

SCOTTISH MINISTERS' CONSIDERATION OF THE CASE FOR A
DEROGATION UNDER THE CONSERVATION (NATURAL HABITATS,
&C.) REGULATIONS 1994 AND THE CONSERVATION OF OFFSHORE
MARINE HABITATS AND SPECIES REGULATIONS 2017

APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT
1989, AND FOR MARINE LICENCES UNDER THE MARINE (SCOTLAND) ACT
2010 AND THE MARINE AND COASTAL ACCESS ACT 2009 FOR THE
CONSTRUCTION AND OPERATION OF SALAMANDER OFFSHORE WIND FARM
AND ASSOCIATED TRANSMISSION INFRASTRUCTURE.

SITE DETAILS: SALAMANDER OFFSHORE WIND FARM, APPROXIMATELY 35
KILOMETRES EAST OF PETERHEAD.

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SECTION 1: INTRODUCTION

1 Requirement for Derogation

- 1.1 The Salamander offshore wind farm (“the Project”) is a floating offshore wind farm located approximately 35 kilometres (“km”) east of Peterhead in Aberdeenshire and will have a generating capacity of around 100 Megawatts (“MW”) produced by up to seven offshore Wind Turbine Generators (“WTGs”). There will be up to eight inter-array High Voltage Alternating Current (“HVAC”) cables and up to two offshore export HVAC cables. The combined length of inter-array cables within the offshore array area is ≤ 35 km and within the offshore export cable area corridor is ≤ 85 km. The export cables will make landfall east of Lunderton, north of Peterhead. Up to two subsea hubs may be deployed to allow the connection of inter-array cables to the export cable.
- 1.2 Salamander Wind Project Company Ltd (“the Company”) was awarded an exclusivity agreement under the Crown Estate Scotland (“CES”) Innovation and Targeted Oil and Gas (“INTOG”) leasing round. It is an innovation (“IN”) project which proposes to enable the further development of commercial scale floating offshore wind farms in Scottish waters,¹ as well as contribute directly to Scotland’s decarbonisation targets. The application has been made prior to the sectoral marine plan (“SMP”) for the INTOG leasing round concluding, however, the Scottish Ministers note that the Draft Updated SMP for Offshore Wind Energy (incorporating the INTOG leasing round) is currently at consultation closing on 22 August 2025.
- 1.3 The Appropriate Assessment (“AA”) for the Project concluded there will be an Adverse Effect on Site Integrity (“AEOSI”) from the Project in combination with other plans or projects for the following features in respect of the following designated sites:
- Gannet at Forth Islands SPA and Outer Firth of Forth and St Andrews Bay Complex SPA (breeding);
 - Kittiwake at Buchan Ness to Collieston Coast SPA, East Caithness Cliffs SPA, Forth Islands SPA, Fowlsheugh SPA, North Caithness Cliffs SPA, Outer Firth of Forth and St Andrews Bay Complex SPA (breeding and non-breeding) and Troup Pennan and Lion’s Heads SPA; and
 - Seabird assemblage qualifiers for Buchan Ness to Collieston Coast SPA (kittiwake), East Caithness Cliffs SPA (kittiwake), Forth Islands SPA (gannet and kittiwake), Fowlsheugh SPA (kittiwake), North Caithness Cliffs SPA (kittiwake), Outer Firth of Forth and St Andrews Bay Complex SPA (breeding

¹ The Scottish Ministers consider references to Scottish waters to include the Scottish inshore region (between 0 and 12 nautical miles) under the Marine (Scotland) Act 2010 and in the Scottish offshore region (between 12 and 200 nautical miles).

and non-breeding kittiwake and breeding gannet) and Troup Pennan and Lion's Heads SPA (kittiwake).

- 1.4 Further, the AA for the Project was unable to conclude beyond reasonable scientific doubt that there would be no AEOSI from the Project alone or in combination with other plans or projects for the following features in respect of the following designated sites:

Alone:

- Guillemot at Buchan Ness to Collieston Coast SPA and Outer Firth of Forth and St Andrews Bay Complex SPA (breeding and non-breeding); and
- Seabird assemblage at Buchan Ness to Collieston Coast SPA (guillemot) and Outer Firth of Forth and St Andrews Bay Complex SPA (breeding and non-breeding guillemot).

In-combination:

- Kittiwake at St Abb's Head to Fast Castle SPA;
- Guillemot at Troup, Pennan and Lion's Heads SPA;
- Puffin at Forth Islands SPA and Outer Firth of Forth and St Andrews Bay Complex SPA (breeding);
- Razorbill at East Caithness Cliffs SPA, Fowlsheugh SPA, Outer Firth of Forth and St Andrews Bay Complex SPA (non-breeding) and Troup, Pennan and Lion's Heads SPA; and
- Seabird assemblage feature of St Abb's Head to Fast Castle SPA (kittiwake).

- 1.5 A copy of the AA can be found in Annex B: Appropriate Assessment.

- 1.6 Given that the AA identified adverse effects at the sites listed above, the Scottish Ministers, as the competent authority, can only agree to the Project if the requirements of the derogation provisions in the Conservation (Natural Habitats, &c.) Regulations 1994 ("the 1994 Regs") and Conservation of Offshore Marine Habitats and Species Regulations 2017 ("the 2017 Regs") (together, "the Habitats Regulations") are met. These provisions are set out at Regulations 49 and 53 of the 1994 Regs and Regulations 29 and 36 of the 2017 Regs, and the Scottish Ministers have considered the Project against the requirements of these provisions to determine whether the Project can be consented.

- 1.7 Regulation 49 of the 1994 Regs and Regulation 29 of the 2017 Regs state that the competent authority may agree to a project if: firstly, it is satisfied that there are no alternative solutions; secondly, the project must be carried out for imperative reasons of overriding public interest ("IROPI"), notwithstanding a negative assessment of the implications for a European site. Thirdly, sections 53 of the 1994 Regs and 36 of the 2017 Regs further require that where a project is agreed to in accordance with

regulation 49 of the 1994 Regs and regulation 29 of the 2017 Regs, notwithstanding a negative assessment of the implications for a European site, the Scottish Ministers shall secure that any necessary compensatory measures are taken to ensure that the overall coherence of the UK Site Network is protected. These three derogation provisions must be considered by the Scottish Ministers sequentially.

1.8 The following sections document the Scottish Ministers' considerations in respect of each of these provisions, which have been assessed in the following sequential order:

- alternative solutions to the Project have been considered;
- consideration has been given to whether there are IROPI justifying the Project proceeding; and
- whether compensatory measures can be secured to ensure the overall coherence of the UK Site Network is protected.

1.9 The Company submitted a HRA Derogation Caseⁱ ("Derogation Case") and Compensation Plan Roadmapⁱⁱ to the Scottish Ministers with its section 36 consent and marine licence applications on 26 April 2024. This was consulted on and comments received from NatureScot on 2 July 2024. Following the completion of the AA, the Company provided further details about its proposed compensatory measures in a Compensation Overview Reportⁱⁱⁱ, Compensation Plan^{iv}, Ecological Evidence Report^v and Outline Compensation Implementation and Monitoring Plan^{vi} on 18 December 2024 (together "the Compensation Package"). NatureScot was consulted on these documents on 14 January 2025 and provided a response on 21 February 2025. On 30 April 2025 the Company submitted supporting notes in relation to the Compensation Package which included: [REDACTED]

[REDACTED]
[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] NatureScot was consulted on these documents on 30 April 2025 and provided a response on 21 May 2025.

SECTION 2: CONSIDERATION OF ALTERNATIVE SOLUTIONS

2 Project Objectives

2.1 This section of the derogation assessment identifies the objectives of the Project before considering how these objectives could be met by alternative solutions with a lesser impact on the UK Site Network.

2.2 The Company has outlined at table 10-2 of its Derogation Case a series of objectives for the Project as follows:

- Develop the future local supply chain to maximise the economic benefits of offshore wind built out to Scotland and the UK.
- Facilitate local content and fabrication with Scottish ports.
- Support the development of technologies that are vital to the future, secure GB energy mix to ensure they are ready for commercialisation ahead of large-scale build out in Scotland.
- Expedite the delivery of floating wind, particularly the ScotWind portfolio.
- De-risk new technologies that will be vital to the future, secure GB energy mix.
- Support cost reduction in new technologies.
- Support decarbonisation and security of the UK's energy supply.
- Support the development of environmental standards and best practices in impact mitigation and biodiversity outcomes.

2.3 The Company has further provided an explanation of how the Project will achieve each of the identified objectives within table 10-2. This in turn is derived from the identified need for the Project, detailed within section 10 and table 10-21 of its Derogation Case. In summary, the Company considers that the Project is needed as it will contribute to UK and Scottish legally binding decarbonisation targets to achieve net zero and mitigate against climate change. In addition, the Company recognises that the Project will contribute towards the security of an indigenous energy supply given its role in enabling and de-risking the deployment of floating offshore wind ("FOW") as an innovative technology to be used in Scotland's offshore wind pipeline. The Company elsewhere considers that the Project is needed to stimulate the local supply chain in support of future commercial scale projects in Scotland and overseas. The Company further identifies that the Project is needed given its role in supporting FOW and therefore it will contribute towards the cost reduction journey of this new technology which will have consequential benefits for consumers and energy prices.

2.4 The Scottish Ministers consider that whilst the Company's proposed objectives, as underpinned by the identified need for the Project, are valid to help frame the development of the Project, they are not all essential for the consideration of the alternative solutions.

2.5 The Scottish Ministers have considered the Company's proposed objectives in the context of Scottish and UK policy frameworks, including the Scottish Government's legislative commitments and policy framework, which set out key national ambitions for Scotland's energy future to achieve net zero emissions by 2045 to mitigate the effects of climate change. The development of offshore wind is driven by the need to limit the magnitude and impacts of climate change and the earlier that steps towards decarbonisation are introduced the greater their contribution to limiting climate change

will be. The need for urgent and additional increases in offshore wind capacity is a significant and constant theme in Scottish and UK policy. The Scottish Ministers consider therefore the key objectives of the Project are: (i) supporting the development and de-risking the use of offshore wind innovative technologies in Scottish waters, in particular FOW, which will be used in the pipeline of large scale FOW projects in Scottish waters forming part of the current CES leasing rounds; and (ii) be operational at the earliest date possible in terms of contributing to the decarbonisation of Scottish electricity supply by way of offshore wind.

- 2.6 The Scottish Ministers have in particular considered part one of the Climate Change (Scotland) Act 2009, paragraph 3.1.1 of the Scottish Government's draft Energy Strategy and Just Transition Plan ("ESJTP") (2023), the Scottish Government's Offshore Wind Policy Statement (2020) together with the draft 'Update to 2020 Offshore Wind Policy Statement: Scotland's Offshore Wind Ambition' (2025) and the Initial Plan Framework for the development of a Sectoral Marine Plan (SMP) for INTOG Decarbonisation (2022) ("INTOG-IPF") whilst noting that the Updated Draft SMP for Offshore Wind Energy incorporating and building upon the INTOG-IPF is currently at consultation due to close on 22 August 2025.
- 2.7 The Scottish Ministers have also had due regard to the UK Government's Overarching National Policy Statement for energy (EN-1), published in January 2024, and its National Policy Statement for renewable energy infrastructure (EN-3), published in November 2023. These policies provide a framework for delivering the UK's international commitments on climate change. The Scottish Ministers have taken particular account of EN-1's identification of nationally significant low carbon infrastructure (which includes offshore wind) as a critical national priority ("CNP") such that when considering derogations under the Habitat Regulations the starting point for CNP infrastructure should be the overarching need for energy security and decarbonising the power sector to combat climate change (paragraph 4.2.21). Whilst the Scottish Ministers note that EN-3 covers offshore wind (>100MW in England and >350MW in Wales - subject to exceptions by direction from the Secretary of State) (paragraph 1.6.1) and that the Project will have a generating capacity for around 100MW, it is the Scottish Ministers' view that EN-3 remains a relevant policy consideration given the contribution which the Project will make in supporting the delivery of further FOW projects in Scottish waters and the recognised urgent need to increase offshore wind capacity in both Scotland and the UK (as well as in recognition that the 100MW threshold does not apply in Scottish waters and is in any event subject to change through a ministerial direction).
- 2.8 The Scottish Ministers have also considered the UK Government's British Energy Security Strategy (2022) ("BESS") and the contribution which Scotland can make to the target of 50GW of offshore wind by 2030 across the UK (p.16). The Scottish Ministers also note the BESS ambition that up to 5GW of the 50GW target should be innovative FOW (p.17). The Scottish Ministers have also had regard to the targets

contained within the UK Government's Clean Power 2030 Action Plan. In addition, the Scottish Ministers have considered the Climate Change Committee ("CCC") "Progress in reducing emissions" 2023 Report to Parliament, which highlights that an average annual deployment rate of 4.5GW is required to deliver 50GW of offshore wind by 2030 (p.204). The Scottish Ministers have further considered the CCC "Progress in reducing emissions" 2024 Report to Parliament, which notes low levels of offshore wind deployment in 2023 (p.56) and the need to get rates back on track given offshore wind's essential contribution to net zero and government renewable targets (p.84).

2.9 The Scottish Ministers consider the following to be the appropriate and primary objectives of the Project and consider that the benefits from the Project to Scotland and/or the Company could alternatively be provided by any projects with these same objectives:

- i. To support the development and de-risk the use of offshore wind innovative technologies in Scottish waters, in particular FOW, for the purpose of reducing technological barriers to facilitate commercial scale floating of offshore wind in Scottish waters;
- ii. To generate low carbon electricity from offshore wind farms in support of the decarbonisation of the Scottish electricity supply;
- iii. To export electricity to the electricity grid to support Scottish commitments for offshore wind generation and security of supply;
- iv. To contribute to the delivery of operational offshore wind in Scottish waters before 2030; and
- v. To contribute towards the generation of low carbon electricity from offshore wind farms in Scottish waters to support the decarbonisation of the Scottish electricity supply and ensure security of supply.

3 Identification of Alternative Solutions

3.1 The Company has identified and assessed at sections 12 and 14 of its Derogation Case several alternatives to the Project and their feasibility. The comparison considers the 'do nothing' option, alternative locations, alternative design, and alternative means of operation.

3.2 The Scottish Ministers do not consider alternative forms of renewable technologies or onshore wind farms to be "alternatives" to offshore wind given the policy objectives identified for the Project. It follows that identification of reasonable alternative solutions will consist of either a 'Do Nothing' approach, or consideration of an alternative project location, scale or design. Any alternative identified must be capable of meeting the identified policy objectives, be legally, technically and financially feasible, and have a lower impact on the designated sites.

- 3.3 The Scottish Ministers have not considered expediting the construction and operation of already consented wind farm projects, noting there are external factors as to whether a consented project will be constructed and become operational and at the scale it was consented for.
- 3.4 The Scottish Ministers have also taken into consideration the policy on alternatives contained in the UK's EN-1, which provides that the need for energy security and decarbonisation of the power sector to combat climate change requires a significant number of deliverable locations for CNP Infrastructure, across the UK, and for each location to maximise its capacity. On this basis, EN-1 notes that "other potential plans or projects deliverable in different locations to meet the need for CNP Infrastructure is unlikely to be treated as an alternative solution" and "...the existence of another way of developing the proposed project which results in a significantly lower generation capacity is unlikely to meet the objectives and therefore be treated as an alternative solution" (para 4.2.21).
- 3.5 Alternative types of wind farm projects considered are:
- a) Offshore wind farms not in Scottish waters
 - b) Offshore wind farms within Scottish waters, including:
 - i) Outside existing leasing round areas;
 - ii) Within existing leasing round areas;
 - iii) Within the exclusivity agreement area in which the Project is located; and
 - c) Alternative scale or design for the Project.

