MAKING COMPLEX EASY
A TETRA TECH COMPANY

SOUTH COAST DESIGNATED MARITIME AREA PLAN

SEA Statement

IE000716A
F02
October 2024

Contents

Tables

Figures

1 INTRODUCTION

RPS was commissioned by the Department of the Environment, Climate and Communications (DECC) to undertake the Strategic Environmental Assessment (SEA) of the South Coast Designated Maritime Area Plan for Offshore Renewable Energy (hereafter referred to as 'SC-DMAP' or 'Plan').

An initial SC-DMAP proposal was subject to a comprehensive nine and half week non-statutory public consultation during August to October 2023. The outcome of this consultation, alongside a process of environmental analysis and a technical assessment subsequently led to the development of the draft SC-DMAP, which was subject to formal statutory consultation between May and August 2024.

This SEA Statement has been prepared as part of the SEA of the SC-DMAP. It has been prepared in accordance with Article 8 (Decision Making) of EU Directive 2001/42/EC on Strategic Environmental Assessment; Article 16(2) of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations (S.I. No. 435 of 2004) as amended; the requirement in section 22(3) of the MAP Act 2021 and Circular Letter PL 9/2013, Department of Environment, Community and Local Government.

This document provides information on the decision-making process and documents how environmental considerations, the views of consultees / stakeholders and the recommendations of the SEA Environmental Report and the assessment carried out under Article 6 of the Habitats Directive have influenced the SC-DMAP as made.

The structure of the SEA Statement is as follows:

1. Introduction,
2. Summary of Key Facts,
3. Summary of the SEA Process,
4. Influence of the SEA Process on SC-DMAP,
5. How Consultation Feedback has Influenced Final Draft SC-DMAP,
6. Preferred Scenario and Reasons for Choosing the Final Draft SC-DMAP,
7. Measures to Monitor Significant Environmental Effects of the Implementation of the SC-DMAP that has been made,
8. Addendum to the SEA Environmental Report.

This SEA Statement has been prepared further to the requirements of Section 25(2) of the Maritime Area Planning Act 2021, as amended (MAP Act). This requires that a draft of the DMAP, together with the Environmental Statement and Appropriate Assessment Determination in respect of the draft DMAP, shall be laid before each House of the Oireachtas. Should the Houses of the Oireachtas approve the draft, it will then be formally made by the Minister. Reference in this Statement to the final draft SC-DMAP/final draft Plan can be read as referring to the draft SC-DMAP as submitted to the Houses of the Oireachtas pursuant to Section 25(2) of the MAP Act.

UPDATE: The final draft SC-DMAP was approved by the Houses of the Oireachtas on 9th and 10th October 2024 with no amendments and was formally made by the Minister on 24th October 2024.

2 SUMMARY OF KEY FACTS

Title of Plan:	**South Coast - Designated Maritime Area Plan**
Purpose of Plan:	The South Coast Designated Maritime Area Plan (SC-DMAP) is the State's first sub-national maritime spatial plan focused on offshore renewable energy (ORE). It aims to ensure the sustainable development of offshore wind by taking into account environmental protection and the interests of existing marine users and activities.
Competent Authority:	The Minister for the Environment, Climate and Communications (MECC)
Period Covered:	The review timeline for the SC-DMAP has been confirmed as 6 years in accordance with the requirements of Section 26(1) of the MAP Act 2021.
Area Covered:	The Plan relates to a geographical area along Ireland's South Coast It extends from the marine area stretching from the Administrative Boundary for local government areas on the South Coast, as established by the Local Government Acts 1925 to 2014, bordering the northern boundary of the SC-DMAP area to the 80-metre depth contour and/or the edge of the Irish Exclusive Economic Zone (EEZ) and comprises a total geographical area of approximately 8,813 square kilometres (km^2).
Nature and Content of the SC-DMAP:	This first DMAP for ORE is located off the south coast of Ireland and identifies four broad areas within which future fixed offshore wind development will be focussed. These areas, referred to as Maritime Areas A-D, have been identified through a process of public engagement and consultation, constraints analysis, technical assessment and environmental impact assessments. The policy areas addressed in SC-DMAP include the following broad headings: • SC-DMAP Geographical Area for Offshore Wind Developments; – Plan-Led ORE Development and the South Coast DMAP – Fixed Offshore Wind in the Irish Celtic Sea – Fixed Offshore Wind Technology – SC-DMAP Maritime Areas for Fixed Offshore Wind Deployment • Plan Level Measures; • Implementation, Governance and Monitoring; • Marine Environment and Biodiversity; • Coexistence; – Co-existence with Aquaculture, Seafood and Fisheries, – Co-existence with Shipping, – Co-existence with Tourism and Recreation, – Co-existence with Telecommunications, – Co-existence with Marine Archaeological and Cultural Heritage. • Land and Sea Interactions;

	– Ports and Harbours; – Transmission System Infrastructure • Economic and Employment Growth Potential; and • Commitment to on-going local and regional community engagement.
Main Contact:	Marine Planning Advisory, Department of the Environment, Climate and Communications, Tom Johnson House, Haddington Road, Dublin D04 K7X4.

