnector	Consented	The NorthConnect Project overlaps with the Offshore Array Area and Offshore ECC respectively.
Green Volt Floating Offshore Wind Farm	Floating Offshore Wind Farm	Consent Application Submitted	The Green Volt project is included as it is scheduled to be operational by 2027. The Green Volt array is 33.6 km and 38.9 km from the Offshore Array Area and Offshore ECC respectively. The Green Volt export cable is 0.3 km from the Offshore Array Area and overlaps the Offshore ECC.
Muir Mhòr Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Muir Mhòr project is included as the construction period could overlap with Salamander. The Muir Mhòr project's array is 28.4 km and 30.9 km from the Offshore Array Area and Offshore ECC respectively. The Muir Mhòr project's ECC is 5.53 km from the Offshore Array Area and overlaps the Offshore ECC.
Cenos Floating Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The Cenos Floating Offshore Wind Farm project is included as it is scheduled to be operational by 2028. This project is currently considering three export cable route options, one of which would also pass through the north of the Offshore Array Area and Offshore ECC.



Development	Type	Project Stage	Reasons for inclusion
MarramWind Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The MarramWind project’s array is 47 km and 59 km of the Offshore Array Area and Offshore ECC respectively. The MarramWind ECC search area is 1.5 km from the Offshore Array Area and overlaps with the Offshore ECC.
Ossian Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Ossian project’s array is 79.5 from both the Offshore Array Area and Offshore ECC respectively.
Caledonia Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Caledonia project’s array is 80.3 km and 62.9 km from the Offshore Array Area and Offshore ECC respectively.
Buchan Floating Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Buchan project’s array is 66.3 km and 69.3 km from the Offshore Array Area and Offshore ECC respectively. The Buchan project’s ECC is 1.44 km from the Offshore Array Area and overlaps with the Offshore ECC.
Morven Offshore Wind Farm	OWF	Scoping Submitted	This project’s array is 74.9 km and 74.2 km from the Offshore Array Area and Offshore ECC respectively.

4.3.8 Aviation and Radar

4.3.8.1 The aviation and radar assessment considers physical obstacles at a low level within 40 km and radar effects within 100 km from the Salamander Project’s Offshore Array Area. This approach enables an assessment of the potential cumulative effects of creating aviation obstacles and effects relating to interference with radar detection within the region.

Table 4.7: Aviation and Radar

Development	Type	Project Stage	Reasons for inclusion
Green Volt Floating Offshore Wind Farm	Floating Offshore Wind Farm	Consent Application Submitted	The Green Volt project is included as it is scheduled to be operational by 2027. The Green Volt array is 33.6 km from the Offshore Array Area.
MarramWind Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	This proposed development was included as the MarramWind array is 47 km from the Offshore Array Area.
Muir Mhòr Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Muir Mhòr project is included as the Muir Mhòr project’s array is 28.4 km from the Offshore Array Area.
Caledonia Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Caledonia project’s array is 80.3 km from the Offshore Array Area Area.
Ossian Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Ossian project’s array is 79.5 from the Offshore Array Area Area.
Morven Offshore Wind Farm	OWF	Scoping Submitted	This project’s array is 74.9 km from the Offshore Array Area Area.
Buchan Floating Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Buchan project’s array is 66.3 km from the Offshore Array Area Area.

4.3.9 Seascape, Landscape and Visual Amenity

4.3.9.1 The seascape, landscape and visual amenity assessment will utilise set distances to consider cumulative effects from other projects in the vicinity, here a blanket approach of 60 km from the Offshore Array Area is taken to understand the potential for additive adverse impacts to visual amenity within the region.

Table 4.8 Seascape, Landscape and Visual

Development	Type	Project Stage	Reasons for inclusion
Green Volt Floating Offshore Wind Farm	Floating Offshore Wind Farm	Consent Application Submitted	The Green Volt project is included as it is scheduled to be operational by 2027. The Green Volt array is 33.6 km and 38.9 km from the Offshore Array Area and Offshore ECC respectively. The Green Volt export cable is 0.3 km from the Offshore Array Area and overlaps the Offshore ECC.
Muir Mhòr Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Muir Mhòr project is included as the construction period could overlap with Salamander. The Muir Mhòr project's array is 28.4 km and 30.9 km from the Offshore Array Area and Offshore ECC respectively. The Muir Mhòr project's ECC is 5.53 km from the Offshore Array Area and overlaps the Offshore ECC.
MarramWind Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The MarramWind project's array is 47 km and 59 km of the Offshore Array Area and Offshore ECC respectively. The MarramWind ECC search area is 1.5 km from the Offshore Array Area and overlaps with the Offshore ECC.