4 Consideration of Alternative Solutions

4.1 Do Nothing

- 4.1.1 The Company considers a 'do nothing' scenario at section 12.1 of its Derogation Case and provides that not proceeding with the Project would result in the loss of 100MW of offshore wind capacity and a loss of an innovative 'supply chain' project which focuses on bringing innovative FOW technology to the commercial market that can be delivered by the Scottish supply chain.
- 4.1.2 The Scottish Ministers consider that not proceeding with the Project would remove the risk of impacts to the qualifying features of the designated sites detailed in section 1.3 and 1.4 of this derogation assessment; however, it would fail to meet the Scottish Ministers identified Project objectives. In particular, it would fail to support the development and derisking of FOW technologies for the purpose of reducing technological barriers to facilitate commercial scale FOW projects and the deployment of additional offshore wind generation before 2030. A 'do nothing' scenario would also be inconsistent with the emissions reductions requirements of the Climate Change (Scotland) Act 2009 to mitigate the effects of climate change. In addition, the Scottish

Ministers consider that adopting a ‘do nothing’ approach would hinder meeting the ambitions set out in the BESS (2022) and Clean Power 2030. The Scottish Ministers therefore do not consider the ‘do nothing’ approach to be a feasible alternative solution as it would fail to meet the aim of the Project as established by its need.

4.2 Offshore Wind Farms not in Scottish waters

4.2.1 The Scottish Ministers consider that offshore wind farm projects located either outside Scottish waters, i.e., within UK waters, or in other countries, are not an alternative to the Project since this would not meet the identified objectives which are specific to Scottish waters with a view to achieving Scotland’s offshore wind ambitions and net zero targets.

4.3 Offshore Wind Farms within Scottish waters

4.3.1 *Alternative locations – Outside existing lease round areas*

4.3.1.1 The Scottish Ministers consider that alternative locations should align with the site selection process for offshore wind proposals controlled by the CES leasing process. It follows that those sites that are not subject to a CES leasing round are not economically or legally viable alternative solutions.

4.3.1.2 Furthermore, the Scottish Ministers are of the view that any location which has not yet commenced a site selection exercise would not meet the identified Project objectives due to the long lead-in times for site selection, environmental impact assessment, consenting, detailed design, procurement, consent compliance, and construction. On this basis, the Scottish Ministers consider that an alternative Scottish site outside an existing leasing round area would not significantly contribute to Scottish offshore wind capacity targets in response to the urgent need for renewable energy.

4.3.2 *Alternative locations – Within existing lease round areas*

4.3.2.1 The Scottish Ministers have considered alternative locations or sites within earlier leasing rounds including, the Scottish Territorial Waters Leasing Round (2009), the Crown Estate (“TCE”) Leasing Round 1 (2000), Round 2 (2003), Round 3 (2010). The Scottish Ministers consider that such sites which are largely or fully developed form part of the existing baseline of installed offshore wind capacity, and therefore are not feasible alternatives. The Scottish Ministers have also considered those projects subject to TCE Extension Round (2017), Round 4 (2021) and the Celtic Sea Floating Offshore Wind Round 5 (2025). The Scottish Ministers, however, consider that leasing sites located in English and Welsh waters do not represent feasible alternative locations to the Project, as they fail to align with each of the Scottish Ministers’

identified Project objectives, which are all specific to Scottish decarbonisation targets and security of the Scottish electricity supply.

4.3.2.2 The Scottish Ministers have, however, considered Berwick Bank Wind Farm, a proposed development identified under TCE Leasing Round 3 (2010) (see section 4.3.2.5 below), for which an application has been submitted to the Scottish Ministers. It is the Scottish Ministers' position that the consenting of other offshore wind farms does not lessen the scale or urgency of the need for further offshore wind projects in pursuance of renewable energy and net zero government targets, as reflected by the Scottish Ministers' Project objectives.

4.3.2.3 In addition, in considering whether certain TCE Round 3 sites that have not been taken forward could be considered as alternatives, the Scottish Ministers consider that such sites would fail to deliver within the timeframe of the Project and therefore not satisfy the identified Project objectives relating to contributing to Scottish Government's 2030 targets for installed offshore wind capacity. In addition, the Scottish Ministers note that none of the TCE Round 3 sites comprise FOW turbines and therefore would fail to meet objective (i) insofar as paving the way for facilitating the development of innovative FOW technologies.

4.3.2.4 The Scottish Ministers have given further consideration to alternative offshore wind farms, including those within the ScotWind and INTOG leasing round outlined below. In its consideration of alternatives, the Scottish Ministers have accounted for the potential of the Project to generate and export around 100MW of low carbon electricity to the electricity grid by the end of 2029. The Project has a contract for Transmission Entry Capacity ("TEC") with the National Energy System Operator ("NESO") for 200MW of electricity at the Peterhead substation with an effective date from October 2029.

Berwick Bank Wind Farm (TCE Round 3)

4.3.2.5 Berwick Bank Wind Farm is a large scale development which is located in shallow waters and will use fixed bottom foundations. Berwick Bank has a contract for TEC with NESO for 1,150MW of electricity at the Berwick Bank A 275/66kV offshore substation with an effective date from October 2028 and a further 1,150MW of electricity at Berwick Bank B 275/66kV offshore substation with an effective date from October 2029.² The Scottish Ministers note that Berwick Bank will use established technology, fixed bottom foundations in shallow waters and therefore do not consider it to be an alternative under objective (i). Whilst Berwick Bank has the potential to be

² <https://www.neso.energy/data-portal/transmission-entry-capacity-tec-register> Version dated: 4 July 2025. Accessed: 5 July 2025

operational before 2030 (if consented),³ the Scottish Ministers also do not consider it to be an alternative under objective (iv). A significant volume of operational offshore wind is required as soon as possible to meet both Scottish and UK targets but also to mitigate the magnitude and impacts of climate change. The Scottish Ministers consider that in the event that both the Project and Berwick Bank are consented, they would both be required to satisfy objective (iv).

Pentland Floating Offshore Wind Farm

- 4.3.2.6 The Company gives due consideration to the Pentland Floating Offshore Wind Farm Project at section 12.1.1.8 of its Derogation Case. A consent under section 36 of the Electricity Act 1989 (“s.36 consent”) and marine licence under part 4 of the Marine (Scotland) Act 2010 (“2010 Act”) were granted on 28 June 2023, varied on 3 April 2024, for the Pentland project constituting up to six FOW turbines and a maximum generating capacity of 100MW of electricity. The Pentland project has secured a contract for TEC with NESO with an effective date of August 2025. The Company distinguishes the Pentland project as it will focus on a different technology package from the Project and it will likely support different supply chain facilities, given its location off the coast of Dounreay, Caithness.
- 4.3.2.7 The Scottish Ministers note that the Pentland project is a test and demonstration project, an update to the Dounreay Tri Offshore Wind Farm that was granted consent in 2017. The Scottish Ministers agree with the Company’s conclusions reached on the Pentland project insofar as it does not represent a viable alternative to the Project. In addition, and in considering the findings of the UK FOW Taskforce’s 2024 report on FOW, in particular the mission to build out the project pipeline (see section 6.26 of this derogation assessment), the Scottish Ministers consider that Scotland will benefit from a programme of multiple stepping stone innovation and demonstration projects to help de-risk the technology, improve learnings and prepare for large scale commercial deployment. The Scottish Ministers therefore consider that both the Project and the Pentland project are required to satisfy objective (i). Moreover, whilst the Pentland project has the potential to be operational before 2030, the Scottish Ministers do not consider it to be an alternative under objective (iv). It is the Scottish Ministers’ position that a significant volume of operational offshore wind is required as soon as possible to meet both Scottish and UK targets but also to mitigate the magnitude and impacts of climate change. As such, the Scottish Ministers consider that both the Project and the Pentland project would be required to satisfy objective (iv).

ScotWind Leasing Round

³ At the time of writing this Derogation Assessment the Berwick Bank s.36 consent application has not been granted. References to the Berwick Bank project are made without prejudice to that determination decision

- 4.3.2.8 The Scottish Ministers recognise the need for urgent decarbonisation of the electricity supply and the significant role Scottish offshore wind projects can contribute to both Scottish and UK net zero targets. This is evidenced by the current consultation on the Scottish Government's Update to the 2020 Offshore Wind Policy Statement: Scotland's Offshore Wind ambition (see section 6.8 of this derogation assessment) which sets out an ambition of up to 40GW of new offshore wind by 2035-2040. The Scottish Ministers consider that there are limited developments (across all existing leasing round areas) which can be operational before 2030 and the Project is one of these developments. As such, in considering ScotWind projects as an alternative, the Scottish Ministers have therefore considered the likelihood of those ScotWind projects being operational before 2030. It is the Scottish Ministers' position that projects with contracts for TEC with NESO without effective dates before 2030 do not constitute alternatives to the Project as they fail to meet the identified objective (iv).
- 4.3.2.9 A s.36 consent and marine licences under part 4 of the 2010 Act and the Marine and Coastal Access Act 2009 ("2009 Act") were granted on 27 June 2025 for the West of Orkney offshore wind farm, a ScotWind project. The West of Orkney project is for up to 125 WTGs, with a maximum generating capacity of around 2GW of electricity. The Scottish Ministers note that the West of Orkney project will use established technology, fixed bottom foundations in shallow waters and therefore do not consider it to be an alternative under objective (i). The West of Orkney project has a contract for TEC with NESO for 750MW of electricity with an effective date from October 2029 and for a further 1,500MW of electricity with an effective date from October 2031.⁴ Whilst the West of Orkney project has the potential to be partly operational before 2030, the Scottish Ministers do not consider it to be an alternative under objective (iv). A significant volume of operational offshore wind is required as soon as possible to meet both Scottish and UK targets but also to mitigate the magnitude and impacts of climate change. Furthermore, the Scottish Ministers consider both the Project and West of Orkney would be required to satisfy objective (iv).

INTOG Leasing Round

- 4.3.2.10 In its consideration of alternative locations within the INTOG leasing round, the Company provides extensive detail at section 12.1 and 12.2.4 of its Derogation Case on the site selection process for the Project as informed by the INTOG-IPF and CES leasing round parameters. The Company concludes that any potential alternative site within the INTOG-IPF process would need to undergo a similar assessment process. Given the timescales involved in identifying locations with suitable technical characteristics, proximity to supply chain facilities and commercial qualities such

⁴ <https://www.neso.energy/data-portal/transmission-entry-capacity-tec-register> Version dated: 4 July 2025. Accessed: 5 July 2025

sites would not be viable as alternatives to the Project, which is further advanced in its development and consenting timeline.

- 4.3.2.11 It is the Scottish Ministers' view that only those sites which have secured an INTOG exclusivity agreement can be considered as alternatives, given the long lead in times for project development and the urgent need for renewable energy. On this basis, any alternative site without such an agreement would fail to meet the identified Project objectives.
- 4.3.2.12 In its consideration of INTOG projects, the Scottish Ministers note that CES offered exclusivity agreements to 13 INTOG projects for the purpose of either targeting the electrification of oil and gas infrastructure (comprising eight TOG projects)⁵ or developing innovative technologies with such projects not exceeding 100MW (comprising five IN projects). These TOG projects and IN projects are considered further below.

TOG Projects

- 4.3.2.13 The Scottish Ministers do not consider those TOG projects with contracts for TEC with NESO without effective dates before 2030 to be alternatives to the Project under objective (iv). In this respect, the Scottish Ministers note that only the Green Volt TOG project has a contract for TEC with NESO with an effective date before 2030.
- 4.3.2.14 A s.36 consent and marine licences under part 4 of the 2009 Act and the 2010 Act were granted on 19 April 2024 for the Green Volt TOG project. The Green Volt TOG project is for up to 35 WTGs, with a maximum generating capacity of 560MW of electricity. Whilst it is anticipated that a proportion of this electricity will be provided to an oil and gas installation, the excess electricity generated will be exported to the onshore grid. In this regard the Green Volt TOG project has a contract for TEC with NESO for 300MW of electricity with an effective date from October 2029. Whilst the Green Volt TOG project has the potential to be operational before 2030, the Scottish Ministers do not consider it to be an alternative under objective (iv). It is the Scottish Ministers' position that a significant volume of operational offshore wind is required as soon as possible to meet both Scottish and UK targets but also to mitigate the magnitude and impacts of climate change. As such, the Scottish Ministers consider that both the Project and the Green Volt TOG project would be required to satisfy objective (iv). Furthermore, the Scottish Ministers consider that whilst the Green Volt TOG project will use FOW technology, it is not an innovation project, which aims to serve as a testbed for developing and accelerating the use of innovative offshore wind technologies, including FOW. The Scottish Ministers also note that the planning criteria contained within the INTOG-IPF is distinct for TOG and IN projects, with the

⁵ Note that one TOG project has since dropped from the INTOG leasing round resulting in seven TOG projects.

former required to be located within areas designated for the targeted oil and gas decarbonisation, while a prerequisite for IN projects is that they cannot be located within such designated areas. In this respect, the Scottish Ministers do not consider the Green Volt TOG project to be a feasible alternative to the Project, in particular due to its failure to satisfy the identified objective (i).

- 4.3.2.15 In addition, the Scottish Ministers have taken due account of the Culzean TOG project, which received a marine licence under part 4 of the 2009 Act on 15 August 2024. This project is for one floating WTG and semi-submersible floating substructure. The WTG will have a maximum generating capacity of 3MW and will not export electricity to the grid onshore. The Scottish Ministers do not therefore consider this to be an alternative to the Project under objectives (i) and (ii).

IN Projects

- 4.3.2.16 The Company's Derogation Case at section 12.1 and 12.2.4 provides detailed consideration of the remaining four IN projects with exclusivity agreements, forming part of the INTOG leasing round, as potential alternatives to the Project. With reference to the approach adopted by CES, the Company underscores the importance of having multiple "stepping stone" IN Projects that will de-risk and support the delivery of FOW in Scottish waters, ensuring that lessons can be learned and investments incentivised in advance of the deployment of larger-scale offshore wind farms which are needed to meet Scottish offshore wind policy ambitions and net zero targets. Furthermore, the Company notes CES's decision to offer exclusivity agreements to a number of IN Projects, thereby taking account of the multiple technologies that will require to be tested and trialled as part of the development process, in particular regarding FOW. In addition, the Company highlights the need for multiple IN projects across various locations to provide learning opportunities and build the capacity of the multiple supply chain facilities, for example installation ports, that will be required to deliver the pipeline of offshore wind farm projects in Scottish waters.
- 4.3.2.17 With regard to the other IN Projects, the Scottish Ministers note that Flora Offshore Wind Farm (50MW) and Malin Sea Wind Offshore Wind Farm (100MW) are aimed at providing power to an onshore hydrogen facility in Aberdeen, thus not connecting to the grid. The Malin project situated off the west coast of Scotland, will benefit installation facilities in its proximity and focus on carbon capture and hydrogen production. In addition, both projects remain at an early development stage, and will therefore not be operational before the Project. As such, the Scottish Ministers consider that neither project will satisfy the identified objectives for the Project, and therefore will not suffice as alternative solutions.