3 SUMMARY OF SEA PROCESS

3.1 Introduction

The SC-DMAP has been subject to a process of SEA, as required under the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations S.I. No. 435 of 2004, as amended. This has included the key steps described in the following sections.

3.2 Screening

The SEA Directive applies to plans and programmes which are (i) prepared or adopted by a national, regional or local level and (ii) required by legislative, regulatory or administrative provisions. Mandatory SEA is required for plans and programmes that are prepared for certain specified sectors, notably energy, and which set the framework for future development consent of projects listed in Annexes I and II to the EIA Directive. This is recognised in Part 2, Chapter 3, Section 22(3) of the MAP Act 2021 which requires strategic environmental assessment process to be carried out in relation to the preparation of a DMAP. Having regard to the above, it was determined by DECC that the SC-DMAP would be subject to SEA.

3.3 Scoping and Statutory Consultation

Scoping was carried out to establish the proposed scope and level of detail of the information to be contained in the Environmental Report. An SEA Scoping Report was prepared and sent to the statutory environmental authorities for SEA in Ireland in August 2023, to be used as the basis for statutory consultations. In addition, informal transboundary consultation was undertaken at scoping stage with the relevant SEA authority in Northern Ireland. The consultees contacted at scoping stage are outlined in **Table 3-1**.

Table 3-1: SEA Scoping Consultees

SEA Scoping Consultees
Environmental Protection Agency (EPA)
Department of the Environment, Climate and Communications (DECC)
Department of Agriculture, Food and the Marine (DAFM)
Department of Housing, Local Government and Heritage (DHLGH)
Development Applications Unit (including NPWS)
Department of Agriculture, Environment and Rural Affairs Northern Ireland (DAERA)

A scoping workshop was subsequently held online on 1st September 2023 via Microsoft Teams. Representatives from the statutory environmental authorities were invited to attend this workshop. This workshop was to facilitate engagement between the statutory environmental authorities, the DECC Plan team and the SEA/AA teams. The following were represented on the day:

- SEA/AA team;
- DECC Plan team;
- Other representatives from other units of DECC;
- Representatives from DAFM;
- Representatives from DHLGH; and
- EPA SEA Unit.

Comments made at the workshop (and in subsequent written submissions) from the consultees were taken into account in the preparation of the Environmental Report. Submissions received from statutory and non-statutory consultation were also considered in preparation of the Environmental Report. All the environmental topics listed in the SEA Directive were considered and all were scoped in for the purposes of the assessment. Consultation is discussed in further in **Chapter 5**.

3.4 Constraints Analysis

To inform the spatial elements of the SC-DMAP, environmental and technical constraints were compiled in a Geographical Information System (GIS) model to allow for analysis and spatial interpretation. A wide scope

of environmental data was collated and a system of scoring was applied to inform an environmental heat mapping exercise. This allowed the areas of highest cumulative environmental constraint to be identified and this informed advice and guidance provided to the Plan team and the technical advisors on the most sensitive environmental areas in the SC-DMAP proposal area. The environmental constraints were then integrated into a larger GIS model to allow for further analysis which included technical and finally cost considerations. The analysis of this data resulted in identification of four broad areas (Maritime Areas A-D) in which deployment of fixed wind could be considered. Notably this avoided the first 10km from the coast as this was identified in the environmental constraints identification and subsequent analysis as cumulatively the most constrained area. The full process is set out in the South Coast DMAP: Maritime Area Identification Report (BVG 2024)[1].

3.5 Environmental Assessment and Environmental Report

3.5.1 Summary of Assessment

Prior to the formal assessment of draft policies, the SEA and AA teams provided advice and guidance to the Plan team on environmental issues / trends / problems identified during compilation of baseline and characterisation data and stakeholder feedback from earlier consultations. This provided a basis for proactive policy development which was responsive to environmental issues.

The approach used for the assessment in the SEA was termed an 'objectives-led assessment'. The draft policies for SC-DMAP were assessed against defined Strategic Environmental Objectives (SEO) using the guiding questions as presented in **Table 3-2**. The environmental receptors identified in the SEOs were derived from the SEA environmental receptors set out in Annex 1(f) of the SEA Directive e.g., population, biodiversity, material assets etc. The draft SEOs were included in scoping consultation and updated following that consultation. The SEOs and guiding questions were also reflective of the current understanding of the key environmental issues having regard to the environmental protection objectives outlined in the main Environmental Report. A matrix format was used for the assessment, which permitted a systematic approach and comparison of alternatives. The matrix assessment was supported by text identifying, describing and evaluating the effects.