4.3.10 Marine Archaeology and Cultural Heritage

- 4.3.10.1 The list of projects for consideration in the marine archaeology and cultural heritage CEA are presented in the table below, alongside the reasons they are deemed to interact with the Salamander Project. Archaeological receptors are most at risk to direct physical impacts, however sediment deposition may also pose indirect physical impacts. The magnitude of these impacts will therefore be greatest during the construction phase, where projects which overlap with the construction timeline of the Salamander Project will have the greatest cumulative significance. Impacts to sediment transport and scour will still be observed during the operational phases, however these will be to a lesser extent.
- 4.3.10.2 The ZOI is therefore defined as a 20 km buffer around the Offshore Development Area, to encompass the 15 km tidal ellipse, plus an additional precautionary 5 km to include any potential for extreme events.
- 4.3.10.3 For the identification of a potential for additive adverse impacts to visual settings on onshore archaeological designated assets, a blanket approach of 60 km for projects with infrastructure above the waterline were identified (in line with the approach to the seascape, landscape and visual amenity assessment, **Section 4.3.9**).

Table 4.9 Marine Archaeology and Cultural Heritage

Development	Type	Project Stage	Reasons for inclusion
Eastern Green Link 2	Interconnector	Consented	There is potential for temporal overlap of construction timelines and the EGL2 project is 26.78 km and 2.86 km of the Offshore Array Area and Offshore ECC.
NorthConnect	Interconnector	Consented	The NorthConnect Project overlaps with the Offshore Array and Offshore ECC respectively.
Hywind Scotland Pilot Park	Floating Offshore Wind Farm	Operational	The Hywind project's array is located 11.7 km and 8.1 km from the Offshore Array Area and Offshore ECC respectively. The Hywind project's ECC is located 14.3 km and 0.1 km from the Offshore Array Area and Offshore ECC respectively.
Green Volt Floating Offshore Wind Farm	Floating Offshore Wind Farm	Consent Application Submitted	The Green Volt project is included as it is scheduled to be operational by 2027. The Green Volt array is 33.6 km and 38.9 km from the Offshore Array Area and Offshore ECC respectively. The Green Volt export cable is 0.3 km from the Offshore Array Area and overlaps the Offshore ECC.

Development	Type	Project Stage	Reasons for inclusion
Cenos Floating Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The Cenos Floating Offshore Wind Farm project is included as it is scheduled to be operational by 2028. This project is currently considering three export cable route options, one of which would also pass through the north of the Offshore Array Area and Offshore ECC.
Central North Sea Electrification Project (CNSE)	Platform Electrification	Scoping Submitted	The CNSE project is included as it is scheduled to be operational by 2028. The CNSE project's cable route is 18.1 and 4.6 km from the Offshore Array Area and Offshore ECC respectively.
MarramWind Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The MarramWind project's array is 47 km and 59 km from the Offshore Array Area and Offshore ECC respectively. The MarramWind ECC search area is 1.5 km from the Offshore Array Area and overlaps with the Offshore ECC.
Muir Mhòr Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Muir Mhòr project is included as the construction period could overlap with Salamander. The Muir Mhòr project's array is 28.4 km and 30.9 km from the Offshore Array Area and Offshore ECC respectively. The Muir Mhòr project's ECC is 5.53 km from the Offshore Array Area and overlaps the Offshore ECC.
Buchan Floating Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	The Buchan project's array is 66.3 km and 69.3 km from the Offshore Array Area and Offshore ECC respectively. The Buchan project's ECC area of search is 1.44 km from the Offshore Array Area and overlaps with the Offshore ECC.
Peterhead (CR070)	Dredge Spoil Disposal	Operational	Disposal ground located within 3.1 km of the Offshore ECC.
North Buchan Ness (CR080)	Dredge Spoil Disposal	Operational	Disposal ground located 1.7 km from the Offshore ECC.

4.3.11 Other Users of the Marine Environment

- 4.3.11.1 The list of projects for consideration in the Other Users Of The Marine Environment CEA are presented in the table below, alongside the reasons they are deemed to interact with the Salamander Project. Other marine users are most at risk to navigational safety impacts, obstruction to vessel movements and displacement. The magnitude of these impacts will be greatest during the construction phase when the frequency and number of Salamander Project vessel movements are at their highest, and projects which overlap with the construction timeline of the Salamander Project will have the greatest cumulative significance.
- 4.3.11.2 The ZOI is determined by the maximum spatial extent for potential effects on Other Users of the Marine Environment, as highlighted within **Volume ER.A.3, Chapter 18**, where the Other Users of the Marine Environment Study Area is defined as 10 nm (18.5 km) around the Offshore Development Area. Areas beyond this range are unlikely to experience any measurable change. As such, only plans or projects with potential to overlap spatially or temporally will be included in the CEA.
- 4.3.11.3 On this basis, the projects considered within the CEA are proposed projects in the early planning and application stages, only. Operational projects are also receptors of Other Users of the Marine Environment, and therefore are already considered within the Other Users of the Marine Environment Impact Assessment.
- 4.3.11.4 The Other Users of the Marine Environment impact assessment chapter considers other users from the projects listed in section 2.4 in addition to impacts on marine tourists and marine recreational users of the region.