- 4.3.2.18 The Scottish Ministers note that Sinclair Offshore Wind Farm and Scaraben Offshore Wind Farm, which are both IN Projects with a supply chain focus, in development alongside the Broadshore Offshore Wind Farm, have contracts for TEC with NESO for 100MW of electricity each with an effective date from 31 October 2033.⁶ The Scottish Ministers therefore do not consider the Sinclair and Scaraben projects constitute viable alternatives insofar as failing to satisfy objective (iv).
- 4.3.2.19 The Scottish Ministers are of the view that there are no alternative viable IN Projects that could meet the identified Project objectives. It is the Scottish Ministers' view that Scotland will benefit from a programme of multiple stepping stone innovation and demonstration projects to help de-risk the technology, improve learnings and prepare for large scale commercial deployment of FOW. The Scottish Ministers therefore consider that the IN projects are not alternatives to each other. In addition, in reaching their conclusion, the Scottish Ministers have given due consideration to the policy contained in EN-1 that projects for CNP infrastructure deliverable in alternative locations are unlikely to be suitable alternatives.

Repowering existing offshore wind farms

- 4.3.2.20 The Scottish Ministers do not consider repowering existing offshore wind farms as an alternative to the Project noting that repowering projects would not materially increase the existing baseline of installed capacity. In addition, repowering could be subject to technical complexities around decommissioning and construction stages, therefore impacting timescales for delivery.
- 4.3.2.21 Typically, offshore wind farms have a life span of 20 to 25 years before planned decommissioning and current operational wind farms will not reach their decommissioning stage for another decade under exception of the Robin Rigg project for which the s.36 consent is due to expire in 2032. The Scottish Ministers are therefore of the opinion that the option of repowering existing offshore wind farms would fail to meet Project objective (iii) in failing to provide any additional operational capacity before 2030. Furthermore, given that the existing offshore wind farms largely comprise fixed bottom foundations, as opposed to the use of floating structures, they would not achieve objective (i) insofar as to enable the development of innovative FOW technologies. It follows that the option of repowering projects within existing locations does not represent a viable alternative to the Project.
- 4.3.2.22 Having considered alternative offshore wind locations within existing leasing round areas, the Scottish Ministers are satisfied that there are no alternative viable projects located within Scottish waters either in isolation or cumulatively. In reaching this view, the Scottish Ministers have also taken account of the policy contained in EN-1 that

⁶ <https://www.neso.energy/data-portal/transmission-entry-capacity-tec-register> Version dated: 4 July 2025. Accessed: 5 July 2025

projects for CNP infrastructure deliverable in alternative locations are unlikely to be suitable alternatives.

Future leasing rounds

4.3.2.23 As regards future leasing rounds that may emerge, the Scottish Ministers consider that such developments would fail to deliver within the timeframe of the Project and would therefore not meet objective (iv). Furthermore, it is the Scottish Ministers' position that alternative locations should align with the site selection process for offshore wind proposals controlled by the CES leasing process. It follows that those sites which are not subject to a CES leasing round are not economically or legally viable alternative options.

4.3.2.24 The Scottish Ministers therefore conclude that there are no feasible alternative locations within existing or future leasing round areas that represent alternative solutions to the Project. In reaching their conclusion the Scottish Ministers have in particular considered the policy contained in EN-1 that projects for CNP infrastructure deliverable in alternative locations are unlikely to be suitable alternatives.

4.3.3 *Alternative locations – Within the Project's exclusivity agreement area*

4.3.4 In its consideration of alternative locations within the Project's exclusivity agreement area, the Company outlines at sections 12.2.4.2 – 12.2.4.6 of its Derogation Case the key constraints which informed the final location and boundaries of the Project. In particular, the Company highlights that a comprehensive site selection process was undertaken, taking account of good technical characteristics, proximity to key ports and supply chain facilities and commercial qualities inherent to an economically viable project. The Company further provides that it has completed a significant amount of preparatory work in relation to the site selected for the Project, including two years of bird surveys and analysis, and extensive public consultation. On this basis, the Company concludes that any new site would need to be subject to a similar assessment process, meaning that it would not be operational within the timescales of the Project in its existing form.

4.3.4.1 Taking account of the Company's position, the Scottish Ministers are of the view that there are no alternative viable locations to the Project within its exclusivity agreement area that could meet the identified Project objectives, specifically objective (iv). The Scottish Ministers have also had regard to the policy contained in EN-1 that CNP infrastructure projects deliverable in alternative locations are unlikely to be suitable alternatives.

4.3.5 *Alternative scale or design for the Project*

- 4.3.5.1 The Company's Derogation Case explores alternative scales and design iterations of the Project at section 12.3, which includes an assessment of changes to the development area and proposed layout, alterations to WTG numbers and heights, and operational shutdowns during certain periods of time.
- 4.3.5.2 In respect of a reduction to the development area and its layout, the Company refers to the refinement process undertaken as part of site selection and the various environmental and engineering considerations that resulted in the location of the Project, which can sufficiently accommodate the parameters of its proposed design envelope. The Company underscores the importance of retaining flexibility in its assessment of design options, allowing account to be taken of technical constraints which may restrict layout and siting. Furthermore, the Company notes that the extent of the array area and its location comprises of a scale that can accommodate the range of designs within its proposed project design envelope. The Company also notes that according to survey data results seabird densities across the extent of the array area are generally uniform and so any specific refinement to the array area would be unlikely to provide a targeted benefit to those seabird species affected by the Project. On this basis, the Company concludes that any commitment to layout or reduction in array area would not be feasible as an alternative and it is likely that the array area will be further refined and reduced as technical data is understood through the Project design, specification and layout process.
- 4.3.5.3 The Company gives due consideration to the option of changing WTG numbers, in addition to various technical alternations to the WTG air gap, which would involve increasing the minimum lower tip height of the blades, in turn requiring an increase to tower heights and foundation sizing. In its assessment at sections 12.3.3 and 12.3.4 the Company concludes that these options would not be viable alternatives as they would result in outcomes which would impact the achievement of the core project objectives. The Company further considers that operational shutdowns during either brief or extended periods would not be feasible or financially viable and would also reduce the energy generating capacity of the Project.
- 4.3.5.4 Taking account of the Company's detailed assessment of alternative scales or design parameters for the Project, the Scottish Ministers agree that they would not be financially or technically viable alternatives. Furthermore, the Scottish Ministers consider that they could have the potential to reduce the capacity for electricity generation, and therefore fail to achieve the identified Project objectives. Furthermore, the Scottish Ministers have considered the policy contained in EN-1 that the existence of another way of developing the proposed project which results in a significantly lower generation capacity is unlikely to be treated as an alternative solution.

4.4 Conclusion on Alternative Solutions

- 4.4.1 The Scottish Ministers have considered the information on alternatives submitted by the Company in the context of the appropriate and primary objectives of the Project identified at section 2.9 of this derogation assessment and are of the view that there are no less damaging alternatives to the Project that would satisfy the objectives and be technically, legally and financially viable. The Scottish Ministers therefore conclude that alternative solutions are not available and IROPI must be considered.

SECTION 3: IMPERATIVE REASONS OF OVERRIDING PUBLIC INTEREST

5 Imperative Reasons of Overriding Public Interest

- 5.1 This section of the derogation assessment determines whether there are IROPI for the Project to proceed, subject to adequate compensatory measures being implemented.
- 5.2 The parameters of IROPI are explored in guidance provided by Defra⁷ and the European Commission,⁸⁹ which identify the following principles:
- **Imperative** – Urgency and importance: There would usually be urgency to the objective(s) and it must be considered “indispensable” or “essential” (i.e., imperative). In practical terms, this can be evidenced where the objective falls within a framework for one or more of the following:
 - i) Actions or policies aiming to protect fundamental values for citizens’ life (health, safety, environment);
 - ii) Fundamental policies for the State and the Society; or
 - iii) Activities of an economic or social nature, fulfilling specific obligations of public service.
 - **Public interest**: The interest must be a public rather than a solely private interest (although a private interest can coincide with delivery of a public objective);
 - **Long-term**: The interest would generally be long-term; short-term interests are unlikely to be regarded as overriding because the conservation objectives of protected sites are long term interests.
 - **Overriding**: The public interest of development must be greater than the public interest of conservation of the relevant protected site(s).

⁷ DEFRA, NE, the Welsh Government and Natural Resources Wales (2021) ‘Habitats Regulations Assessment: Protecting a European site’: [Habitats regulations assessments: protecting a European site - GOV.UK](#)

⁸ European Commission (2019), Directorate-General for Environment, Managing Natura 2000 sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC, Publications Office, 2019: [Publication detail - Publications Office of the EU](#)

⁹ While the UK is no longer an EU member state and not subject to the oversight of the EU Commission, the guidance is still helpful in understanding the intention behind the drafting of the Habitats Directive as captured within our domestic legislation.

- 5.3 The IROPI test under the Habitats Regulations identifies certain grounds for IROPI that may be advanced in favour of such a project. When the designated site hosts a priority natural habitat or species, reasons for IROPI must include human health, public safety or beneficial consequences of primary importance to the environment, or any other IROPI. Otherwise, if the designated site does not host a priority natural habitat or species, IROPI may include reasons of a social or economic nature.
- 5.4 As outlined at section 1.3 and 1.4 the affected features of the Buchan Ness to Collieston Coast SPA, East Caithness Cliffs SPA, Forth Islands SPA, Fowlsheugh SPA, North Caithness Cliffs SPA, St Abb's Head to Fast Castle SPA and Troup, Pennan and Lion's Heads SPA from the Project are not priority species. Therefore, the Company's IROPI submission within its Derogation Case at sections 15 to 17 pertains to consideration of economic and social benefits and recognises that the Project aims to:
- Develop the Scottish supply chain for the pipeline of FOW ScotWind projects;
 - Provide substantial social and economic stimulus to the local area;
 - Contribute directly and indirectly to Scotland's and the UK's legally binding climate change targets by helping to decarbonise the UK's energy supply.
- 5.5 In demonstrating the IROPI test, the Scottish Ministers must firstly be satisfied that the Project serves a public interest, and if so, the Scottish Ministers are required to weigh that public interest against the conservation interest which will be put at risk by the Project, therefore deciding whether the public interest overrides the potential harm to the integrity of the designated sites.

6 Description of public interest

- 6.1 The Scottish Ministers consider that the appropriate and primary objectives of the Project (paragraph 2.9) are relevant to assessing and weighing IROPI for the Project.
- 6.2 In 2019 the Scottish Government declared a climate emergency, recognising the global and unprecedented impacts from this and the urgent response required. The principal and essential benefit of the Project is the immediate and significant contribution it will provide to limiting the extent of the climate crisis in accordance with the objectives of the Paris Agreement. The consequences of not achieving those objectives would be severely deleterious to societies across the globe, including Scotland and the rest of the UK, to human health, to social and economic interests and to the environment.
- 6.3 The need to address climate change is the principal driver behind the Climate Change (Scotland) Act 2009. This legislation legally binds the Scottish Government to reach net zero Scotland by 2045. In addition, at a UK level the Climate Change Act 2008

binds the UK to achieving 100% reduction in greenhouse gas emissions by 2050 compared to 1990 levels.

- 6.4 In this regard, the Scottish Ministers consider that the Project will make an important and urgent contribution to delivering on these statutory duties and thereby mitigating the effects of climate change through its role as an innovation project, which will help enable the delivery and unlock the potential of FOW technology for the purpose of large-scale commercial development, in particular the ScotWind leasing round and its pipeline of projects. Furthermore, the Project has the potential to become operational before 2030, and therefore the Scottish Ministers consider that it will play a key part in the future deployment at pace of FOW and Scotland's clean energy transition to net zero by the deadlines set in statute.
- 6.5 The Scottish Government's programme for offshore wind is set out across a number of policy documents and establishes the critical role for offshore wind in the delivery of Scottish and UK net zero targets.

The Scottish Energy Strategy (2017)

- 6.6 This strategy sets out Scotland's 2050 energy vision, recognising the need to decarbonise the whole energy system and deliver "secure, affordable, clean energy" in alignment with net zero ambitions. It recognises the strategic priority of renewables and low carbon solutions as part of the transition. Targets sets for the Scottish energy system by 2030 include the equivalent of 50% of the energy for Scotland's heat, transport and electricity consumption to be supplied from renewables sources. This strategy also introduces the concept of "no regret" or "low regret" options and actions when pursuing its strategic priorities. This concept is also adopted in the UK Government's Net Zero Strategy (2021) and defined as actions which are cost effective and are likely to provide benefit in the future.

The Scottish Government's Offshore Wind Policy Statement (2020)

- 6.7 The statement includes an ambition to achieve up to 8-11GW of offshore wind in Scottish waters by 2030. This is the basis for the planning assumptions for the existing SMP for Offshore Wind Energy, which set out a spatial footprint for a maximum potential capacity of up to 10GW. However, the Offshore Wind Policy Statement also highlights the Committee on Climate Change report, published in May 2019, which includes a scenario requiring at least 75GW of offshore wind in UK waters by 2050 in order to achieve net zero.

Update to the 2020 Offshore Wind Policy Statement: Scotland's Offshore Wind Ambition

- 6.8 On 18 June 2025, the Scottish Government launched a consultation to update the Offshore Wind Policy Statement (see section 6.7 of this derogation assessment)

acknowledging that since 2020 there had been considerable change in the policy and planning landscape for offshore renewable energy generation in Scotland and the wider UK, referencing the Clean Power 2030 Action Plan (see section 6.23 of this derogation assessment) as a considerable driver for change. The updated Policy Statement, sets out the Scottish Government commitment to maximise the deployment of offshore wind in Scotland, by resetting its ambition and aiming for the development of up to 40GW by 2035-2040.

INTOG-IPF (2022)

- 6.9 The INTOG-IPF has been developed under the Scottish Government's system of sectoral marine planning which aims to facilitate the sustainable development of offshore renewable energy in Scottish waters. It provides an overview of the planning process and the areas of seabed that will inform the CES leasing process for INTOG decarbonisation projects, which aims to help decarbonise North Sea oil and gas platforms, bolster innovation, support increased economic activity and enable access to the renewable energy sector. Any project that will progress under the framework must satisfy either the criteria for IN projects, or TOG projects. In this regard, the framework recognises that IN projects should not exceed 100MW potential generation capacity, should not be located within areas marked for exclusion or inside areas identified for TOG projects, and must have been awarded exclusivity through the CES leasing process. A core objective of the framework is to identify new sustainable opportunities for offshore wind development by maximising opportunities for economic development, investment and employment in Scotland. The INTOG-IPF particularly emphasises the potential of FOW technology given its suitability to deeper Scottish waters, which in turn will significantly contribute to the offshore wind energy supply.

The Scottish Government's draft Energy Strategy and Just Transition Plan (2023) ("ESJTP")

- 6.10 Following publication of a draft Energy Strategy and Just Transition Plan in 2023 the Scottish Ministers have consulted on setting further offshore wind deployment ambitions out to 2045 (by which point the Government is committed to achieving net zero). The draft ESJTP sets out how its vision of affordable, resilient and clean energy supplies for Scotland will be delivered, maximising home-grown clean energy provision and significantly increasing domestic production of renewable electricity by 2030, helping to address climate change by substantially reducing the emissions of our energy sector.