Table 3-2: Strategic Environmental Objectives and Guiding Questions

SEA Environmental Objective(s)	To What Extent will the SC-DMAP contribute to….	Related NMPF and SDG Policies for Context
Population and Human Health (PHH) Objective: (i) To ensure bathing waters are not prevented from achieving excellent status as a result of the SC-DMAP (ii) To ensure the quality standards for water quality in shellfish water are not compromised as a result of the SC-DMAP (iii) To maintain access to the coastal and marine resource for tourism and recreation. (iv) To avoid significant disruption, disturbance or nuisance to local communities.	• Inclusive public access to and within the SC-DMAP area? • Opportunities for co-existence and co-operation with other activities in the SC-DMAP area? • Future provision of services for tourism and recreation activities particularly in the coastal adjacent area? • A net increase in marine related employment in the hinterland of the SC-DMAP? • Enhancement or promotion of social benefits? • Addressing transboundary impacts beyond the SC-DMAP area?	**NMPF Policies:** • Environmental – Ocean Health Policy 1 • Biodiversity Policy 1 and 2 • Water Quality Policy 1 • Sea-floor and Water Column Integrity Policy 1 and 2 • Co-existence Policy 1 • Access Policy 1 • Rural Coastal and Island Communities Policy 1 **Strategic Development Goals:** • SDG 3 - good health and wellbeing • SDG 7 - affordable and clean energy • SDG 11 - Sustainable cites and communities • SDG 13 - Climate action • SDG 14 - Life below water
Biodiversity, Flora and Fauna (BFF) Objective:	• Achieving MSFD targets relating to biodiversity, non-indigenous species?	**NMPF Policies:** • Environmental – Ocean Health Policy 1

[1] gov - Public Consultation on the Draft South Coast Designated Maritime Area Plan for Offshore Renewable Energy (SC-DMAP) (www.gov.ie)

SEA Statement

SEA Environmental Objective(s)	To What Extent will the SC-DMAP contribute to….	Related NMPF and SDG Policies for Context
(i) Preserve, protect, maintain and where appropriate restore marine biodiversity (and terrestrial aspects on which the marine biodiversity is reliant), particularly EU designated sites and protected species. (ii) Avoid, minimise or mitigate disturbance impacts on mobile species, within or reliant on the marine area, resulting from SC-DMAP. (iii) Safeguard space for the natural marine environment to enable continued provision of ecosystem goods and services within the SC-DMAP area. (iv) Contribute to achieving the environmental objectives under the MSFD and the WFD (v) Maintain and protect marine protected areas and ensure integrity of the network is not impacted as a result of the SC-DMAP.	• Safeguarding aquatic ecosystems and space for the provision of ecosystem goods and services? • Avoiding, minimising, or mitigating disturbance impacts on mobile aquatic species? • Preserving, protecting, maintaining and / or restoring protected areas and ensuring integrity of the network is not impacted? • Protecting and conserving ecological corridors? • Monitoring and research as part of the implementation of the draft plan? • Ongoing engagement with MPA process and Celtic Sea sensitivity mapping?	• Biodiversity Policy 1, 2, 3, 4 • Protected Marine Sites Policy 1 and 2 • Water Quality Policy 1 and 2 • Sea-floor and Water Column Integrity Policy 1, 2 and 3 **Strategic Development Goal:** • SDG 14 - Life below water • SDG 15 - Life on Land
Land and Soil (LS) Objective: (i) Maintain the integrity of marine processes for the protection of coastal habitats and places within and influenced by the SC-DMAP. (ii) Protect the quality and character of the seabed and its sediments and avoid significant effects on seabed morphology and sediment transport processes.	• Maintaining the integrity of marine processes for the protection of coastal habitats and areas influenced by the SC-DMAP? • Maintaining character of seabed and sediments? • Avoiding affecting seabed morphology and sediment processes?	**NMPF Policies:** • Environmental – Ocean Health Policy 1 • Sea-floor and Water Column Integrity Policy 1, 2, and 3 • Seascape and Landscape Policy 1. • **Strategic Development Goal:** • SDG 14 - Life below water • SDG 15 - Life on Land
Water (W) Objective: (i) Contribute to achieving the objectives under the MSFD and the WFD i.e. achievement or maintenance of Good Environmental Status (GEnS) and Good Ecological Status (GEcS). (ii) Protect, maintain, and where possible improve status of classified water bodies within the Plan area in line with requirements of the WFD and MSFD. (iii) Avoid pollution of the coastal and marine environment (iv) Reduce marine litter resulting from terrestrial and marine dumping (v) Minimise generation and propagation of manmade noise within the marine environment. (vi) Promote energy transmission technologies and configurations which seek to	• Achieving the objectives under the MSFD and the WFD? • Pollution prevention of the coastal, marine and freshwater environment from ORE related activity? • Ensuring minimal noise pollution within the marine environment? • Ensuring EMF is minimised?	**NMPF Policies:** • Environmental – Ocean Health Policy 1 • Water Quality Policy 1 and 2 • Sea-floor and Water Column Integrity Policy 1,2 and 3 • Marine Litter Policy 1 • Underwater Noise Policy 1 • Transmission Policy 1 and 2 **Strategic Development Goal:** • SDG 3 - Good Health and Well-Being • SDG 6 - Clean Water and Sanitation • SDG 7 - Affordable and Clean Energy • SDG 14 - Life below water