Table 4.10: Other Users of the Marine Environment

Development	Type	Project Stage	Reasons for inclusion
NorthConnect	Interconnector	Consented	The NorthConnect Project overlaps with the Offshore Array Area and Offshore ECC respectively.
Eastern Green Link 2 (EGL2)	Interconnector	Consented	There is potential for temporal overlap of construction timelines and the EGL2 project is 26.78 km and 2.86 km of the Offshore Array Area and Offshore ECC respectively.



Development	Type	Project Stage	Reasons for inclusion
Central North Sea Electrification (CNSE) Project	Platform Electrification	Scoping Submitted	The CNSE project is included as it is scheduled to be operational by 2028. The CNSE project’s cable route is 18.1 and 4.6 km from the Offshore Array Area and Offshore ECC respectively.
Green Volt Floating Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Consent Application Submitted	The Green Volt project is included as it is scheduled to be operational by 2027. The Green Volt export cable is 0.3 km from the Offshore Array Area and overlaps the Offshore ECC.
Cenos Floating Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The Cenos Floating Offshore Wind Farm project is included as it is scheduled to be operational by 2028. This project is currently considering three export cable route options, one of which would also pass through the north of the Offshore Array Area and Offshore ECC.
MarramWind Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The MarramWind project is included as its ECC search area is 1.5 km from the Offshore Array Area and overlaps with the Offshore ECC.
Muir Mhòr Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The Muir Mhòr project is included as the construction period could overlap with the Salamander Project. The Muir Mhòr project’s ECC is 5.53 km from the Offshore Array Area and overlaps the Offshore ECC.
Buchan Floating Offshore Wind Farm Export Cable	Floating Offshore Wind Farm	Scoping Submitted	The Buchan project’s ECC is 1.44 km from the Offshore Array Area and overlaps with the Offshore ECC.

4.3.12 Socio-economics, Tourism and Recreation

- 4.3.12.1 Offshore projects within the central and northern North Sea that have the potential to overlap with the construction and operation and maintenance phases of the Salamander Project have been considered in relation to socio-economics, tourism and recreation impacts. This is primarily due to competition for labour and supply chain. Cumulative effects are not considered for decommissioning due to uncertainty and lack of evidence to support an assessment at this time.
- 4.3.12.2 In addition, onshore projects within 50 km of the Onshore Development Area have been considered for cumulative impacts. This 50 km radius has been determined to be the onshore socio-economics Zone of Influence (ZOI). The consideration of which projects to include within the topic ZOI was based on the nature and the scale of potential effects from the Salamander Project on specific socio-economics, tourism and recreational receptors as well as expert judgement of the socio-economics specialist consultant.

Table 4.11 Socio-economics, tourism and recreation

Development	Type	Project Stage	Reasons for inclusion
Inch Cape Offshore Wind Farm	OWF	Consented	Located within Scottish waters of the central North Sea and identified as having potential for temporal overlap of construction timelines with the Salamander Project.
Pentland Floating Offshore Wind Farm	Floating Offshore Wind Farm	Consented/Variation application submitted	Located within Scottish waters of the northern North Sea and identified as having potential for temporal overlap of construction timelines with the Salamander Project.
Berwick Bank Wind Farm	OWF	Consent application submitted	Located within Scottish waters of the central North Sea and identified as having potential for temporal overlap of construction timelines with the Salamander Project.
Green Volt Floating Offshore Wind Farm	Floating Offshore Wind Farm	Consent Application Submitted	The Green Volt project is located within Scottish waters of the northern North Sea included as it is scheduled to be operational by 2027.
Muir Mhòr Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	Located within Scottish waters of the central North Sea and identified as having potential for temporal overlap of construction timelines with the Salamander Project.



Development	Type	Project Stage	Reasons for inclusion
MarramWind Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	Located within Scottish waters of the northern North Sea.
Caledonia Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	Located within Scottish waters of the northern North Sea.
Cenos Floating Offshore Wind Farm	Floating Offshore Wind Farm	Scoping Submitted	Located within Scottish waters of the central North Sea and identified as having potential for temporal overlap of construction timelines with the Salamander Project.
Morven Wind Farm	OWF	EIA Scoping Report submitted July 2023	Project located within Scottish waters of the central North Sea with onshore development in Aberdeenshire
Neart Na Gaoithe (NNG) Offshore Wind Farm	Offshore Wind Farm	Under construction	Located within Scottish waters of the central North Sea and scheduled to be operational in 2024.
Seagreen Alpha and Bravo Offshore Wind Farms	Offshore Wind Farm	Operational; Screening Report submitted for proposed increase in height of remaining consented, but not constructed, 36 turbines.	Located within Scottish waters of the central North Sea.
Moray West Offshore Wind Farm	Offshore Wind Farm	Under construction	Located within Scottish waters of the northern North Sea and identified as having potential for temporal overlap of construction timelines with the Salamander Project.