The CCC's Progress in reducing emissions in Scotland - Report to Parliament (2023)

- 6.11 In its report monitoring Scotland's progress in reducing emissions, the CCC notes that Scotland is failing to achieve its climate change goals and actions continue to fall short of what at the time the report was published, was legally required under the targets in

the Climate Change (Scotland) Act 2009. In its assessment of electricity supply policies, the CCC recommends that the Scottish Government should work with the UK Government to ensure that targets for Scotland (as set out in the ESJTP) are met, together with the UK-wide objective of a decarbonised electricity supply by 2035. The CCC recognises that energy policy, regulation of energy markets and networks, and nationally significant infrastructure planning remains a reserved matter to UK Government and therefore Scottish targets will depend on the delivery of UK policy and supporting energy infrastructure (i.e., grid connections).

The Green Industrial Strategy (2024)

- 6.12 This strategy recognises Scotland's leading role in the energy transition to clean and renewable power and the economic benefits of this transition to net zero. One of the strategy's key focus areas is the need to maximise Scotland's established wind economy, which includes building on the capabilities of Scotland's "first-mover advantage" in the development of FOW technology and design for the purpose of generating clean electricity. The strategy particularly emphasises Scotland's potential as an early mover in FOW and the benefits which this would have in terms of expanding the capacity of the domestic supply chain and presenting opportunities across the offshore wind sector.

The Draft Updated SMP for Offshore Wind Energy ("SMP-OWE") (2025)

- 6.13 The Scottish Government's updated SMP-OWE is currently in draft form and at the consultation stage (from 30 May 2025 to 22 August 2025). It aims to take account of the significant ambition demonstrated by the ScotWind and INTOG leasing rounds, and the resultant pipeline of potential offshore wind development in Scottish waters thereby maximising their delivery over the next decade. As such, its proposed purpose is to provide a strategic spatial framework for offshore wind development in Scotland, incorporating both ScotWind option areas and INTOG option and exclusivity agreement areas into one integrated planning framework. In the context of INTOG projects, it will specifically build upon the INTOG-IPF and its planning process (2022) (see section 6.9 of this derogation assessment).

National Innovation Strategy: 2023 to 2033

- 6.14 The Scottish Government National Innovation Strategy 2023 to 2033 sets out the vision for Scotland to be one of the most innovative small nations in the world and how this vision can be delivered by 2033. The strategy describes how innovation is a key tool to make Scotland a fairer, more equal, wealthier and greener country. Innovation is defined as:

"the introduction and implementation of a new or significantly improved product, service, process, or method with the purpose of helping to solve societal challenges

or delivering economic growth. Innovation is about new ideas, technologies and research being utilised, adopted and commercialised to benefit society and the economy” (p.7).

- 6.15 Energy transition is one of the key areas identified in the strategy, in particular opportunities in floating offshore wind.
- 6.16 Referencing the Scottish Government’s innovation strategy, the Scottish Offshore Wind Energy Council (SOWEC), a partnership between the Scottish public sector and the offshore wind industry, details the innovation opportunities presented by INTOG projects and Salamander specifically in a January 2025 report entitled ‘SOWEC Innovation Guide Showcasing Scotland’s offshore wind research, development and commercialisation landscape and how to unlock its potential’. The guide details two specific examples relating to innovation at the Salamander project.

UK Government Policy

- 6.17 The global climate emergency and energy demand ensures that UK-wide energy security and energy policy, although a reserved matter, is a crucial consideration for Scottish Ministers.

UK Government Energy White Paper: Powering our Net Zero Future (2020)

- 6.18 Building on the ambitions contained within the UK Government’s Ten Point Plan for a Green Industrial Revolution (2020), this paper sets a target of 40GW of offshore wind by 2030, including 1GW of FOW, across the UK. It recognises the degree of autonomy within the devolved administrations in contributing towards this target and facilitating the transition towards a low cost, clean electricity system.

British Energy Security Strategy (2022)

- 6.19 This strategy aims to respond to concerns over security, affordability and sustainability of the UK’s energy supply. In particular, it recognises the importance of ensuring greater energy security for the UK, which can be achieved through an electricity supply coming from domestic renewable energy sources, as opposed to volatile international fossil fuel markets. In the context of offshore wind, this strategy commits to fully decarbonising electricity generation by 2050, and sets out an ambition for the delivery of up to 50GW of offshore wind capacity by 2030 of which up to 5GW should be innovative FOW. Given the current pipeline of possible offshore wind development across the UK it is clear that Scottish projects will be required to make a significant contribution to this ambition.

The CCC’s Progress in reducing emissions - Report to Parliament (2023 and 2024)

- 6.20 In its consideration of electricity supply within its most recent progress report on net zero, the CCC emphasised the need to ensure that decarbonisation ambitions are delivered through the rapid scale-up of low carbon electricity supply and its supporting infrastructure. As regards the deployment of renewable energy, the CCC recognised that generating capacity has grown through 2022, however, deployment rates are not tracking the UK government's target of 50GW by 2030, which would require annual deployment of 4.5GW. In its most recent 2024 report, the CCC further noted that current installation rates of offshore wind remain off track due to low levels of deployment in 2023, which present a continued risk to achievement of UK government renewables targets. It provided an assessment that achieving at least 50GW by 2030 will now require more than 5GW of offshore wind to be added on average each year.

UK Government's Overarching National Policy Statement for Energy (known as EN-1) and UK Government's National Policy Statement for Renewable Energy Infrastructure (known as EN-3)

- 6.21 As mentioned above, EN-1 came into force on 17 January 2024, and sets out UKG policy on delivering major energy infrastructure. While a UK Government policy, it is a relevant consideration for Scottish Ministers when they are exercising their functions on licensing and consenting of offshore wind projects as energy policy is generally a matter reserved to UK Ministers. EN-1 notes that the provision of nationally significant low carbon infrastructure, which includes offshore wind, is a critical national priority ("CNP") for the UK Government and further that energy security and decarbonising the power sector to combat climate change are: "...capable of amounting to IROPI for HRAs [habitats regulations assessments]...for CNP Infrastructure" (EN-1 para. 4.2.21).
- 6.22 EN-3 sets out that applications for offshore wind above 100MW in England will be considered as nationally significant infrastructure projects ("NSIPs") and that because energy policy is generally a matter reserved to UK Ministers this policy may be a relevant consideration in planning decisions in Wales and Scotland (para 1.4.5). EN-1 further notes that in recognition of the level and urgency of the need for NSIPs that the Secretary of State will start with a presumption in favour of granting consent to these projects (para. 4.1.3).

Clean Power 2030

- 6.23 Clean Power 2030 (published in 2024) sets in place an Action Plan to deliver 43-50GW of offshore wind capacity across the UK in order to achieve a 95% clean energy system by 2030. The Action Plan aims to support deployment of up to 50GW of offshore wind by 2030, including up to 5GW from FOW. The Scottish Government is committed to working closely with the UK Government on shared ambitions to decarbonise energy generation and drive progress towards net zero in line with these objectives. To meet the Clean Power 2030 target, the Action Plan recognises the

important role projects in Scotland will play and emphasises the need to capitalise on projects that are already in the planning system and able to commence construction before 2030. The Action Plan further recognises the importance of deploying FOW at scale in order to meet the UK's longer-term decarbonisation targets. In particular, the Action Plan highlights the benefit of FOW technologies, which will provide additional GW capacity through its use in deeper water depths (p.81).

The Offshore Wind Industrial Growth Plan (2024)

- 6.24 The Industrial Growth Plan has been developed by RenewablesUK, the Offshore Wind Industry Council, The Crown Estate and Crown Estate Scotland, working in partnership with wider industry. The Industrial Growth Plan aims to grow the offshore wind supply chain to accelerate and de-risk delivery, as well as grow market share and technology leadership for the UK. The IGP sets out priorities, objectives, actions and investment needs in the key technologies FOW. The IGP states that:

“With a strong research capability, world leading test and demonstration facilities and a market leading position in floating offshore wind, the UK can develop and commercialise new technologies to address key sector challenges to: Scale-up wind turbines; Lower the LCOE (levelised cost of energy) of deep water and floating, Improve overall wind farm reliability and enable positive environmental impacts.”

- 6.25 Throughout the Industrial Growth Plan the need to make significant development in FOW innovation and technology by 2030, if the UK is to capitalise on domestic and international FOW opportunities, is clear.

Floating Wind: Anchoring the next generation offshore

- 6.26 The UK Floating Offshore Wind Task Force, a joint government-industry initiative, is working to support and accelerate the development of the UK floating wind sector and help deliver the Industrial Growth Plan 2024. The work of the Task Force is funded by, amongst others, Crown Estate Scotland, Highlands and Island Enterprise, and Scottish Enterprise. The 2024 Report 'Floating Wind: Anchoring the next generation offshore' focuses on five key missions; Driving Cost Reduction, Building our Pipeline, Enabling Infrastructure, Commercialising Supply Chain Opportunities and Innovating to Win.

- 6.27 The pipeline of INTOG stepping stone projects, which includes Salamander, are described as:

“...prerequisites to unlocking floating offshore wind cost-trajectory” (p.7)

- 6.28 And it states the following:

"Pilot projects, demonstration and early industrial-scale projects are essential stepping stones towards commercialisation. A leading UK programme of pilot projects will allow accelerated learning about the technology, supply chain, infrastructure and regulatory processes, de-risk the investment needed to scale up the industry and drive down costs" (p.17).

7 The Overriding Test

- 7.1 The AA completed for the Project was unable to conclude beyond reasonable scientific doubt that there would be no adverse effect on the qualifying features of the designated sites identified at section 1.3 and 1.4 in combination with other projects. In demonstrating IROPI the public interest of the Project must therefore be weighed against these qualifying interests of the designated sites, which are protected by the Habitats Regulations.
- 7.2 In its consideration of the 'overriding test' the Company considers in its Derogation Case that the overriding nature of the public interest of the Project relates to its role as a facilitator in the delivery of a pipeline of renewable energy projects, which will by consequence provide a greater benefit to health, safety and the environment, in addition to benefits of a social and economic nature, all of which reflects core IROPI reasons. Given that the Project does not impact upon priority features, the Company has gone beyond what is required in demonstrating that the Project meets this IROPI reasoning, as opposed to the lower standard of demonstrating IROPI of a social or economic nature where non-priority features are concerned.
- 7.3 The Scottish Ministers consider that the Project will play an important role in assisting with the innovation, upscaling and de-risking of FOW as a rapidly expanding technology which will be key for the majority of ScotWind projects. The UK has a world leading FOW pipeline with the potential of up to 25GW of projects in Scottish waters, which means that the development of this technology in order to deliver the FOW project pipeline is fundamental in order to help realise benefits which will serve the long term national public interest. In this regard, the Scottish Ministers consider the innovation aspect of the Project (as identified within objective (i)) to serve the national public interest as the advancement of FOW technology in the energy transition should allow for the development of commercial-scale projects in deeper waters. This will in turn contribute to Scottish and UK legislative commitments and policy ambitions (outlined above) which reflect the urgent need to reduce carbon emissions as swiftly as possible by maintaining and quickening the pace of delivery in tackling the global climate crisis. The Scottish Ministers also recognise the importance of a reliable, secure and stable energy supply in the UK, with reduced dependencies on imported oil and gas, which can be subject to geopolitical tensions and volatile international markets, as emphasised by the BESS (2022). The Scottish Ministers therefore consider the Project's innovative role in developing and de-risking FOW technology for the purpose of upscaling its use and deployment for commercial scale projects in

deeper waters to further serve the long term national public interest through its contribution to energy security as a domestic renewable energy source of electricity.

- 7.4 The Scottish Ministers are therefore of the view that there is an imperative reason which justifies the need for the Project and as such this overrides the AEOSI on the designated Sites and the conservation objectives at risk. In reaching this conclusion, the Scottish Ministers have considered the scale of the predicted adverse impacts on designated sites. The Scottish Ministers are of the view that the Project will contribute towards the UK and Scottish targets for offshore wind energy within the 2030 timeframe (with associated benefits for climate change and energy security) through its innovative role as an enabler for commercial scale FOW projects, and in its own right as an offshore wind farm generating electricity before 2030. As such, the Scottish Ministers consider that they have established that there is an overriding need and urgency for the Project.
- 7.5 In particular, the Scottish Ministers have put considerable weight on the potential for the Project to become operational before 2030, a timeframe for which there is a limited pipeline of projects that can meet this objective. The Scottish Ministers recognise the need to accelerate and support development of FOW technology and consider it is in the public's interest to maximise the operational offshore wind capacity by 2030, which means all viable projects are necessary and urgent. The Scottish Ministers also note that the public interest inherent in tackling the climate crisis is also served by the fact that mitigation of the climate crisis will in turn alleviate the nature crisis, given that many of the pressures exerted by the nature crisis emanate from the climate crisis.
- 7.6 On this basis, and given the established lack of alternative solutions, the Scottish Ministers consider that the Project will serve the national public interest through its urgent contribution of generating and delivering low carbon electricity before 2030 and its ability as an innovation project to facilitate and accelerate the commercial scale pipeline of future FOW projects. The Scottish Ministers are therefore of the view that the Project will support and contribute towards the Scottish Government's decarbonisation commitments in pursuance of its legally binding target for net zero by 2045, and further avoid compromising security of electricity supply in Scotland. The Scottish Ministers are therefore of the view that there is an imperative reason justifying the need for the Project, which overrides the AEOSI and the conservation objectives at risk.

8 Conclusion of Overriding Public Interest

- 8.1 The Scottish Ministers consider there to be an immediate need to increase energy supply from offshore renewables both for energy security reasons and as a key contribution towards mitigating against climate change. They also consider there is an urgent need to test innovations in FOW to help transition to larger-scale FOW infrastructure in the medium-term future as a key element in achieving a clean energy

system. In this derogation assessment, the Scottish Ministers have considered the likely magnitude and population implications of the adverse effects arising from the Project on the designated sites, however, the Scottish Ministers are satisfied that there are IROPI for the Project to proceed subject to adequate compensatory measures being implemented. In arriving at their decision, the Scottish Ministers have considered how the Project provides a public benefit which is essential and urgent and has been assessed as outweighing the harm to the integrity of the designated sites.

SECTION 4: COMPENSATORY MEASURES

9 Aims of Compensatory measures

9.1 This section of the derogation assessment determines whether necessary compensatory measures can be secured to ensure the protection of the overall coherence of the network.

9.2 The AA completed for the Project, concluded that the Project, in combination with other plans or projects would have an AEOSI of the following species and sites:

- Gannet at Forth Islands SPA and Outer Firth of Forth and St Andrews Bay Complex SPA (breeding);
- Kittiwake at Buchan Ness to Collieston Coast SPA, East Caithness Cliffs SPA, Forth Islands SPA, Fowlsheugh SPA, North Caithness Cliffs SPA, Outer Firth of Forth and St Andrews Bay Complex SPA (breeding and non-breeding) and Troup Pennan and Lion's Heads SPA; and
- Seabird assemblage qualifiers for Buchan Ness to Collieston Coast SPA (kittiwake), East Caithness Cliffs SPA (kittiwake), Forth Islands SPA (gannet and kittiwake), Fowlsheugh SPA (kittiwake), North Caithness Cliffs SPA (kittiwake), Outer Firth of Forth and St Andrews Bay Complex SPA (breeding and non-breeding kittiwake and breeding gannet) and Troup Pennan and Lion's Heads SPA (kittiwake).

9.3 Further, the AA for the Project was unable to conclude beyond reasonable scientific doubt that there would be no AEOSI from the Project alone or in combination with other plans or projects for the following features in respect of the following designated sites:

9.4 Alone:

- Guillemot at Buchan Ness to Collieston Coast SPA and Outer Firth of Forth and St Andrews Bay Complex SPA (breeding and non-breeding); and

- Seabird assemblage at Buchan Ness to Collieston Coast SPA (guillemot) and Outer Firth of Forth and St Andrews Bay Complex SPA (breeding and non-breeding guillemot).