SEA Environmental Objective(s)	To What Extent will the SC-DMAP contribute to….	Related NMPF and SDG Policies for Context
minimise EMF within the marine environment.		
Air Quality (AQ) Objective: (i) Avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air, including transboundary considerations. (ii) Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency. (iii) Avoid adversely impacting on air quality, with particular regard to known existing concentrations of transport and industrial related pollution close to the coast.	• Avoiding adverse impacts on air quality, with particular regard to known pollution from ORE activities? • Mitigating effects on human health and the environment from emissions? • Promoting air quality improvement measures?	**NMPF Policies:** • Air Quality Policy 1 and 2 • Transboundary Policy 1 **Strategic Development Goal:** • SDG 3 - Good Health and Well-Being • SDG 11 - Sustainable cites and communities
Climatic Factors (C) Objective: (i) Minimise existing and avoid new emissions of greenhouse gases across all sectors. (ii) Decrease the usage of fossil fuels and increase renewable energy usage. (iii) Reduce the environmental, social and economic vulnerability to the impacts of climate change and/or improve resilience to climate and coastal change.	• Reduction of greenhouse gas emissions? • Reduction in reliance on fossil fuels and encourage renewable energy use? • Reduction in the environmental, social, and economic risks from climate change? • Improving resilience to climate and coastal change? • Achievement of Ireland's 2030 and longer-term renewable energy and legally binding decarbonisation objectives, including the overarching objective to deliver a net zero greenhouse gas emissions Irish economy by 2050.	**NMPF Policies:** • Climate Change Policy 1 • Climate Change Policy 2, • Protected Marine Sites Policy 3 • ORE Policy 1, • Transmission Policy 1 **Strategic Development Goal:** • SDG 3 – Good Health and Well-Being • SDG 7 – Affordable and Clean Energy • SDG 11 - Sustainable cites and communities
Material Assets (MA) Objective: (i) Contribute to transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050. (ii) Address conflicts with other environmental protection objectives. (iii) Support marine material assets (including fisheries, shellfish, military activity and infrastructure) and resources by maximising opportunities for co-existence, co-location and co-benefits. (iv) Ensure continuity and safety of navigation (marine and air).	• Supporting marine material assets by maximising co-location and co-benefit opportunities? • Avoiding conflict with other environmental protection objectives? • Transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy? • Ensuring continuity and safety of marine and air navigation? • Enhancing future energy security at regional and national level through displacing volatile fossil fuel imports with indigenous green energy? • Maximising opportunities for co-existence between ORE and commercial fisheries, through minimising overlaps between ORE development areas and commercially significant fisheries, avoiding the most ecologically	**NMPF Policies:** • Co-existence Policy 1 • Protected Marine Sites Policy 1 • Infrastructure Policy 1 • Defence and Security Policy 1 • ORE Policy 1, 10 and 11 • Transmission Policy 1 • Fisheries Policy 2, 3, 4 and 6 • Transboundary Policy 1 **Strategic Development Goal:** • SDG 8 - Decent Work and Economic Growth • SDG 9 - Industry, Innovation and Infrastructure • SDG 11 - Sustainable cites and communities • SDG 12 – Responsible Consumption and Production • SDG 14 - Life below water