Development	Type	Project Stage	Reasons for inclusion
Central North Sea Electrification (CNSE) Project	Sub-sea cable installation for electrification of existing oil and gas infrastructure in the central North Sea	Offshore EIA Scoping Report submitted May 2023.	Located within Scottish waters of the central North Sea and identified as having potential for temporal overlap of construction timelines with the Salamander Project.
NorthConnect	Interconnector	Consented	Located within Scottish waters of the central and northern North Sea.
Eastern Green Link 2 (EGL2)	High Voltage Direct Current link through the North Sea	Consented August 2023	Located within Scottish waters of the central North Sea and identified as having potential for temporal overlap of construction timelines with the Salamander Project. It should be noted that this Project commences in Peterhead
Kirkton Solar PV Farm and Energy Storage Facility	A solar Photovoltaic (PV) Farm of approximately 50 MW capacity and a battery energy storage facility of approximately 20 MW capacity.	Consented by the Energy Consents Unit December 2022	Site located within the onshore ZOI.

Development	Type	Project Stage	Reasons for inclusion
Peterhead - Energy Storage Facility	1 GW Battery Storage Facility	EIA Screening Opinion	Site located within the onshore ZOI.
Phase 5G Greenacres Development Wester Clerkhill Peterhead AB42 3QG	Erection of 11 Dwellings	Consented July 2022	Site located within the onshore ZOI.
Phase 5E Greenacres Development Wester Clerkhill Peterhead Aberdeenshire	Erection of 11 houses (Change of House Types to Planning Permission Reference APP/2016/0720 for Erection of 210 Dwellinghouses with Associated Infrastructure)	Consented May 2022	Site located within the onshore ZOI.
Phase 5 Greenacres Wester Clerkhill Kinmundy Road Peterhead Aberdeenshire	Erection of 13 Dwellinghouses (Change of House Types and Plot Layout from Planning Permission Reference	Consented March 2022	Site located within the onshore ZOI.

Development	Type	Project Stage	Reasons for inclusion
	APP/2016/0720 for Erection of 210 Dwellinghouses with Associated Infrastructure)		
Newton Road St Fergus Aberdeenshire AB42 3DD	Erection of 20 Dwellinghouses and Associated Infrastructure	Consented June 2020	Site located within the onshore ZOI.
Land Adjacent To The St Fergus Gas Terminal St Fergus Peterhead	Erection of 2 Wind Turbines (Hub Height 78m, 119m to Blade Tip), a 5 MWp Solar Photovoltaic Farm, Battery Storage Units and Associated Infrastructure	Consented July 2021	Site located within the onshore ZOI.
Land At West Road Peterhead Aberdeenshire	Erection of 20 houses and Associated Infrastructure	Consented August 2020	Site located within the onshore ZOI.

Development	Type	Project Stage	Reasons for inclusion
Land At West Road Peterhead Aberdeenshire	Erection of 32 houses and Associated Infrastructure	Consented August 2020	Site located within the onshore ZOI.
OP1 Site Newton Road St Fergus Aberdeenshire AB42 3DD	Erection of 20 houses and Associated Infrastructure	Consented June 2020	Site located within the onshore ZOI.
Phase 5 Greenacres Wester Clerkhill Kinmundy Road Peterhead	Erection of 11 houses (Amendments to Planning Permission Reference APP/2016/0720)	Consented August 2019	Site located within the onshore ZOI.
Inverugie Meadows Housing Development Peterhead Aberdeenshire	Erection of 29 houses (Change of House Types and Plot Layouts to Planning Permission Reference APP/2006/2149, APP/2013/3544)	Consented March 2019	Site located within the onshore ZOI.



Development	Type	Project Stage	Reasons for inclusion
	and APP/2015/3237 including Erection of 4 Additional Dwellinghouses)		
Peterhead Carbon Capture Power Station	Power station with carbon capture technology	EIA and Section 36 Application submitted March 2022	Project located in Peterhead (within the Onshore ZOI)
Acorn Carbon Capture and Storage Site	Carbon Capture and Storage Site	Funding awarded	Project located within Scottish waters of the central North Sea with onshore development in Aberdeenshire.
Thainstone Energy Recovery Plant	Energy recovery facility (waste to energy)	Consented by Aberdeenshire Council in June 2021	Located in Inverurie (within the Onshore ZOI)

5 References

IEMA (Institute of Environmental Management and Assessment) (July 2020). Impact Assessment Outlook Journal; Volume 7. Demystifying Cumulative Effects.

PINS (Planning Inspectorate) (2019). Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant infrastructure. Accessed on: 28/11/21. Available at:
<https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-17/>

Woodward, I, Thaxter, C.B., Owen, E, Cook, A.S.C.P (2019), Desk-based revision of seabird foraging ranges used for HRA screening, British Trust for Ornithology.