9.5 In-combination:

- Kittiwake at St Abb's Head to Fast Castle SPA;
- Guillemot at Troup, Pennan and Lion's Heads SPA;
- Puffin at Forth Islands SPA and Outer Firth of Forth and St Andrews Bay Complex SPA (breeding);
- Razorbill at East Caithness Cliffs SPA, Fowlsheugh SPA, Outer Firth of Forth and St Andrews Bay Complex SPA (non-breeding) and Troup, Pennan and Lion's Heads SPA; and
- Seabird assemblage feature of St Abb's Head to Fast Castle SPA (kittiwake).

9.6 The pathways of effect for the above seabird species were identified as displacement and/or collision risk which could impact the conservation objective to maintain the population of the species as a viable component of the site. Full details of the impacts which require to be compensated for are included in Table 1 below:

Table 1: Mortality summary for species and sites where AEOSI was concluded, or Scottish Ministers were unable to conclude no AEOSI. CPS=Counterfactual of Population Size.

Species	SPA	Mortality (birds per annum- upper value)	CPS (upper value)	Conclusion
Alone				
Guillemot	Buchan Ness to Collieston Coast SPA	128.6	0.877	Unable to conclude no AEOSI
In-combination				
Guillemot	Troup, Pennan and Lion's Heads SPA	62.4	0.858	Unable to conclude no AEOSI
Kittiwake	Buchan Ness to Collieston Coast SPA	19.7	0.843	AEOSI
Kittiwake	East Caithness Cliffs SPA	3.1	0.714	AEOSI
Kittiwake	Forth Islands SPA	0.4	0.799	AEOSI
Kittiwake	Fowlsheugh SPA	4.1	0.822	AEOSI
Kittiwake	North Caithness Cliffs SPA	0.5	0.774	AEOSI
Kittiwake	Troup, Pennan and Lion's Heads SPA	6.5	0.826	AEOSI
Kittiwake	St Abb's Head to Fast Castle SPA	0.4	0.878	Unable to conclude no AEOSI
Puffin	Forth Islands SPA	3.8	0.885	Unable to conclude no AEOSI
Razorbill	East Caithness Cliffs SPA	0.6	0.736	Unable to conclude no AEOSI

Species	SPA	Mortality (birds per annum- upper value)	CPS (upper value)	Conclusion
Razorbill	Fowlsheugh SPA	2.5	0.824	Unable to conclude no AEOSI
Razorbill	Troup, Pennan and Lion's Heads SPA	1.6	0.899	Unable to conclude no AEOSI
Gannet	Forth Islands SPA	3.8	0.775	AEOSI

Note:- seabird assemblage features are not included in the table as the impact has been assessed and concluded on the main feature. Further the Outer Firth of Forth and St Andrews Bay Complex SPA is also excluded because the impacted populations that are the qualifying features of this site originate from colonies functionally linked to the Outer Firth of Forth and St Andrews Bay Complex SPA. As such the impact is recorded for those populations at their functionally linked SPA(s).

10 Details of Proposed Measures

10.1 Potential Measures Considered

- 10.2 In its Compensation Roadmap, the Company narrates the approach it took to producing a longlist of potential compensatory measures. The potential measures identified were then investigated further to understand their suitability before being assessed against the criteria of preference hierarchy, location, technical feasibility, timing, additionality and scale. This was used to produce a shortlist of eight measures which were then considered against a number of delivery criteria. The shortlist included measures that would be potentially delivered at a government/strategic level, with a joint venture partner and at a project level.
- 10.3 Preliminary investigation and stakeholder feedback informed the decision to not take forward four of the shortlisted measures. This included the four measures that relied on either strategic delivery or were dependent on a third party project. Of the remaining four measures, human disturbance reduction was also discounted due to project timelines and due to no suitable sites being identified for habitat enhancement. This left two measures, predator reduction and bycatch reduction, which were taken forward into the final proposed Compensation Package.
- 10.4 The Company is proposing to collaborate with Ossian Offshore Wind Farm Limited ("OWFL") over the development and delivery of both compensatory measures. Ossian OWFL has submitted its s.36 consent and marine licence applications¹⁰, alongside which it has submitted a derogation case. The Ossian OWFL application is yet to be determined. In its Compensation Plan, the Company state that both measures can be pursued in collaboration or by either project independently and that there is capacity within the measures to deliver sufficient compensation for both. It further states that should consent be granted for both projects, the first project consented would progress

¹⁰ [Ossian Offshore Wind Farm | marine.gov.scot](https://marine.gov.scot)

the compensatory measures with the second project subsequently joining thereafter.

[REDACTED]

11 Predator Reduction – Mink Control

11.1 Details of Proposed Measure

11.1.1 The Scottish Invasive Species Initiative's ("SISI") Mink Control Project ("MCP") started in spring 2018 and currently has funding until 2026, with no confirmed extension. The Company is proposing to fund the continuation of the MCP for the duration of the Salamander Project. The MCP aims to control mink in order to prevent their predation of seabirds, including puffin, razorbill, kittiwake and guillemot, and their young. There are currently rafts and traps situated across 43 river catchments. Rafts are placed at the water's edge with wooden tunnels. Inside the tunnel, a clay pad captures paw prints, indicating mink presence. If mink are detected, the monitoring raft is replaced with a live capture trap which is checked daily. Some traps are equipped with electronic monitoring devices which trigger when the trap closes. A network of traps also operates without prior detection of mink presence. If a mink is caught, a local dispatcher is called to humanely dispatch the animal.

11.1.2 The current area covered by the MCP encompasses about 29,500km² and includes Fowlsheugh SPA, Troup, Pennan and Lion's Heads SPA and Buchan Ness to Collieston Coast SPA (referred to as "Objective A" in this derogation assessment). As an adaptive management measure, if required, the Company may also provide resources to expand the area of coverage of the MCP, particularly towards other key SPAs such as the North Caithness Cliffs SPA, East Caithness Cliffs SPA, Cape Wrath SPA and Handa SPA if required (referred to as "Objective B" in this derogation assessment). Whilst it is acknowledged that the complete eradication of mink from Scotland is not feasible, the focus of the measure is on control.

11.1.3 The Company outlines that the MCP currently employs 11 full time staff, one part-time and four seasonal staff, and it additionally relies on approximately 350 volunteers to check mink rafts for evidence of mink. The Company proposes to continue this existing model for its objectives and suggests the funding supplied will provide warden resource to ensure that at least one of the SPAs impacted by the Project will benefit by exceeding the compensation required for kittiwake, guillemot, puffin and razorbill.

[REDACTED]

11.1.4 The Company proposes to continue with monitoring of mink throughout the Project to ensure that the mink population is suppressed to an adequate level using the existing

techniques and processes. Updated methods will be considered where feasible e.g. with advancements in technology. No monitoring of seabirds is proposed due to the difficulty of detecting and attributing the impact contribution that mink predation would have had at the population level within an SPA.

11.2 Evidence for the Issue

11.2.1 Of the references provided by the Company in support of its proposed derogation measures, several focus on individual seabird species that the Company uses as evidence for negative impacts from mink on seabird colonies; however, these species differ from those requiring compensation. Schüttler et al. (2009)^{xii} compared solitary nesting waterbirds to colony nesting gulls and terns in mainland Chile, finding that colonial gulls and terns showed the highest nest survival probabilities (67-84%) and no predation from mink, compared to low survival rate for the solitary nesting waterbirds (5-20%) with high mink predation (10-44%). Hipfner et al. (2010)^{xiii} is incorrectly referenced as discussing seabird extirpation by mink at the Scott Islands in British Columbia, Canada; however, this study describes non-native rabbit (*Oryctolagus cuniculus*) effects on Cassin's auklet (*Ptychoramphus aleuticus*). The publications relevant to seabird extirpation by mink are those by Carl et al. (1951)^{xiv} and Rodway et al. (1990)^{xv}. These two papers are referenced regarding mink invasion in Iceland, the former paper was not accessible online but the Company outlines that it investigated mink impacts on black guillemot (*Cepphus grylle*). However, this species is only semi-colonial, often nesting solitarily in crevice and burrows which increases their risk to ground predators (Johannesson and Gudjonsdóttir, 2007)^{xvi} and is thus not comparable to the species requiring compensation for this derogation assessment. The Company also cites two review papers: Bonesi and Palazon (2007)^{xvii} examine the status, impacts and control of mink in 28 European countries; whilst López et al. (2023)^{xviii} review 51 papers investigating mink control in Europe and South America showing that trapping is the most used and efficient method of control. Both reviews provide important evidence of the negative impacts of mink and positive impacts of mink control; however, evidence of effects specifically on colonial cliff nesting seabirds is lacking. There is evidence for mink predation of ground nesting marine birds, but evidence for mink predation of cliff nesting seabirds in Scotland, outside of anecdotal evidence, is lacking. According to the evidence presented, mink have caused colony collapses of gulls and terns in Scotland, but this evidence is several decades old, pre-2000.

11.2.2 The Company does provide some references for mink effects on kittiwake, guillemot, puffin and razorbill, although much of this evidence is anecdotal (e.g. Furness et al., 2013^{xix}, Mavor et al., 2002^{xx}, Dunstone 1993^{xxi}) or circumstantial (e.g. Lambin, *pers. comm.*), relying on personal communications or data extracted from non-peer reviewed websites or magazines. Other evidence of auk predation by mink provided by the Company largely relies on references where the focus of research is population

size and demographics, and not direct observation of auk predation by mink, and therefore confidence in the causal link between these factors is low.

11.2.3 [REDACTED]

11.2.4 With respect to the estimation of mink densities, the Scottish Ministers consider that the Scottish studies (Moore et al., 2003^{xxii}, Dunstone and Birks, 1985^{xxiii}, Birks and Dunstone, 1991^{xxiv}) are now dated and use of these densities would not take into consideration population fluctuations over time and the efforts of the mink control projects to date. In addition, other coastal habitat types have been used as the closest proxy to inform mink densities for cliff habitat. Therefore, the Scottish Ministers consider that the mink densities used in the Company's calculations are not based on data relevant to seabird cliffs [REDACTED]

[REDACTED]

11.2.5 Following a review of the literature, the Scottish Ministers note the following evidence not presented by the Company. There are additional studies that have found negative impacts on ground nesting waterbirds and gulls/terns, and one report finding effects on some of the target species (Burton & Fuller, 1999^{xxv}, Ferreras & Macdonald, 2001^{xxvi}, Nordström 2003^{xxvii}, Ratcliffe et al., 2008^{xxviii}). These studies further support the positive impacts of mink removal on ground nesting gulls, terns and other waterbirds, and highlight the lack of evidence around cliff nesters as well as for the burrow nesting puffin. There is some limited evidence from remote islands for population increases post mink eradication for kittiwake, puffin and guillemot (Stien et al., 2023)^{xxix}; however, studies typically focused on grassland and riparian/coastal habitats rather than steep cliffs and so may not translate into the same benefits to cliff nesting habitats on the mainland.

11.2.6 Two additional papers show evidence for the decline of mink within the British Isles between the 1970s and early 2000s (McDonald et al., 2007^{xxx} Bonesi et al. 2006)^{xxxi}. In contrast, a review paper (Harrington et al., 2020)^{xxxii} found no evidence to suggest that mink culling implementation or monitoring is sufficient to generate national level reductions. As the mink density studies presented by the Company are from the late

1990s and early 2000s, and not all from a Scottish or UK context, the Scottish Ministers consider that the studies the Company presents may not be likely to represent current Scottish mink densities. This may especially be the case when considering the evidence that mink were already declining during this time period, and that mink control has occurred since 2018 as part of the MCP.

11.3 Assessment of Sufficiency of the Measure

11.3.1 Ecological Effectiveness

11.3.2 The Company only provides accounts via personal communication and non-peer reviewed articles to support the idea that mink predate cliff-nesting species, including the four target species kittiwake, razorbill, puffin and guillemot. The Scottish Ministers, in agreement with NatureScot, acknowledge that when present at accessible colonies, mink can and will predate seabirds, particularly eggs or chicks, and potentially in high numbers, though advise that the evidence for predation on cliff-nesting species in Scotland is lacking. A recent Scottish Government report (Tapia-Harris and Evans, 2024)^{xxxiii} included reference to two research papers on mink which showed that mink control efforts around the Finnish Baltic Sea had limited impact on razorbill (Nordström et al., 2003^{xxxiv}, and Banks et al., 2008^{xxxv}), and showed that mink were most likely to predate ground-nesting seabirds. Additionally, there is a lack of evidence that mink are impacting the target species at the proposed SPAs. Consequently, the level of impact that mink might have on the target species, and at the impacted SPAs, is unquantified due to the lack of published evidence on mink predation of cliff-nesting seabirds and a lack of evidence in a Scottish context.

11.3.3 In agreement with NatureScot, Scottish Ministers note that there is little evidence for the predation of the target species, particularly in Scotland, since studies typically have found predation on solitary and/or ground nesting species rather than cliff nesting species. There is also a lack of evidence for benefits to the target species following mink control. Whilst there is some limited evidence available for kittiwake, puffin and razorbill (but not guillemot), these studies were conducted on remote islands rather than on the mainland. However, in agreement with NatureScot, the Scottish Ministers consider that [REDACTED] proposed by the Company should reduce some of these uncertainties.

11.3.4 In agreement with NatureScot, the Scottish Ministers highlight that the target species and colonies described for the measure are unlikely to be equally accessible to predation from mink. However, calculations for the minimum percentage accessibility necessary to deliver the compensation levels required provided by the Company seem logical and increases confidence in the sufficiency of this measure in relation to the target sites and species (see section 11.3.19). Of the four target species, puffin requires the highest percentage accessibility of the colony by mink (40%) to confer the required level of benefit. The Scottish Ministers, in agreement with NatureScot,

consider that this figure is not unreasonable: as puffin nest in burrows, they are more likely to be accessible to mink compared to the other species.

- 11.3.5 The SPAs where the AA concluded AEOSI or unable to conclude no AEOSI are presented in Table 1. The Company states that the Objective A measure will benefit guillemot at all of the SPAs where the AA concluded impact (Buchan Ness to Collieston Coast and Troup, Pennan and Lion's Heads), razorbill at two of the three impacted SPAs (Fowlsheugh and Troup, Pennan and Lion's Heads), and kittiwake at three of the seven impacted SPAs (Fowlsheugh, Buchan Ness to Collieston Coast and Troup, Pennan and Lion's Heads). Two further impacted SPAs are covered by the Objective B measure (East Caithness Cliffs, and North Caithness Cliffs) as part of the adaptive management option (see section 11.3.19). Neither the Objective A nor Objective B measure considers on site compensation for the impacted SPA for puffin (Forth Islands). However, the Company states that the requirement for puffin will be fulfilled at Buchan Ness to Collieston Coast SPA. The Company does not describe connectivity between the SPAs where the measure will be implemented and the connectivity of those SPAs for razorbill, kittiwake and puffin which will not have an increase in adult birds from the primary measure.
- 11.3.6 Whilst the Scottish Ministers recognise that compensation does not necessarily need to be delivered at the impacted site, attributing expected benefit for each species and site provides important information. In agreement with NatureScot, the Scottish Ministers consider that the topographical nature of the targeted site coupled with the distribution and accessibility of the species and presence of mink will influence the ability of the measure to be delivered across the different sites. The Scottish Ministers consider that the spatial scale and location of the measure is suitable, if evidence can be provided that shows that mink are present at the target locations.
- 11.3.7 The Scottish Ministers consider that once the measure is implemented, benefits in terms of reduction in the mink population and increase in the number of chicks surviving to fledging, are likely to be seen immediately, assuming that mink are present in the target trapping areas. The Scottish Ministers consider that the measure will not confer benefit to the target species in terms of recruitment of adults into the population until the amount of time has passed that is at least as long as the age to recruitment, which is different for different species (typically between three and five years).
- 11.3.8 The Scottish Ministers conclude that the measure, assuming the target sites and species are vulnerable to mink predation, does have potential to ensure that in light of the predicted damage that the overall coherence of the UK site network is protected. For puffin and kittiwake impacts at the Forth Islands and kittiwake at St Abb's Head to Fast Castle, the proposed measure is not directly targeting these SPAs but the Scottish Ministers consider that this does not negatively impact the sufficiency of the measure or overall coherence of the UK Site Network since these species will benefit from the measure at other SPAs within the UK Site Network.