SEA Environmental Objective(s)	To What Extent will the SC-DMAP contribute to….	Related NMPF and SDG Policies for Context
	sensitive fisheries spawning/nursery areas, as well as mitigatory measures that enhance co-existence opportunities.	
Cultural Heritage (CH) Objective: (i) Protect places, features, buildings and landscapes of cultural, historical archaeological or architectural heritage. (ii) Protect the site and setting of marine and coastal historic environment features. (iii) Protect known wrecks and historic and cultural features within the DMAP area. (iv) Incorporate opportunities to enhance cultural/historic knowledge and understanding.	• Protecting, conserving, or enhancing places, features, buildings, and landscapes of cultural, archaeological, or architectural heritage significance? • Protecting the site and setting of marine, freshwater and coastal historic environment features? • Protecting historical and cultural features (including wrecks)? • Ensuring opportunities to enhance cultural/historic knowledge and understanding are incorporated?	**NMPF Policies:** • Heritage Assets Policy 1 • Seascape and Landscape Policy 1 • Transboundary Policy 1 **Strategic Development Goal:** • SDG 11 - Sustainable cites and communities
Landscape (LandS) Objective: (i) Protect and maintain landscape character and visual amenity, including geo-heritage. (ii) Recognise and respect the value of wider (non-designated) landscapes and seascapes.	• Valuing and protecting diversity and local distinctiveness of wider (non-designated) landscapes /seascapes? • Protecting and enhancing the landscape / seascape including geo-heritage?	**NMPF Policies:** • Heritage Assets Policy 1 • Seascape and Landscape Policy 1 **Strategic Development Goal:** • SDG 11 - Sustainable cites and communities

In the draft SC-DMAP, a total of 47 policies were drafted across 22 themes and in addition, four spatial areas were identified. The policy themes addressed issues such as co-existence with sea commercial fisheries, shipping, climate change, environmental protection and governance among others. A summary of the assessment of the policies in draft SC-DMAP is outlined in **Table 3-3**. The summary assessment and mitigations in the table relate to the assessment of the draft SC-DMAP which was the subject of statutory consultation from May to August 2024.

Table 3-3: Summary of Assessment for Draft SC-DMAP

Policy Objective Theme	Summary of Policies and Assessment	Mitigation/ Recommendation (✓/×)
Policy Objectives for Maritime Areas (MA)	These policies recognise Ireland's ORE potential, and provide an overview of the type of ORE development and how this will be deployed in the defined Maritime Areas (A-D) within the SC-DMAP. Subject to application of related policies for lower tier plans and projects, and the application of project level requirements such as preparation of supporting plans and carrying out site specific surveys, no mitigation required.	×
Policy Objectives for Mitigation (MI)	These policies set out the requirement of regional surveys to be carried out to inform the project level EIA and AA in-combination and cumulative assessments. They also set out survey requirements and guidance to support applications. These policies reflect iterative feedback from the SEA/AA teams over the evolution of the draft plan and are considered positive. No mitigation required.	×

Policy Objective Theme	Summary of Policies and Assessment	Mitigation/ Recommendation (✓/×)
Policy Objectives for Governance, Implementation, and Monitoring (IGM)	These policies relate to the governance structure proposed to support the implementation of the SC-DMAP and reflect considerable iterative discussion and feedback from the SEA / AA team on the need for a collaborative forum in which other key infrastructure providers such as those delivering grid and port services would be aligned. The policy objectives include an Implementation Board supported by working groups on environmental and technical matters. These also support the publication of an Implementation Plan and are considered broadly positive. Mitigation was proposed to improve monitoring commitments.	✓ (M & R)
Policy Objectives for Overarching Environmental Protection (OEP)	These policies set the requirement for planning applications to have regard to Guidelines issued under section 7 of the MAP Act, and prepare robust project assessments and a project-specific Nature Enhancement and Rehabilitation Plan to ensure adequate environmental protection is acheived at the project level within the SC-DMAP area. These policies reflect iterative feedback from the SEA/AA teams over the evolution of the draft Plan and are considered broadly positive. Mitigation was proposed to include a guidance note on the scope and expectations for applications for a typical offshore wind farm and associated infrastructure to bridge the gap until offshore energy guidelines are available.	✓ (M)
Policy Objective for Biodiversity (B)	This policy objective sets out the guidance and plans and updates thereof that applications for development within the SC-DMAP area will have to have regard to. This policy and the list provided in Appendix D of the SC-DMAP reflect iterative feedback and early proactive and protective mitigations from the SEA/AA teams over the evolution of the draft Plan and are considered broadly positive. No mitigation required.	×
Policy Objective for Protected Marine Sites (MS)	This policy objective aims to ensure appropriate consideration is given to evolving baseline conditions for the statutory reviews of the SC-DMAP and projects brought forward under this Plan. This will includes additional future national protected sites e.g. Marine Protected Areas (MPAs) and European Sites. This policy reflects discussions with the SEA/AA teams on the importance of a robust evidence base and good data to inform furture plans and development applications and also the importance of proactively integrating the evolving baseline and aligns with NMPF objectives. The policy is considered broadly positive.No mitigation required.	×
Policy Objectives for Water Quality (WQ)	This policy objective aims to protect and improve water quality by setting a requirement for projects to carry out comparative analysis of routes and installation techniques. This policy reflects discussions with the SEA/AA teams on the importance of good site and route selection to avoide impacts in the first instance and aligns with NMPF objectives. The policy is considered broadly positive.No mitigation required.	×
Policy Objectives for Marine Litter (ML)	These policies set out requirements for project proposals within the SC-DMAP area to minimise the marine litter and impacts of electromagnetic field in the marine environment through prevention, reuse and recycling of waste and mitigation by design respectively. These policies reflect iterative feedback from the SEA/AA teams and alignment with Marine Strategy Framework Directive and NMPF objectives. The policies are considered broadly positive.No mitigation required.	×
Policy Objectives for Underwater Noise (UN)	This set of policies aims to reduce the impact of underwater noise on the marine environment and marine mammals in particular and includes reference to NPWS guidance and use of apporpriate programming and construction techniques to minimise risks. The policies are considered broadly positive	✓