Wright, L.J., Ross-Smith, V.H., Austin, G.E., Massimino, D., Dadam, D., Cook, A.S.C.P., and Burton, N.H.K. (2012). Strategic Ornithological Support Services Project SOSS-05 Assessing the risk of offshore wind farm development to migratory birds designated as features of UK Special Protection Areas (and other Annex 1 species). British Trust for Ornithology: Thetford.

Appendix A – Cumulative Assessment Long List

Key		Marine Physical Processes	Benthic Ecology	Water and Sediment Quality	Fish and Shellfish Ecology	Offshore Ornithology	Marine Mammals	Commercial Fish	Shipping and Navigation	Aviation and Radar	Seascape, Landscape, Visual Impact Amenity	Marine Archaeology and Cultural Heritage	Other Users of the Marine Environment	Socio-economics, Recreation and Tourism
1	Included as part of the topic baseline and hence not considered within the cumulative impact assessment.													
2	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative impact assessment: Screened into assessment.													
3	Potential cumulative impact exists: Screened into assessment.													
4	No conceptual effect-receptor pathway: Screened out of assessment.													
5	Low data confidence: Screened out of assessment.													
6	No physical effect-receptor overlap: Screened out of assessment.													
7	No temporal overlap: Screened out of assessment.													
8	Cancelled/Decommissioned: Screened out of assessment													
Project Name	Sector													
Acorn Carbon Capture and Storage Site	Carbon Capture and Storage	6	6	6	6	4	4	4	6	4	4	6	6	3
Northern Endurance (Net Zero Teeside)	Carbon Capture and Storage	6	6	6	6	4	4	6	6	6	6	6	6	6
Sea Wall Repair and Extension - Alexandra Parade, Peterhead	Construction	1	1	1	1	1	1	1	1	1	1	1	1	1
North Base Jetty, Peterhead Harbour	Construction Activities	1	1	1	1	1	1	1	1	1	1	1	1	1
North Buchan Ness (CR080)	Dredge Disposal Site	3	3	3	3	3	4	1	1	4	4	3	1	1
Peterhead (CR070)	Dredge Disposal Site	3	3	3	3	3	4	1	1	4	4	3	1	1
Central North Sea Electrification Project	Electrification Project	3	3	3	3	3	5	3	6	5	5	3	3	3
Aberdeen to Mons Craiq	Fisheries Management Area	4	4	4	4	4	4	1	4	4	4	4	4	4
Mons Craig to Doolie Ness	Fisheries Management Area	4	4	4	4	4	4	1	4	4	4	4	4	4
Union waters of 3a and 4a (200-600m depth)	Fisheries Management Area	4	4	4	4	4	4	1	4	4	4	4	4	4
Eastern Green Link 1 (EGL1) HVDC Cables and Cable Protection' - Thorntonloch to Hawthorn Pit	Interconnector	6	6	6	6	4	4	6	6	6	6	6	6	1
Eastern Green Link 2 (EGL2) HVDC Cables and Cable Protection' - Peterhead to Drax	Interconnector	3	3	3	3	3	4	3	3	4	4	3	3	3
Eastern Green Link 3 (EGL3) HVDC Cables and Cable Protection' - Peterhead to Lincolnshire/West Norfolk	Interconnector	5	5	5	5	5	5	5	5	5	5	5	5	5
Eastern Green Link 4 (EGL4) HVDC Cables and Cable Protection' - Peterhead to Lincolnshire/West Norfolk	Interconnector	5	5	5	5	5	5	5	5	5	5	5	5	5