11.3.9 The Scottish Ministers conclude that [REDACTED]
[REDACTED] submitted on 30 April 2025 [REDACTED]
[REDACTED] will
help reduce uncertainty on [REDACTED]. [REDACTED]
[REDACTED], as stated by the Company, the
Scottish Ministers agree with NatureScot's advice of 21 May 2025 that the proposed
measure could likely compensate for the impacts predicted by the Project from an
ecological effectiveness perspective.

11.3.10 Compensation Figures Proposed by the Measure

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]



11.3.11 The value of compensation calculated per site, compared to the required compensation values, is very high. The Scottish Ministers consider that the numbers of adult seabirds presented by the Company for the predator reduction – mink control measure, if delivered at the predicted magnitude, adequately cover the impact concluded by the AA. However, the Scottish Ministers advise caution in the confidence around these values. There are many assumptions made by the Company that the Scottish Ministers, in agreement with NatureScot, consider creates a high level of uncertainty in the calculations of expected benefit to target seabird populations and as such conclude that it is difficult to establish with confidence the potential compensation this measure could deliver.

11.3.12 The assumptions made by the Company that result in this uncertainty are as follows:

- The Company cites a personal communication within a published paper (Clode and Macdonald 2002)^{xxxvi} as an example of an event where 200 guillemot chicks were found in a single mink den in Iceland. There is no mention of any habitat characteristics of this den or the likely preyed guillemot habitat, and it is only mentioned as a single instance. The Company lists other recorded observations of mink predation on seabirds (kittiwake, puffin and terns, but not guillemot or razorbill) from a mix of Scottish and European examples in its supporting notes. While the Scottish Ministers consider these examples support the principle that reducing the potential for mink predation will benefit seabird breeding success, the examples provided vary in their level of impact and are largely anecdotal reports of one-off predation observations. Therefore, these do not greatly strengthen the assumptions made by the Company on the quantity of impact. Without other relevant evidence to support the estimate of 200 chicks per mink, it is unclear whether this estimate of impact quantity is typical of the predation impact a mink might have on a cliff-nesting seabird colony in Scotland. Therefore, downstream calculations based upon this single observation are highly uncertain.
- The Company does not present any adjustment in the calculations over the proposed 35 years of the Project. There is some evidence that mink populations in the UK are decreasing (see section 11.2.6) and the Company has not presented any evidence for current densities nor future population trajectories in Scotland.
- The figures that the Company draws on for density estimates of mink are dated (see section 11.3.1), not entirely from a Scottish or UK context, and do not consider the numbers that have already been removed by the MCP project.
- There is evidence suggesting that cliff-nesting species may not be as vulnerable to mink predation as ground-nesting species (Tapia-Harris and Evans, 2024)^{xxxiii}.

- There is no evidence provided on existing impact that mink exert on these SPAs and qualifying species.
- The Company does not consider that not all mink will predate seabird chicks, nor that the number predated may depend on the number of accessible chicks at any one location. The Company also assumes that the topography of each SPA and consequently, each species, is equally accessible to mink. Seabirds are not uniformly distributed across cliff features, there are nesting habitat niches and preferences for each species. Auks, like guillemot and razorbill, may nest relatively low on the cliff facade, compared to kittiwake, whilst puffin are a burrow nesting species. It may also be likely that colonially nesting seabirds situated in the centre of a cliff-nesting colony will be less vulnerable to mink than those nesting at the edges. The Scottish Ministers consider that, due to this, the accessibility of nesting habitat to mink is likely to influence species' exposure to mink predation i.e. mink will not predate seabird chicks in proportion to their numbers at an SPA and are more likely to target the most accessible species at a given location.

11.3.13 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]. The Scottish Ministers agree with NatureScot's advice of 21 May 2025 that complete accessibility of mink at cliff-nesting colonies is unlikely, but the [REDACTED] by the Company will help assess and refine levels of accessibility. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] is a useful metric in the consideration of the magnitude of benefit that the measure may be able to deliver, and that the Company's calculations seem logical. However, the calculations rely upon assumptions (see above) that have limited evidence, and the values presented therefore have a high level of uncertainty associated with them.

11.3.14 In addition, the Scottish Ministers consider that the approach presented by the Company to calculate the number of additional chicks per species (and subsequently recruited breeding adults), namely an additional 200 chicks of mixed species per mink per year, produced is highly uncertain and likely an over-estimate. Predation rates are highly variable and there is not adequate evidence provided by the Company to support this figure. NatureScot outline a similar position in its response of 21 February 2025, advising refinement is necessary in the quantification approach applied to the measure. In its response of 21 May 2025, NatureScot stated that the [REDACTED]
[REDACTED]
[REDACTED] are more convincing as evidence of mink predation. The Scottish

Ministers support NatureScot's suggestion that a workshop should be organised with mink experts to collectively agree the [REDACTED].

11.3.15 **Additionality**

11.3.16 The Company states that the current funding for the SISI MCP will end in 2026, and that there is no further funding secured beyond this.

11.3.17 Five SPAs are included within the area currently covered by the MCP; Troup, Pennan and Lion's Heads SPA, Fowlsheugh SPA, Buchan Ness to Collieston Coast SPA, Handa SPA and Cape Wrath SPA. The Company presents a figure indicating that the MCP caught mink at Troup, Pennan and Lion's Heads SPA and Handa SPA between 2020-2023. The Company notes that the figure it presents does not include any information on mink control effort which it says has been inconsistent due to the reliance on the volunteer network. The Company does not present any information on how long the MCP has been in place at the impacted SPAs.

11.3.18 In agreement with NatureScot, the Scottish Ministers conclude that the predator reduction – mink control measure is additional to routine and ongoing conservation management practices within the relevant SPAs.

11.3.19 **Monitoring and Adaptive Management**

Monitoring

11.3.20 The Company states that mink wardens will carry out mink monitoring duties and will supplement the existing network of volunteers supporting the MCP. No monitoring of seabird populations or productivity is proposed by the Company due to the difficulty of attributing any impacts on the population level at an SPA to the removal of mink. The Scottish Ministers agree with NatureScot that assessing the impact of mink predation on seabird colonies should be considered further and agree that reviewing other predator control projects may provide some indication of measurement of success and how monitoring of seabird colonies has been undertaken.

11.3.21 The Scottish Ministers consider that more information is required on the monitoring methodology and protocols to determine if the mink population will be adequately monitored to fulfil the proposed measure. In particular, detail is lacking on what constitutes an “adequate level” for the mink population to reach before an SPA is deemed “mink-controlled”.

11.3.22 The Scottish Ministers advise, in agreement with NatureScot, that further consideration of suitable and sufficient monitoring should include consultation with NatureScot, the Scottish Ministers and RSPB Scotland.

Adaptive Management

- 11.3.23 The Company proposes two objectives as part of their predator reduction – mink control measure. The Company notes that there is sufficient capacity for the primary measure (Objective A), to deliver the required benefits and describes the second objective (Objective B) as “*effectively adaptive management*”. The Scottish Ministers assume that the Company’s process will be to first implement the Objective A measure and that the Objective B adaptive management option of extending the existing mink control programme to new locations, would be employed if the Objective A measure is not shown to be as effective as required.
- 11.3.24 The Scottish Ministers conclude that, if the Objective B option has the potential to be suitable as an adaptive management measure, it should be implemented in consultation with NatureScot, the Scottish Ministers and RSPB Scotland.
- 11.3.25 There is insufficient evidence provided by the Company on the predator-proof fencing comprising the Objective B adaptive management option (for example, evidence for its efficacy at the chosen sites or detail on how it would be implemented) for the Scottish Ministers to determine if the approach is suitable.
- 11.3.26 The Company states that the Objective B adaptive management option (expanding the coverage of the MCP area) will benefit a greater number of SPAs than those impacted by the Project (i.e. Cape Wrath and Handa), and so, if implemented, this Objective B option would enhance the benefit to the UK Site Network. The Company states that two of the seven impacted SPAs for kittiwake that are not covered by the Objective A measure are covered by this expansion (East Caithness Cliffs and North Caithness Cliffs). The third of three impacted SPAs for razorbill (East Caithness Cliffs) are also covered by the expansion.
- 11.3.27 The Objective B adaptive management option uses the same calculation method as the Objective A measure and so could provide additional sufficiency, but clarity is needed about which sites and species have the potential to be or are being impacted by mink. The concerns raised in section 11.3.11 relating to the assumptions involved in the calculations for the Objective A measure also apply to the proposed Objective B adaptive management option.
- 11.3.28 The Scottish Ministers, in agreement with NatureScot, acknowledge the high-level nature of the adaptive management described, but are content with it on principle, noting that more detail on the Objective A measure will be needed to establish its potential for success.

11.4 **Assessment of Feasibility of the Measure**

11.4.1 **Technical Feasibility**

- 11.4.2 The Scottish Ministers consider that there is good evidence of the negative impacts of mink predation on some seabird species and on the positive impacts of control on

reducing the mink population. The use of live traps and humane dispatch is an established method to successfully reduce mink populations and the ongoing work of the SISI's MCP demonstrates that removing mink is achievable and is already happening in a large area of Scotland.

- 11.4.3 The Scottish Ministers note that the Company assumes all mink on an SPA coastline are catchable. However, SISI data suggest only ~350 individual mink were caught over two years with many hundreds of trap sites. Therefore, the Scottish Ministers consider that catching the required number of mink at the focal SPAs may be challenging, and the Company should detail how catching effort will be intensified if the required captures are not met and how this increase in effort would be resourced.
- 11.4.4 The Scottish Ministers consider that providing funding for the continuation of the MCP for the proposed predation reduction via the mink control measure would be technically feasible given that the SISI's MCP is an established project and has been successful in controlling mink for several years. However, elements of the proposed measure are uncertain, including how increasing intensity and expanding to new trapping areas would be achieved through the current volunteer-led system and how site access would be secured. Both of these factors are further considered within the financial and legal feasibility sections of this derogation assessment.
- 11.4.5 The Scottish Ministers consider that the measure has the potential to be technically feasible but is dependent on more information on the above aspects. The Scottish Ministers agree with NatureScot that the [REDACTED] proposed by the Company in its supporting notes will help reduce uncertainty and facilitate greater confidence in the technical feasibility of the measure to ensure that the overall coherence of the UK Site Network is protected.
- 11.4.6 **Financial Feasibility**
- 11.4.7 The Company proposes to provide funding for the continuation of the MCP so that effort at the existing trapping locations can be increased. The Company does not provide details on how this will be achieved, beyond resources to employ additional wardens. The Company expects to follow the current model of the MCP, which is heavily dependent on volunteers and there is no proposed engagement strategy for how the MCP will increase its number of volunteers to increase effort and deliver the Objective B option, to expand to new trapping locations. For example, MCP have delivered mink control at Troup, Pennan and Lion's Heads SPA, Fowlsheugh SPA, Buchan Ness to Collieston Coast SPA, Handa SPA and Cape Wrath, but no information on mink control effort in these areas was presented by the Company, who attributed this to inconsistency associated with reliance on the volunteer network. Therefore, whilst a valuable resource in many projects, reliance on volunteers to deliver compensatory measures, particularly across remote sites, may not ensure a reliable mechanism of securing the measure. There is therefore the potential that paid mink wardens or alternative mechanisms for mink control may be required. It is also

the case that even volunteer networks take a large amount of staff resource to maintain.

11.4.8 Notwithstanding these factors, the Scottish Ministers do consider this measure to be financially feasible for the Company for the lifetime of the Project. The Scottish Ministers expect further details in respect of the Company's proposed funding mechanism to be confirmed within the Detailed Seabird Compensation Plan, in particular how the proposed extension to the MCP in its current form will be carried out.

11.4.9 **Legal Feasibility**

11.4.10 The Company has stated that the measure is legally feasible as it has already successfully been implemented across large portions of the country. The Company specifically notes that the SISI's MCP has not identified any issues with landowner or access agreement and the Company therefore suggests that access to new locations will be developed in line with SISI protocols. However, the Scottish Ministers note that permissions to access new locations may not yet have been secured by the Company and there is no mention in the information provided by the Company of the permits that would be required for the mink control. Nevertheless, the Scottish Ministers consider that assuming the appropriate permits and approvals are obtained by the Company, there do not appear to be any legal barriers to the proposed measure and on this basis it could be considered legally feasible.

11.4.11 The Scottish Ministers are content that any permitting requirements relating to the measure will be considered during the Detailed Seabird Compensation Plan stage and if any necessary permits or approvals cannot be obtained by the Company it will be required to submit details of an alternative compensation measure within its Detailed Seabird Compensation Plan in agreement with the Scottish Ministers.

11.5 **The Scottish Ministers' Conclusion**

11.5.1 The Scottish Ministers consider that the supporting notes provided by the Company on 30 April 2025 have improved the evidence base presented, though uncertainties in the proposed measure remain. Although there is currently insufficient evidence to conclude with confidence that mink control will deliver the expected benefit to kittiwake, guillemot, puffin and razorbill, as required by the impact numbers determined by the AA, the Scottish Ministers agree with NatureScot that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The results of this work are not yet available. However, the Scottish Ministers conclude that for the focal species the proposed measure has the potential to compensate for the impacts predicted for the Project.

11.5.2 The Scottish Ministers agree with NatureScot and advise that given appropriate monitoring, the measure is technically feasible and could ensure that the overall coherence of the UK Site Network is protected, in light of the predicted damage, for most species, and the [REDACTED] [REDACTED] will help determine ecological feasibility. However, insufficient detail is provided by the Company to determine if mink, or seabird populations, will be adequately monitored to determine the impact of mink control on mink predation or benefits to seabirds. In addition, whilst the proposed Objective B adaptive management option may potentially be suitable there is not sufficient evidence provided on the predator-proof fencing for Scottish Ministers to advise if this is feasible or sufficient.

12 Bycatch Reduction – Gannet in Portuguese Waters

12.1 Details of Proposed Measure

12.1.1 The Company proposes to decrease the mortality of gannet from commercial fishing bycatch through implementing bycatch reduction techniques in Portuguese waters. The measure is proposed to be undertaken in partnership with Sociedade Portuguesa para o Estudo das Aves (“SPEA”, translated in English to the Portuguese Society for the Study of Birds). The proposed compensatory measure is in collaboration with Ossian OWFL, but the Company has stated that it can also be delivered independently, if required.