Policy Objective Theme	Summary of Policies and Assessment	Mitigation/ Recommendation (✓/×)
	however mitigation is proposed to improve the evidence base for future ORE projects in deeper waters in the medium to longer term, to future proof the plan, noting that very little evidence is currently available beyond 45m.	(R)
Policy Objectives for Air Quality (AQ)	This policy objective aims to reduce reliance on fossil fuel emissions and reduce air pollution by requiring projects to comply with existing regulatory and policy commitments under MARPOL and Ireland's enacting legislation. The policy is considered broadly positive. No mitigation required.	×
Policy Objectives for Climate Change (CC)	This set of policies supports Ireland's climate and renewable energy objectives by providing for ORE development and aims to ensure that the development in the SC-DMAP area should avoid impacts on carbon storage and carbon sequestration and include consideration of the integrity of European sites. The policies were considered broadly positive however mitigation was also proposed which included development (by DECC in partnership with the Marine Institute) of an SC-DMAP area specific Ecosystems Services Map which identifies key services including but not limited to climate regulation services.	✓ (M)
Policy Objectives for Co-existence (CO)	This set of policy objectives aims to promote co-existence between ORE and other existing and future uses in the SC-DMAP and sets requirements for developers to accurately map their respective development sites, including electricity export and inter-array cables as laid post development. The developers are required to provide this data to MARA and other maritime users in a defined format. These policies reflect feedback from consultation over the evolution of the draft plan. Mitigations were proposed in relation to achieving more accurate data for vessels less than 12 m, funding for real world examples of co-existence and, finally, rewording on one objective to acknowledge environmental protection.	✓ (M)
Policy Objectives for Seafood and Fisheries (SF)	This set of policies support and facilitate the co-existence between ORE development and seafood, aquaculture and fisheries sectors by setting requirements for developers to engage with Irish-registered fishers and the wider seafood sector, andhave regard to the objectives and principles established in the 'Seafood/ORE Engagement in Ireland. It also supports preparation of a Fisheries Management and Mitigation Strategy (FMMS), an Aquaculture Management and Mitigation Strategy (AMMS) and appointment of a Fisheries Liaison Officer (FLO). These policies reflect feedback from consultation during the evolution of the draft plan and are considered broadly positive. Mitigation proposed included the need to fill the data gap on the location and nature of activies for vessels less than 12 m to ensure they can be accomodated in future iterations of the Plan and by developers.	✓ (M)
Policy Objective for Tourism and Recreation	This policy objective supports and facilitates coexistence between ORE development and a thriving tourism sector subject to carrying out statutory environmental assessment at plan and project level. This policy reflects feedback from consutlation and iterative discussion during the evolution of the draft Plan and is considered broadly positive. No mitigation required.	×
Policy Objective for Telecommunications	This policy objective supports the principle of coexistence of offshore wind development with digital telecommunications infrastructure, subject to carrying out statutory environmental assessment at plan and project level (which may include SEA, EIA and/or AA) and the outcome of planning and licensing processes as relevant. This policy reflects feedback from consultation and iterative discussion during the evolution of the draft Plan and is considered broadly positive. No mitigation required.	×