Key				Marine Physical Processes	Benthic Ecology	Water and Sediment Quality	Fish and Shellfish Ecology	Offshore Ornithology	Marine Mammals	Commercial Fish	Shipping and Navigation	Aviation and Radar	Seascape, Landscape, Visual Impact Amenity	Marine Archaeology and Cultural Heritage	Other Users of the Marine Environment	Socio-economics, Recreation and Tourism
1	Included as part of the topic baseline and hence not considered within the cumulative impact assessment.	2	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative impact assessment: Screened into assessment.	3	Potential cumulative impact exists: Screened into assessment.	4	No conceptual effect-receptor pathway: Screened out of assessment.	5	Low data confidence: Screened out of assessment.	6	No physical effect-receptor overlap: Screened out of assessment.	7	No temporal overlap: Screened out of assessment.	8	Cancelled/Decommissioned: Screened out of assessment	
Project Name	Sector															
NorthConnect HVDC Cable	Interconnector	3	3	3	3	4	4	3	3	4	4	3	3	3	3	3
Cenos (11)	INTOG	3	3	3	3	5	3	3	3	6	6	3	3	3	3	3
GreenVolt (6)	INTOG	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Project name unknown (INTOG MAP ID 10)	INTOG	6	6	6	6	5	5	6	6	6	6	6	6	6	6	5
Project name unknown (INTOG MAP ID 12)	INTOG	6	6	6	6	5	5	6	6	6	6	6	6	6	6	5
Project name unknown (INTOG MAP ID 13)	INTOG	6	6	6	6	5	5	6	6	6	6	6	6	6	6	5
Project name unknown (INTOG MAP ID 4)	INTOG	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Project name unknown (INTOG MAP ID 7)	INTOG	6	6	6	5	5	5	5	5	5	6	5	6	6	5	5
Project name unknown (INTOG MAP ID 8)	INTOG	6	6	6	6	5	5	6	6	6	6	6	6	6	6	5
Project name unknown (INTOG MAP ID 9)	INTOG	6	6	6	6	5	5	6	6	6	6	6	6	6	6	5
Scaraben (ID 1 or 2)	INTOG	6	6	6	5	5	5	5	5	5	6	5	6	6	5	5
Sinclair (INTOG MAP ID 1 or 2)	INTOG	6	6	6	5	5	5	5	5	5	6	6	6	6	5	5
Maintenance Dredge and Sea Deposit - Aberdeen North and South Harbour	Maintenance Dredge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Maintenance Dredging and Sea Deposit - Banff Harbour	Maintenance Dredge	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Key				Marine Physical Processes	Benthic Ecology	Water and Sediment Quality	Fish and Shellfish Ecology	Offshore Ornithology	Marine Mammals	Commercial Fish	Shipping and Navigation	Aviation and Radar	Seascape, Landscape, Visual Impact Amenity	Marine Archaeology and Cultural Heritage	Other Users of the Marine Environment	Socio-economics, Recreation and Tourism
1	Included as part of the topic baseline and hence not considered within the cumulative impact assessment.	2	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative impact assessment: Screened into assessment.	3	Potential cumulative impact exists: Screened into assessment.	4	No conceptual effect-receptor pathway: Screened out of assessment.									
5	Low data confidence: Screened out of assessment.	6	No physical effect-receptor overlap: Screened out of assessment.	7	No temporal overlap: Screened out of assessment.	8	Cancelled/Decommissioned: Screened out of assessment.									
Project Name	Sector															
Firth of Forth Bank	MPA			4	4	4	4	4	4	1	4	4	4	4	4	4
Southern Trench	MPA			4	4	4	4	4	4	1	4	4	4	4	4	4
Turbot Bank	MPA			4	4	4	4	4	4	1	4	4	4	4	4	4
Arven	Offshore Wind			6	6	6	6	5	5	6	6	6	6	6	6	6
Ayre Offshore Wind Farm	Offshore Wind			6	6	6	6	5	5	6	6	6	6	6	6	5
Beatrice Offshore Wind Farm	Offshore Wind			6	6	6	6	2	1	2	6	6	6	6	6	3
Bellrock Floating Offshore Wind Farm	Offshore Wind			6	6	6	5	5	5	5	6	5	6	6	6	5
Berwick Bank Offshore Wind Farm	Offshore Wind			6	6	6	6	3	3	6	6	6	6	6	6	3
Blyth Demo Phase 1	Offshore Wind			6	6	6	6	2	7	6	6	6	6	6	6	6
Blyth Demo Phase 2	Offshore Wind			6	6	6	6	5	3	6	6	6	6	6	6	6
Bowdun Offshore Wind Farm	Offshore Wind			6	6	6	5	5	5	5	5	5	5	5	6	5
Broadshore Offshore Wind Farm	Offshore Wind			6	6	6	5	5	5	5	5	5	6	6	6	5
Buchan Floating Offshore Wind Farm	Offshore Wind			3	3	3	3	5	5	3	3	3	6	3	3	5
Caledonia Offshore Wind Farm	Offshore Wind			6	6	6	3	5	3	3	3	3	6	6	6	5

Key				Marine Physical Processes	Benthic Ecology	Water and Sediment Quality	Fish and Shellfish Ecology	Offshore Ornithology	Marine Mammals	Commercial Fish	Shipping and Navigation	Aviation and Radar	Seascape, Landscape, Visual Impact Amenity	Marine Archaeology and Cultural Heritage	Other Users of the Marine Environment	Socio-economics, Recreation and Tourism
1	Included as part of the topic baseline and hence not considered within the cumulative impact assessment.	2	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative impact assessment: Screened into assessment.													
3	Potential cumulative impact exists: Screened into assessment.	4	No conceptual effect-receptor pathway: Screened out of assessment.													
5	Low data confidence: Screened out of assessment.	6	No physical effect-receptor overlap: Screened out of assessment.													
7	No temporal overlap: Screened out of assessment.	8	Cancelled/Decommissioned: Screened out of assessment.													
Project Name	Sector															
CampionWind Floating Offshore Wind Farm	Offshore Wind	6	6	6	5	5	5	5	5	5	5	5	5	5	6	5
Celtic Deep Phase 1	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Celtic Deep Phase 2	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Cluaran Deas Ear Offshore Wind Farm	Offshore Wind	6	6	6	5	5	5	5	5	5	5	5	5	5	6	5
Cluaran Ear-Thuath Floating offshore Wind Farm	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	5
Dogger Bank A	Offshore Wind	6	6	6	6	3	1	6	6	6	6	6	6	6	6	6
Dogger Bank B	Offshore Wind	6	6	6	6	3	7	6	6	6	6	6	6	6	6	6
Dogger Bank C	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	6
Dogger Bank D	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Dogger Bank South	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Dounreay Tri Demonstration Project	Offshore Wind	6	6	6	6	8	8	6	6	6	6	6	6	6	6	8
Dudgeon Offshore Wind Farm	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Dudgeon Offshore Wind Farm Extension	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	6
East Anglia One	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6