12.1.2 Since 2010, SPEA have overseen bycatch monitoring at Aveiro-Nazaré SPA, and (more recently) monitoring and bycatch reduction trials at Ilhas Berlengas SPA, but a lack of funding prevents further efforts. Sagres Costa Sudoeste SPA has additionally been identified as a gannet bycatch hotspot, but monitoring data are only preliminary due to lack of funding. Available data from sampled vessels suggests that more than 300 gannets are by-caught in Aveiro-Nazaré SPA in a single year. The Company proposes to provide additional resources, expertise and funding to support the continuation of monitoring, trialling and eventual implementation of bycatch reduction efforts in partnership with SPEA.

12.1.3 The bycatch reduction techniques to be trialled have not been explicitly identified by the Company, instead stating that these will be finalised post-consent.

12.1.4 While this measure will be implemented outside of Scotland, the Company states that it will deliver benefits to Scottish breeding gannet populations due to their “*likely presence*” within bycatch hotspots in Portuguese waters. This suggestion is based on the results of various tracking studies, but the Company also intends to adjust the scale of delivery according to the proportion of birds in the region apportioned back to the UK Site Network and/or Scottish SPAs. [REDACTED]
[REDACTED]
[REDACTED]

12.1.5 The Company intends to provide funding to support the continuation of monitoring, trialling and the eventual implementation of bycatch reduction efforts with SPEA. Following the successful identification of an effective method for reducing bycatch of gannet, the Company propose to support the implementation of the selected technique for a defined period of time (e.g. the lifetime of the Project).

12.2 Evidence for the Issue

12.2.1 The incidental bycatch of seabirds, including gannet, is well documented both globally and in Portuguese waters, with the Company presenting numerous references in their bycatch evidence section within the “Report 4: HRA Derogation Case, Ecological Evidence Report” document (e.g. Ramírez et al., 2024^{xxxvii}, Calado et al., 2021^{xxxviii}, Oliveira et al., 2015^{xxxix}, Oliveira et al. 2020^{xl}, Araújo et al., 2022a^{xli}, Pott and Wiedenfeld 2017^{xlii}, and Bradbury et al., 2017^{xliii}).

12.2.2 The Company also provided several references which demonstrate that some gannets do travel from colonies in northern Europe to wintering grounds in Western Africa via Portugal (e.g. Fagundes, 2021^{xliv}, Elmberg et al. 2020^{xlv}, Araújo et al. 2022b^{xlvi}). Additionally, the Company provides examples of connectivity between the Bass Rock gannet population and Portuguese waters (e.g. Deakin et al. 2019^{xlvii}, Kubetzki et al. 2009^{xlviii}, Lane et al. 2021^{xlix}, Furness et al. 2018^l and Fort et al. 2012^{li}). For example, tracking data from Bass Rock supports the proposition that adult and juvenile gannets from the Forth Islands SPA use Portuguese waters during their migration (Lane et al., 2021)^{xlix}, and that adults use Portuguese waters as an over-wintering site (Deakin et al., 2019)^{xlvii}.

12.2.3 [REDACTED]

12.2.4 A literature search undertaken by the Scottish Ministers confirms our agreement with the Company’s position of gannet bycatch being an issue in Portuguese waters, noting the following evidence not presented by the Company: Costa et al., 2020^{lii}, ICES, 2023^{liii}.

12.3 Assessment of Sufficiency of the Measure

12.3.1 Ecological Effectiveness

- 12.3.2 Based on the evidence presented in section 12.2, there is good evidence that bycatch rates of gannet in Portuguese waters are high, and some evidence of connectivity to Scottish colonies (namely Bass Rock, part of the Forth Islands SPA). Since the UK holds a large proportion (58%) of the global breeding population of gannet (Wanless et al., 2023^{liv}), the Scottish Ministers consider that it is reasonable to assume that a large proportion of the gannets in Portuguese waters originate from Scotland and the wider UK Site Network. The Scottish Ministers, therefore, agree with NatureScot's advice of 21 February 2025, that there is some level of connectivity between gannets breeding in Scotland and Portuguese bycatch hotspots during passage migration and winter. The Scottish Ministers consider that if the bycatch reduction technique chosen by the Company proves successful (see section 12.4.1), then there is potential for an adequate number of gannets in Portuguese waters to be protected to compensate for the impacts of the Project concluded in the AA (see section 12.3.7). Consequently, the Scottish Ministers conclude that there is a reasonable probability of ensuring the overall coherence of the UK Site Network is protected in light of the predicted damage via the proposed measure.
- 12.3.3 The Scottish Ministers agree with NatureScot's advice of 21 February 2025 that further clarification of the scale of connectivity between gannets breeding in Scottish SPAs and those being bycaught in Portuguese waters is required. The Scottish Ministers consider that the proportion of gannets in Portuguese waters that originate from Scotland/the UK Site Network is unknown, [REDACTED]
[REDACTED] The Scottish Ministers agree with NatureScot's advice of 21 May 2025 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
- 12.3.4 A recent RSPB report to Scottish Government on the feasibility of strategic compensatory measures (Tapia-Harris and Evans, 2024)^{xxxiii} assessed the overall feasibility of reducing bycatch via mitigation in longline fisheries as a compensatory measure as "*medium*" for both ecological efficacy and overall feasibility, with gannet expected to benefit with "*medium certainty*". Albeit this report focuses on Scotland, it highlights that quantifying overall population-level benefits, as well as apportioning benefits to individual SPAs, is challenging due to wide confidence intervals around bycatch rates and difficulty linking bycaught birds to specific SPAs. The Scottish Ministers consider that these potential issues are also relevant in a Portuguese context.
- 12.3.5 In addition, the Scottish Ministers consider that any benefit to the breeding population size at Scottish SPAs via the proposed measure may have a lag effect since juvenile gannets are more likely to be bycaught than adults and take approximately five years to mature (Lane et al. 2021^{xlix}, Watkins et al. 2008^{IV}).

Therefore, the Scottish Ministers consider that depending on the age structure of the bycaught population, the bycatch measures may need to be in place between two and five years before benefits to the breeding population are observed.

- 12.3.6 In agreement with NatureScot's advice of 21 May 2025, the Scottish Ministers conclude that the proposed measure is ecologically feasible and has potential to compensate for the impacts predicted for gannet by the Project. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED] The Scottish Ministers conclude that the results of this work are required before a more conclusive assessment can be made. The Scottish Ministers also consider that consultation is undertaken with the Scottish Ministers, NatureScot, and RSPB Scotland regarding other approaches that could qualitatively or semi quantitatively be applied to assess the proportion and origin of UK Site Network gannets in Portuguese waters.

12.3.7 **Compensation Figures Proposed by the Measure**

- 12.3.8 The Company does not present the magnitude of benefit expected from the gannet bycatch reduction measure and does not provide specific SPAs that the measure will benefit, stating that it is the UK Site Network and/or Scottish SPAs that will benefit. An estimated mortality of 3.8 adult gannets per year was concluded in the AA (see Table 1).

- 12.3.9 The Company states that the exact scale of compensation will be determined by the AA, and there is sufficiency within the measure to scale up delivery of compensation if required. The Company suggests that due to the large estimates of gannet bycatch in Portuguese waters, there is the potential for many birds to be compensated for, by implementing bycatch reduction techniques across the whole of the target fisheries.

- 12.3.10 The Scottish Ministers conclude that this measure has potential to deliver the required level of compensation, and the level of compensation appears to be scalable. However, the level of compensation to be delivered should be clarified via the additional work that the Company has committed to do. The Scottish Ministers expect that such further detail will be included within the Detailed Seabird Compensation Plan.

12.3.11 **Additionality**

- 12.3.12 The Company states that over half of the current work of SPEA to reduce bycatch in Portuguese waters (i.e. analyses on bycatch hotspots and reduction methods) is funded by the LIFE PanPuffinus project. Specific to the Aveiro-Nazaré SPA, this is due to end in 2025. The Company states that there is potential for SPEA's work to cover multiple sites in Portuguese waters, but notes that the proposed programme of bycatch reduction would not be possible without funding. The Company also states

that a Portuguese national plan of action on bycatch is in progress though a draft has not yet been released. The Company states that this plan will focus on three taxonomic groups and though one of these groups will be seabirds, the plan will be limited in its capacity to deliver for gannet, due to having resources split amongst other taxa.

12.3.13 NatureScot in its response of 21 February 2025 indicate it is content the by-catch measure can be considered additional to routine and ongoing site management practices within the relevant SPAs.

12.3.14 The Scottish Ministers elsewhere note that the RSPB report to Scottish Government on the feasibility of strategic compensatory measures (Tapia-Harris and Evans, 2024)^{xxxiii} highlighted additionality issues around reducing bycatch as a compensatory measure, given existing efforts to reduce bycatch.

12.3.15 In agreement with NatureScot, the Scottish Ministers conclude that the measure is additional to routine and ongoing conservation management practices within the relevant SPAs.

12.3.16 **Monitoring and Adaptive Management**

Monitoring

12.3.17 The Company intends to provide funding and monitor the success of the measure via monitoring bycatch levels post-implementation of the chosen bycatch reduction methods. Monitoring of seabird bycatch by SPEA has so far consisted of interviews with fishers, questionnaires, onboard observers on vessels, and voluntary logbooks. However, the Scottish Ministers note that monitoring methods have not been consistent across years, gear types or scale.

12.3.18 The Scottish Ministers note that the RSPB report to Scottish Government on the feasibility of strategic compensatory measures (Tapia-Harris and Evans, 2024)^{xxxiii} highlighted issues around compliance and monitoring. However, the Scottish Ministers, in agreement with NatureScot's advice of 21 February 2025, consider that the monitoring proposed by the Company would be suitable if standardised pre-implementation, and if compliance is ensured either by onboard observers or the installation of camera monitoring systems since self-reporting of bycatch has proved to be unreliable. The Scottish Ministers also support the Company's proposal to train fishers in effective reporting of bycatch and advise that the Company's suggestion to use camera monitoring systems on fishing vessels should be implemented.

Adaptive Management

12.3.19 The Company has proposed bycatch mitigation in Scottish waters as an alternative should the Portugal approach fail/ not deliver what is required. The Scottish Ministers consider that not enough information is presented by the Company to determine if the

adaptive management proposed for this measure would be suitable. The Company states that a working relationship has been formed with researchers at the [REDACTED] [REDACTED] but highlights that the evidence base and these relationships are not well developed, and that there is currently no mechanism for delivery of bycatch reduction in Scottish waters. Therefore, the Company acknowledges that this measure is unlikely to be developed within the timeframe required.

12.3.20 NatureScot, in its advice of 21 February 2025, stated that the proposed adaptive management measure “appears valid from the information we have been given to date”. The Scottish Ministers conclude that the adaptive management requires further development to be properly assessed.

12.4 Assessment of Feasibility of the Measure

12.4.1 Technical Feasibility

12.4.2 Limited evidence is currently presented in support of the technical feasibility of the measure, in terms of the efficacy of the bycatch reduction techniques, implementation of the chosen reduction method(s), and to demonstrate that the proposed implementation sites are “*bycatch hotspots*” as described by the Company. The Scottish Ministers consider that besides anecdotes, little evidence is provided on bycatch risk or pressure in these areas. The Company states that the measure will deliver benefits in the same region as the proposed impacts. The Scottish Ministers consider that the proposed location and spatial coverage of the measure could be suitable provided the Company can provide evidence that gannets are subject to sufficient levels of bycatch in these areas to result in the subsequent benefit required to compensate for the level of impact set out in the AA.

12.4.3 The Scottish Ministers note that trials are ongoing for the various bycatch reduction methods outlined by the Company, with the Company proposing to fund some of these trials as part of the measure before selecting the specific method to be implemented. However, as these trials are currently ongoing/yet to commence, the Scottish Ministers consider that the efficacy of the bycatch reduction measures is currently unknown. Consequently, the Scottish Ministers cannot currently assess the technical feasibility of the measure as the bycatch reduction method to be implemented has yet to be chosen by the Company.

12.4.4 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

12.4.5 The Company stated in its Outline Compensation Implementation and Monitoring Plan^{vi} that the measure will be implemented when “an agreed number of fishing vessels have commenced carrying out the agreed bycatch control measures”. The Scottish Ministers note that the RSPB report to Scottish Government on the feasibility of strategic compensatory measures (Tapia-Harris and Evans, 2024)^{xxxiii} highlighted that although a bycatch mitigation programme could likely be put into place within a year, full implementation could “take a few years”. The Scottish Ministers also note that implementation may be delayed due to issues with enforcement. Consequently, the benefits of the measure, which may already have a potential lag effect (see section 12.3.1), could be further delayed. The Scottish Ministers agree with NatureScot and conclude that, although likely to occur over several years, the implementation of the measure is technically feasible, provided fishers are willing to take part in bycatch reduction trials and subsequently accommodate the implementation of any chosen methods.

12.4.6 [REDACTED]

12.4.7 The Scottish Ministers conclude that provided the chosen bycatch reduction methods are successful, an implementation and enforcement plan is produced, and fisheries agree to their implementation, the proposed measure is technically feasible and could deliver the required benefit to gannet at Scottish SPAs and protect the overall coherence of the UK Site Network.

12.5 Financial Feasibility

12.5.1 [REDACTED]

12.5.2 The Scottish Ministers are content that, although limited information is supplied on the financial costs of this work, it is financially feasible for the Company to provide funding for the bycatch reduction efforts. The Scottish Ministers expect further details will be confirmed within the Detailed Compensation Implementation and Monitoring Plan.

12.6 Legal Feasibility

12.6.1 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

12.6.2 The Scottish Ministers are satisfied that there are unlikely to be any legal reasons why the Company is not able to contribute funding to SPEA to allow the programme to continue. The Scottish Ministers are therefore satisfied that the measure is legally feasible and are content that any legal requirements [REDACTED]
[REDACTED] relating to the measure will be considered during the Detailed Seabird Compensation Plan stage. If any necessary requirements related to the legal feasibility of the measure cannot be obtained by the Company, it will be required to submit details of an alternative compensation measure within its Detailed Seabird Compensation Plan, in agreement with the Scottish Ministers.

12.7 The Scottish Ministers' Conclusion on the Proposed Measure

12.7.1 The Scottish Ministers consider that the Company has provided evidence to conclude that reducing gannet bycatch in Portuguese waters has the potential to deliver the required level of benefit to gannets from Scottish SPAs to compensate for the impact of the Project identified in the AA. The Scottish Ministers agree with NatureScot that [REDACTED] will help reduce any uncertainties associated with the proposed measure, [REDACTED]
[REDACTED]
[REDACTED] the Scottish Ministers consider that the proposed measure has the potential to compensate for the impacts predicted by the Project.

12.7.2 The Scottish Ministers consider that monitoring of this method would be suitable if standardised pre-implementation in consultation with NatureScot, the Scottish Ministers and RSPB Scotland, and if compliance with the measure by fishers is ensured. The Scottish Ministers also consider that there is a reasonable probability of the measure, in light of the predicted damage, protecting the overall coherence of the UK Site Network, further to agreed-upon methods for attributing gannets from Portuguese waters to the UK Site Network. And subsequently, the measure is ecologically feasible. In addition, the Scottish Ministers require further detail from the Company as part of the Detailed Seabird Compensation Plan in relation to existing bycatch initiatives in the region and adaptive management.

13 Securing of Compensatory Measures

13.1 The obligation for compensatory measures generally requires them to be in place before damage to the European site(s) occurs. In the case of the Project, the impacts identified in the AA occur at the point that the Project becomes operational. The

Scottish Ministers therefore consider it appropriate to meet the requirement to put in place compensatory measures through a suspensive condition on the s.36 consent and marine licences. The following condition will be added to the s.36 consent and marine licences to ensure that satisfactory and sufficient compensatory measures are approved by the Scottish Ministers before the commencement of the Project.