Policy Objective Theme	Summary of Policies and Assessment	Mitigation/ Recommendation (✓/×)
Policy Objective for Marine Archaeological Heritage	This policy objective aims to ensure that any ORE surveys, site investigation and development, including associated electrical transmission infrastructure, should, where relevant, include measures to protect underwater archaeological and cultural heritage. This policy reflects feedback from consultation and iterative discussion during the evolution of the draft Plan and is considered broadly positive. Mitigation was proposed to consider underwater archaeology and built heritage in route and site selection processes.	✓ (M)
Policy Objectives for Land and Sea Interaction	This set of policy objectives supports the coordination of land and sea interactions and the alignment of terrestrial plans and policy at national, regional, and local level that deliver sustainable onshore infrastructure to enable ORE in the SC-DMAP area. This will also include support for location and siting of supporting onshore infrastructure. These policy objectives reflects feedback from consultation and iterative discussion during the evolution of the draft Plan and are considered broadly positive. No mitigation required.	×
Policy Objective for Ports and Harbours	This policy objective supports the alignment of terrestrial planning with marine planning at regional and local level to provide for the sustainable development of port infrastructure that enables the development of ORE within the SC-DMAP subject to revelant environmental assessments. This policy reflects feedback from consultation and iterative discussion during the evolution of the draft Plan and is considered broadly positive. No mitigation required.	✓ (R)
Policy Objective for Shipping	This policy objective sets the requirement for consultation with port and harbour authorities and the Maritime Safety Directorate prior to submission of applications for development and associated surveys. This policy reflects feedback from consutlation and iterative discussion during the evolution of the draft plan and is considered broadly positive. No mitigation required.	×
Policy Objectives for Electricity Transmission System	This set of policy objectives aims to prioritize the sustainable development of offshore and onshore transmission infrastructure that supports and enables the sustainable development of ORE within the SC-DMAP. This will be acheived by supporting the integration and alignment of terrestrial planning and by avoiding, minimising and mitigating any associated adverse environmental and social impacts. These policies reflect feedback from consultation and iterative discussion during the evolution of the draft Plan and are considered broadly positive. No mitigation required.	×
Policy Objective for Economic and Employment Growth Potential	The policy objective aims to support actions under Government's Offshore Wind Industrial Strategy (2024) and through regional and local level plans that support research, innovation, skills development, enterprise, jobs growth and the sustainable development of economic clusters in the ORE sector subject to relevant environmental assessments. This policy reflects feedback from consultation and iterative discussion during the evolution of the draft Plan and is considered broadly positive. No mitigation required.	×
Policy Objective for Community Engagement	This policy objective aims to ensure that stakeholder engagement is continued at the project level by requiring MAC holders to prepare and publish a project-specific Public Engagement Plan. This policy reflects feedback from consultation and iterative discussion during the evolution of the draft Plan and is considered broadly positive. No mitigation required.	✓ (R)

3.5.2 Preparation of Environmental Report

The Environmental Report identified, described and evaluated the likely significant effects on the environment of implementing the SC-DMAP. It included consideration of:

- The relevant aspects of the current state of the environment and its evolution in the absence of the SC-DMAP;
- The environmental characteristics of areas likely to be significantly affected and existing environmental problems relevant to the SC-DMAP;
- Links between the SC-DMAP and other relevant strategies, policies, plans, programmes and environmental protection objectives;
- The likely significant effects of the SC-DMAP on the environment (both positive and negative);
- Measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment;
- An evaluation of reasonable alternatives including an outline of the reasons for selecting the alternatives chosen;
- The measures concerning monitoring of the significant environmental effects of implementation of the Plan; and
- Non-technical summary.

3.5.3 Statutory Public Consultation

The draft SC-DMAP was published for statutory public consultation on 3rd May 2024 alongside the SEA Environmental Report and the Natura Impact Statement (NIS), prepared to inform the Appropriate Assessment process. All documents were available for inspection and download online[2]. See further details on consultation in **Chapter 5**.

3.6 SEA Statement

In accordance with Article 16 of S.I. 435 of 2004, as amended, the Competent Authority is required to prepare a statement (the subject of this report) summarising:

- How environmental considerations have been integrated into the plan or programmes, or modification to a plan or programme.
- How (i) the environmental report, prepared pursuant to Article 12, (ii) submissions and observations made to the competent authority in response to a notice under Article 13 and (iii) any consultations under Article 14 have been taken into account during the preparation of the plan or programme.
- The reasons for choosing the plan or programme, in light of other reasonable alternatives dealt with.
- The measures decided upon to monitor, in accordance with Article 17, the significant environmental effects of implementation of the plan or programme.

The main purpose of this SEA Statement is therefore to provide information on the decision-making process for the SC-DMAP in order to illustrate how decisions were taken, making the process more transparent. In so doing, the SEA Statement records how the recommendations of both the Environmental Report and the NIS, as well as the views of the statutory consultees and other submissions received from the public during consultation have influenced the preparation of the final draft SC-DMAP. The SEA Statement also provides information on the arrangements put in place for monitoring and mitigation.

3.7 Appropriate Assessment

In addition to the SEA, there is a requirement under the EU Habitats Directive (92/43/EEC) as transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and Section 22(3) of the MAP Act 2021 to carry out Appropriate Assessment (AA). The requirement for an assessment derives from Article 6 of the Habitats Directive, and in particular Article 6(3) which requires that:

> *"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's*

[2] Draft South Coast Designated Maritime Area Plan for Offshore Renewable Energy (SC-DMAP). Documents available at: https://www.gov.ie/en/consultation/72a5c-south-coast-designated-maritime-area-plan-for-offshore-renewable-energy/

conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

In recognition of this, an AA Screening was undertaken, in parallel with the SEA process. It was determined that a Stage 2 AA was required, and an NIS was therefore prepared to inform the AA. Following consultation and updates to the draft SC-DMAP, the NIS was also updated. The formal AA determination made by the MECC is available under separate cover on www.gov.ie.