Key				Marine Physical Processes	Benthic Ecology	Water and Sediment Quality	Fish and Shellfish Ecology	Offshore Ornithology	Marine Mammals	Commercial Fish	Shipping and Navigation	Aviation and Radar	Seascape, Landscape, Visual Impact Amenity	Marine Archaeology and Cultural Heritage	Other Users of the Marine Environment	Socio-economics, Recreation and Tourism
1	Included as part of the topic baseline and hence not considered within the cumulative impact assessment.	2	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative impact assessment: Screened into assessment.													
3	Potential cumulative impact exists: Screened into assessment.	4	No conceptual effect-receptor pathway: Screened out of assessment.													
5	Low data confidence: Screened out of assessment.	6	No physical effect-receptor overlap: Screened out of assessment.													
7	No temporal overlap: Screened out of assessment.	8	Cancelled/Decommissioned: Screened out of assessment.													
Project Name	Sector															
East Anglia One North	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	6
East Anglia Three	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	6
East Anglia Two	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	6
European Offshore Wind Deployment Centre	Offshore Wind	6	6	6	1	2	1	2	1	1	1	1	1	6	1	
Five Estuaries Offshore Wind Farm	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Forthwind Offshore Wind Demonstration Project	Offshore Wind	6	6	6	6	3	7	6	6	6	6	6	6	6	6	5
Galloper Offshore Wind Farm	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Greater Gabbard Offshore Wind Farm	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Gunfleet Sands	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Havbredey	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Hornsea Project 1	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Hornsea Project 2	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Hornsea Project 3	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	6
Hornsea Project 4	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	6

Key				Marine Physical Processes	Benthic Ecology	Water and Sediment Quality	Fish and Shellfish Ecology	Offshore Ornithology	Marine Mammals	Commercial Fish	Shipping and Navigation	Aviation and Radar	Seascape, Landscape, Visual Impact Amenity	Marine Archaeology and Cultural Heritage	Other Users of the Marine Environment	Socio-economics, Recreation and Tourism
1	Included as part of the topic baseline and hence not considered within the cumulative impact assessment.	2	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative impact assessment: Screened into assessment.													
3	Potential cumulative impact exists: Screened into assessment.	4	No conceptual effect-receptor pathway: Screened out of assessment.													
5	Low data confidence: Screened out of assessment.	6	No physical effect-receptor overlap: Screened out of assessment.													
7	No temporal overlap: Screened out of assessment.	8	Cancelled/Decommissioned: Screened out of assessment.													
Project Name	Sector															
Humber Gateway	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Hywind Scotland Pilot Park	Offshore Wind	1	1	1	2	2	7	2	1	1	1	1	2	1	1	1
Inch Cape Offshore Wind Farm	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	3
Kentish Flats	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Kincardine Offshore Wind Farm	Offshore Wind	6	6	6	1	2	1	2	1	1	1	6	6	6	6	1
Levenmouth Demonstration Turbine (Fife Energy Park)	Offshore Wind	6	6	6	6	4	4	6	6	6	6	6	6	6	6	1
Lincs Offshore Wind Farm	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
London Array	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Lynn and Inner Dowsing Wind Farms	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
MachairWind	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
MarramWind Offshore Wind Farm	Offshore Wind	3	3	3	3	5	3	3	3	3	3	3	3	3	3	3
Methil Offshore Wind Demonstration Zone	Offshore Wind	6	6	6	6	2	7	1	1	1	1	1	6	6	6	6
Moray East Offshore Wind Farm	Offshore Wind	6	6	6	1	2	1	2	6	1	6	6	6	6	6	1
Moray West Offshore Wind Farm	Offshore Wind	6	6	6	6	3	3	2	3	6	6	6	6	6	6	3