- 13.2 The wording of the below condition is as it will appear on the s.36 consent; however, the condition will also be added to the marine licences for the Project with appropriate changes to defined terms. Defined terms used in the condition below will have the meaning given to them in the s.36 consent, if granted.

Detailed Seabird Compensation Plan

- 1) No later than six months prior to the implementation of proposed compensatory measures (or such alternative timeframe, as approved in writing by the Scottish Ministers), the Developer must submit a Detailed Seabird Compensation Plan in writing to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with NatureScot and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers, which may include a compensatory measures steering group.
- 2) The Detailed Seabird Compensation Plan must be in accordance with the Outline Seabird Compensation Plan submitted on 18 December 2024, and supporting notes submitted on 30 April 2025 unless otherwise agreed by the Scottish Ministers, and demonstrate that the compensatory measures will compensate for any adverse effects on the Special Protection Areas (“SPAs”) as identified and quantified in the Appropriate Assessment for the Development where conclusions of adverse effect on site integrity (“AEOSI”) or being unable to conclude no AEOSI have been drawn. The Detailed Seabird Compensation Plan must include the following:
 - a) a timetable of implementation and maintenance of the compensatory measures;
 - b) the location of the compensatory measures;
 - c) a description of the characteristics of the proposed compensatory measures;
 - d) the predicted outcomes of each compensatory measure, including timescales of when those outcomes will be achieved;
 - e) details of monitoring and reporting of the effectiveness of the compensatory measures including—
 - i) survey methods;
 - ii) survey programmes;
 - iii) success criteria;

- iv) timescales for monitoring reports to be submitted to the Scottish Ministers;
 - v) reporting of meeting success criteria, and,
 - vi) measures to adapt, and where necessary increase, compensatory measures and the criteria used to trigger any adaptation of compensatory measures
 - f) details on how the Developer will comply with any additional permitting requirements; and
 - g) copies of any necessary legal agreements associated with the implementation of the compensatory measures.
- 3) The Developer must implement the measures set out in the approved Detailed Seabird Compensation Plan in full.
- 4) The Commencement of the Development cannot take place without written approval of the Detailed Seabird Compensation Plan by the Scottish Ministers. The Scottish Ministers may also require that certain elements of the Detailed Seabird Compensation Plan must be fulfilled prior to Commencement of the Development. In this instance, the Scottish Ministers will notify the Developer, in writing, of what is required. The Developer must not initiate Commencement of the Development until the Scottish Ministers have confirmed, in writing, that they are content and any such elements have been fulfilled.
- 5) Any requests for amendments to the approved Detailed Seabird Compensation Plan must be submitted, in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with NatureScot and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers, which may include a compensatory measures steering group.
- 6) The Developer must make such alterations to the approved Detailed Seabird Compensation Plan as directed by the Scottish Ministers and submit the updated Detailed Seabird Compensation Plan to the Scottish Ministers for approval within such a period as directed in writing by the Scottish Ministers.
- 7) The Developer must notify the Scottish Ministers and NatureScot of the completion of any compensatory measures set out in the Detailed Seabird Compensation Plan.

14 References

- ⁱ Salamander. 2024. Salamander Offshore Wind Farm HRA Derogation Case, Part 1-3. 08581085.
- ⁱⁱ Salamander. 2024. Salamander Offshore Wind Farm HRA Derogation Case, Compensation Plan Roadmap. 08614145.
- ⁱⁱⁱ NIRAS Group (UK) Ltd. 2024. Salamander Offshore Wind Farm HRA Derogation Case, Compensation Overview Report. 09084948.
- ^{iv} NIRAS Group (UK) Ltd. 2024. Salamander Offshore Wind Farm HRA Derogation Case, Compensation Plan. 08866458.
- ^v NIRAS Group (UK) Ltd. 2024. Salamander Offshore Wind Farm HRA Derogation Case, Ecological Evidence Report. 08819427.
- ^{vi} NIRAS Group (UK) Ltd. 2024. Salamander Offshore Wind Farm HRA Derogation Case, Outline Compensation Implementation and Monitoring Plan. 09084950.
- ^{vii} [REDACTED]
- ^{viii} [REDACTED]
- ^{ix} [REDACTED]
- ^x [REDACTED]
- ^{xi} [REDACTED]
- ^{xii} Schüttler, E., Klenke, R., McGehee, S., Rozzi, R. and Jax, K. (2009). Vulnerability of ground-nesting waterbirds to predation by invasive American mink in the Cape Horn Biosphere Reserve, Chile. *Biological Conservation*, 142(7), pp 1450-1460.
- ^{xiii} Hipfner, J.M., Lemon, M.J. and Rodway, M.S., 2010. Introduced mammals, vegetation changes and seabird conservation on the Scott Islands, British Columbia, Canada. *Bird Conservation International*, 20(3), pp.295-305.
- ^{xiv} Carl, G. C., Guiget, C. J. and Hardy, G. A. (1951) *Biology of the Scott Island group*, British Columbia. Victoria: British Columbia Provincial Museum.
- ^{xv} Rodway, M. S., Lemon, M. J. F. and Summers, K. R. (1990) *British Columbia seabird colony inventory: Scott Islands*. Vancouver: Canadian Wildlife Service. (Technical Report Series No. 86).
- ^{xvi} Johannesson, J. H. and Gudjonsdottir, B. (2007). The effect of mink-predation on six monitored Black Guillemot colonies in Strandasysla, NW-Iceland. *Naturufraedingurinn*, 76, pp 29–36.
- ^{xvii} Bonesi, L. and Palazon, S. (2007). The American mink in Europe: status, impacts, and control. *Biological conservation*, 134(4), 470-483.
- ^{xviii} López, R., Clapperton, B. K. and Medina-Voguel, G. (2023). A global review of the American mink (*Neovison vison*) removal techniques—Patagonia as a case study for their potential application. *Gayana*, 87(1), pp 43-62.

-
- ^{xix} Furness, R., MacArthur, D., Trinder, M. and Macarthur, K. (2013). Evidence review to support the identification of potential conservation measures for selected species of seabirds. Report to Defra.
- ^{xx} Mavor, R.A., Pickerell, G., Heubeck, M. and Mitchell, P.I. 2002. Seabird numbers and breeding success in Britain and Ireland, 2001. JNCC. Peterborough. (UK Nature Conservation, No. 26).
- ^{xxi} Dunstone, N. (1993). The Mink. London, Poyser Natural History.
- ^{xxii} Moore, N. P., Roy, S. S. and Helyar, A. (2003). Mink (*Mustela vison*) eradication to protect ground-nesting birds in the Western Isles, Scotland, United Kingdom. *New Zealand Journal of Zoology*, 30(4), pp 443-452.
- ^{xxiii} Dunstone, N. and Birks, J. S. (1985). The comparative ecology of coastal, riverine and lacustrine mink *Mustela vison* in Britain. *Zeitschrift für angewandte Zoologie*, 72(1-2), 59-70.
- ^{xxiv} Birks, J. D. S and Dunstone, N. (1991). Mink. In: *The Handbook of British Mammals*. 3rd ed. Blackwell Scientific Publications, Oxford, UK.
- ^{xxv} Burton, N.H.K. and Fuller, R.J., 1999. A Review of the Status and Population Trends of Ground-Nesting Birds Vulnerable to Mink Predation on Harris and Lewis. British Trust for Ornithology.
- ^{xxvi} Ferreras, P. and Macdonald, D.W., 1999. The impact of American mink *Mustela vison* on water birds in the upper Thames. *Journal of Applied Ecology*, 36(5), pp.701-708.
- ^{xxvii} Nordström, M., 2003. Introduced predator in Baltic Sea archipelagos: variable effects of feral mink on bird and small mammal populations. *Turun yliopisto*.
- ^{xxviii} Ratcliffe, N., Craik, C., Helyar, A., Roy, S. and Scott, M., 2008. Modelling the benefits of American Mink *Mustela vison* management options for terns in west Scotland. *Ibis*, 150, pp.114-121.
- ^{xxix} Stien, J., Molværsmyr, S., Breistøl, A., Guidos, S., Landa, A. and Systad, G.H.R., 2023. Effektmåling av minkuttak på bakkehekkende sjøfugl.
- ^{xxx} McDonald, R.A., O'Hara, K. and Morrish, D.J., 2007. Decline of invasive alien mink (*Mustela vison*) is concurrent with recovery of native otters (*Lutra lutra*). *Diversity and Distributions*, 13(1), pp.92-98.
- ^{xxxi} Bonesi, L., Strachan, R. and Macdonald, D.W., 2006. Why are there fewer signs of mink in England? Considering multiple hypotheses. *Biological Conservation*, 130(2), pp.268-277.
- ^{xxxii} Harrington, L.A., Birks, J., Chanin, P. and Tansley, D., 2020. Current status of American mink *Neovison vison* in Great Britain: a review of the evidence for a population decline. *Mammal review*, 50(2), pp.157-169.
- ^{xxxiii} Tapia-Harris, C. & Evans, T. (2024). Report to Scottish Government. Feasibility of strategic ornithological compensatory measures in the Scottish context
- ^{xxxiv} Nordström, M., 2003. Introduced predator in Baltic Sea archipelagos: variable effects of feral mink on bird and small mammal populations. *Turun yliopisto*.
- ^{xxxv} Banks, P.B., Nordström, M., Ahola, M., Salo, P., Fey, K., Korpimäki, E., 2008. Impacts of alien mink predation on island vertebrate communities of the Baltic Sea Archipelago: review of a long-term experimental study. *Boreal Environmental Research* 13, 3-16.
- ^{xxxvi} Clode, D. and Macdonald, D. W. (2002). Invasive predators and the conservation of island birds: the case of American Mink *Mustela vison* and terns *Sterna* spp. in the Western Isles, Scotland. *Bird Study*, 49(2), 118-123.

-
- ^{xxxvii} Ramírez, I., Mitchell, D., Vulcano, A., Rouxel, Y., Marchowski, D., Almeida, A., Arcos, J.M., Cortes, V., Lange, G., Morkūnas, J., Oliveira, N. and Paiva, V.H. (2024). Seabird bycatch in European waters. *Animal Conservation*, 27, 737-752. <https://doi.org/10.1111/acv.12948>
- ^{xxxviii} Calado, J.G., Ramos, J.A., Almeida, A., Oliveira, N. and Paiva, V.H. (2021). Seabird-fishery interactions and bycatch at multiple gears in the Atlantic Iberian coast. *Ocean and Coastal Management*, 200, 105306.
- ^{xxxix} Oliveira, N., Henriques, A., Miodonski, J., Pereira, J., Marujo, D., Almeida, A., Barros, N., Andrade, J., Marçalo, A., Santos, J., Oliveira, I.B., Ferreira, M., Araújo, H., Monteiro, S., Vingada, J. and Ramírez, I. (2015). Seabird bycatch in Portuguese mainland coastal fisheries: An assessment through on-board observations and fishermen interviews. *Global Ecology and Conservation*, 3, 51-61.
- ^{xl} Oliveira, N., Almeida, A., Alonso, H., Constantino, E., Ferreira, A., Gutiérrez, I., Santos, A., Silva, E. and Andrade, J. (2020). A contribution to reducing bycatch in a high priority area for seabird conservation in Portugal. *Bird Conservation International*, 31(4), 553-572.
- ^{xli} Araújo, H., Correia-Rodrigues, P., Debru, P., Ferreira, M., Vingada, J. and Eira, C. (2022a). Balearic shearwater and northern gannet bycatch risk assessment in Portuguese Continental Waters. *Biological Conservation*, 267, 109463.
- ^{xlii} Pott, C. and Wiedenfeld, D. (2017). Information gaps limit our understanding of seabird bycatch in global fisheries. *Biological Conservation*, 210, 192-204.
- ^{xliii} Bradbury, G., Shackshaft, M., Scott-Hayward, L., Rexstad, E., Miller, D. and Edwards, D. (2017). Risk assessment of seabird bycatch in UK waters. Report prepared for the Department for Environment Food and Rural Affairs (Project Code MB0126).
- ^{xliv} Fagundes, A.I.C. (2021). The use of the Portuguese coast by migratory seabirds (Master's thesis, Universidade de Évora).
- ^{xlvi} Elmberg, J., Hirschfeld, E., Cardoso, H., & Hessel, R. (2020). Seabird migration at Cabo Carvoeiro (Peniche, Portugal) in autumn 2015. *Marine Ornithology*, 48, 231-244
- ^{xlvi} Araújo, H., Correia Rodrigues, P., Bastos-Santos, J., Ferreira, M., Pereira, A., Martínez-Cedeira, J., Vingada, J. and Eira, C. (2022b). Monitoring abundance and distribution of Northern Gannets *Morus bassanus* in Western Iberian Waters in autumn by aerial surveys. *Ardeola*, 69, 179-202.
- ^{xlvi} Deakin, Z., Hamer, K.C., Sherley, R.B., Bearhop, S., Bodey, T.W., Clark, B.L., Grecian, W., Gummery, M., Lane, J., Morgan, G., Phillips, R., Wakefield, E.D. and Votier, S. C. (2019). Sex differences in migration and demography of a wideranging seabird, the northern gannet. *Marine Ecology Progress Series*, 622, 191-201.
- ^{xlvi} Kubetzki, U., Garthe, S., Fifield, D., Mendel, B. and Furness, R. W. (2009). Individual migratory schedules and wintering areas of northern gannets. *Marine Ecology Progress Series*, 391, 257-265.
- ^{xlvi} Lane, J.V., Pollock, C.J., Jeavons, R., Sheddán, M., Furness, R.W. and Hamer, K.C. (2021). Post-fledging movements, mortality and migration of juvenile northern gannets. *Marine Ecology Progress Series*, 671, 207-218.
- ⁱ Furness, R.W., Hallgrímsson, G.T., Montevecchi, W.A., Fifield, D., Kubetzki, U., Mendel, B. and Garthe, S. (2018). Adult Gannet migrations frequently loop clockwise around Britain and Ireland. *Ringling & Migration*, 33(1), 45-53.
- ⁱⁱ Fort, J., Pettex, E., Tremblay, Y., Lorentsen, S.H., Garthe, S., Votier, S., Pons, J.B., Siorat, F., Furness, R.W., Grecian, W.J., Bearhop, S., Montevecchi, W.A. and Grémillet, D. (2012). Meta-population evidence of oriented chain migration in northern gannets (*Morus bassanus*). *Frontiers in Ecology and the Environment*, 10(5), 237-242.

-
- ⁱⁱⁱ Costa, R.A., Sá, S., Pereira, A.T., Ângelo, A.R., Vaqueiro, J., Ferreira, M., Eira, C. (2020). Prevalence of entanglements of seabirds in marine debris in the central Portuguese coast, Marine Pollution Bulletin, 161, Part A.
- ⁱⁱ ICES. 2023. Working Group on Bycatch of Protected Species (WGBYC). ICES Scientific Reports. 5:111. 334 pp. <https://doi.org/10.17895/ices.pub.24659484>
- ^{iv} Wanless, S., Harris, M.P. and Murray, S. (2023). Northern Gannet *Morus bassanus*. In: Burnell, D., Perkins, A.J., Newton S.F., Bolton, M., Tierney, T.D. and Dunn T.E. (2023) Seabirds Count: a census of breeding seabirds in Britain and Ireland (2015-2021). Lynx Nature Books, Barcelona.