Key				Marine Physical Processes	Benthic Ecology	Water and Sediment Quality	Fish and Shellfish Ecology	Offshore Ornithology	Marine Mammals	Commercial Fish	Shipping and Navigation	Aviation and Radar	Seascape, Landscape, Visual Impact Amenity	Marine Archaeology and Cultural Heritage	Other Users of the Marine Environment	Socio-economics, Recreation and Tourism
1	Included as part of the topic baseline and hence not considered within the cumulative impact assessment.	2	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative impact assessment: Screened into assessment.													
3	Potential cumulative impact exists: Screened into assessment.	4	No conceptual effect-receptor pathway: Screened out of assessment.													
5	Low data confidence: Screened out of assessment.	6	No physical effect-receptor overlap: Screened out of assessment.													
7	No temporal overlap: Screened out of assessment.	8	Cancelled/Decommissioned: Screened out of assessment.													
Project Name	Sector															
Morgan	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Morven Offshore Wind Farm	Offshore Wind	6	6	6	3	5	5	3	3	3	6	6	6	6	6	5
Muir Mhor Floating Wind Farm	Offshore Wind	3	3	3	3	5	3	3	3	3	3	3	3	3	3	3
Neart Na Gaoithe (NNG) offshore Wind Farm	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	3
Norfolk Vanguard	Offshore Wind	6	6	6	6	3	7	6	6	6	6	6	6	6	6	6
Norfolk Vanguard E&W	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	6
Norfolk Boreas	Offshore Wind	6	6	6	6	3	7	6	6	6	6	6	6	6	6	6
North Falls Offshore Wind Farm	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Ossian Floating offshore Wind Farm	Offshore Wind	6	6	6	3	5	5	3	3	3	6	6	6	6	6	5
Outer Dowsing Offshore Wind Farm	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Pentland Floating Offshore Wind Farm	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	3
Race Bank	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Rampion	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Rampion 2 / extension	Offshore Wind	6	6	6	6	6	3	6	6	6	6	6	6	6	6	6

Key				Marine Physical Processes	Benthic Ecology	Water and Sediment Quality	Fish and Shellfish Ecology	Offshore Ornithology	Marine Mammals	Commercial Fish	Shipping and Navigation	Aviation and Radar	Seascape, Landscape, Visual Impact Amenity	Marine Archaeology and Cultural Heritage	Other Users of the Marine Environment	Socio-economics, Recreation and Tourism
1	Included as part of the topic baseline and hence not considered within the cumulative impact assessment.	2	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative impact assessment: Screened into assessment.	3	Potential cumulative impact exists: Screened into assessment.	4	No conceptual effect-receptor pathway: Screened out of assessment.	5	Low data confidence: Screened out of assessment.	6	No physical effect-receptor overlap: Screened out of assessment.	7	No temporal overlap: Screened out of assessment.	8	Cancelled/Decommissioned: Screened out of assessment.	
Project Name	Sector															
Robin Rigg	Offshore Wind	6	6	6	6	4	1	6	6	6	6	6	6	6	6	6
ScotWind NE1 West	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Scroby Sands	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Seagreen Alpha and Bravo Offshore Wind farms	Offshore Wind	6	6	6	6	3	3	2	6	6	6	6	6	6	6	3
Sealtainn Offshore Wind	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
SENSE Pelastar	Offshore Wind	6	6	6	5	5	5	5	5	5	5	6	6	6	6	5
Sheringham Shoal Extension Offshore Wind Farm Extension	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	6
Sheringham Shoal Offshore Wind Farm	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Sofia	Offshore Wind	6	6	6	6	3	3	6	6	6	6	6	6	6	6	6
Spiorad na Mara	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Stromar Floating offshore Wind Farm	Offshore Wind	6	6	6	5	5	5	5	6	5	6	6	6	6	6	5
Talisk Offshore Wind Project	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Teeside	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
Thanet	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6

Key				Marine Physical Processes	Benthic Ecology	Water and Sediment Quality	Fish and Shellfish Ecology	Offshore Ornithology	Marine Mammals	Commercial Fish	Shipping and Navigation	Aviation and Radar	Seascape, Landscape, Visual Impact Amenity	Marine Archaeology and Cultural Heritage	Other Users of the Marine Environment	Socio-economics, Recreation and Tourism
1	Included as part of the topic baseline and hence not considered within the cumulative impact assessment.	2	Part of the baseline but has an ongoing impact and is therefore considered relevant to the cumulative impact assessment: Screened into assessment.													
3	Potential cumulative impact exists: Screened into assessment.	4	No conceptual effect-receptor pathway: Screened out of assessment.													
5	Low data confidence: Screened out of assessment.	6	No physical effect-receptor overlap: Screened out of assessment.													
7	No temporal overlap: Screened out of assessment.	8	Cancelled/Decommissioned: Screened out of assessment.													
Project Name	Sector															
Thanet Extension	Offshore Wind	6	6	6	6	8	7	6	6	6	6	6	6	6	6	6
Triton Knoll	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
West of Orkney Wind Farm	Offshore Wind	6	6	6	6	3	5	6	6	6	6	6	6	6	6	6
Westermost Rough	Offshore Wind	6	6	6	6	2	7	6	6	6	6	6	6	6	6	6
White Cross	Offshore Wind	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6
Geophysical Survey, St Fergus	Survey Activities	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4
Pipeline Survey Works - St. Fergus, Aberdeenshire	Survey Activities	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4