4 INFLUENCE OF THE SEA PROCESS ON THE SC-DMAP

4.1 Integration of the SEA Process

4.1.1 Environmental Constraints

To support the identification of Maritime Areas for development within the wider SC-DMAP area, constraints identification and analysis was undertaken. This included consideration of technical and environmental constraints. The identification of suitable Maritime Areas for offshore wind development was carried out by the technical team, supported by the environmental team on behalf of DECC. Full details are provided in the BVG Associates *South Coast Designated Maritime Area Plan: Maritime Area Identification* Report, which is available under a separate cover on the SC-DMAP consultation webpage https://www.gov.ie/southcoastdmap/.

Multiple environmental and technical criteria were considered in order to identify areas deemed unsuitable for locating offshore fixed wind developments. From the remaining areas, four areas (referred to as Maritime Area A-D) were identified based on analysis of environmental, technical and costs considerations, as set out in the BVG report. Advancement of offshore fixed wind development in any of these four areas would be contingent on the implementation of the SC-DMAP policy objectives and the mitigations integrated into the final draft SC-DMAP, as made, and subject to all necessary environmental assessment and legislative requirements.

4.1.2 Advice and Guidance

To assist the DECC SC-DMAP team in developing objectives which integrated environmental considerations into the plan, the SEA and AA teams provided advice, guidance and feedback on proposed wording of objectives. This included workshops and meetings to discuss overall strategy and specific themes. The SEA and AA have, as a result, had a positive influence on the plan evolution. Specifically both the SEA and AA teams:

- Inputted to a workshop on scoping of environmental issues;
- Hosted a workshop with the Plan team on alternatives and cross-cutting issues;
- Participated in numerous meetings to discuss potential conflicts that might arise in the course of the implementation of the SC-DMAP and resolutions;
- Undertook a review of the early draft policies and evolving draft policy wording proposed for the draft SC-DMAP;
- Suggested specific policy areas e.g. need for a collaborative forum under the governance theme;
- Provided feedback on language to address concerns, e.g. Natura 2000 and AA; and
- Developed additional mitigation measures and recommendations for inclusion in the SC-DMAP.

Table 4-1 shows how environmental considerations and the input of the SEA and AA processes have been taken into account in the SC-DMAP.

Table 4-1: How Environmental Considerations Have Been Taken into Account in the SC-DMAP

Environmental Consideration	Integration into the SC-DMAP
Identification of environmental constraints	RPS ecologists supported DECC and their appointed technical consultants with the identification of environmental constraints relevant to an offshore wind development. Publicly available datasets were collected and, using GIS, a heat map of cumulative constraints was developed. This helped to inform spatial analysis of the SC-DMAP area alongside technical constraints and finally cost considerations.
Early discussion on Plan development	The SEA / AA teams engaged directly with the DECC team at an early stage to discuss the format and scope of the SC-DMAP, to raise issues and create awareness on key environmental constraints relating to the SC-DMAP, as well as alternatives.
Environmental Baseline	The SEA team prepared baseline information on environmental conditions with the focus on SEA environmental topics, including: population, human health, biodiversity, flora and fauna, water, climate, air, land and soil, landscape, cultural heritage, and material assets. This information was used to focus the SEA strategic environmental objectives, inform the alternatives discussions and the assessment, and assess positive and negative impacts

Environmental Consideration	Integration into the SC-DMAP
	associated with the implementation of the Plan. It also influenced the development of the SEA monitoring programme by identifying data gaps.
Assessment of alternatives	The environmental baseline and objectives were used to identify key sensitivities and informed the development and assessment of the alternatives. The SEA team and the DECC Plan team liaised on possible alternatives during preparation of the SEA scoping document and subsequently during the Environmental Report preparation through meetings and workshops.
Iterative assessment and discussion of emerging policies	The SEA / AA teams engaged directly with DECC and their technical advisors throughout the development of the SC-DMAP providing advice, guidance and feedback on the emerging policy base and mapping.
Recommendation of mitigation measures to address impacts on the wider environment	Mitigation measures were proposed to address negative environmental effects identified during the assessment process. These included amendments to the wording of objectives in the SC-DMAP and recommendations for changes to reflect protection of the environment (see **Section 4.2** which presents the mitigation measures and recommendations from the SEA and AA processes and clarifies how they have influenced the final Plan as made).
Required environmental monitoring programme	A monitoring programme was presented in the SEA Environmental Report. This has been amended following statutory public consultation and is intended to help facilitate the ongoing monitoring of the implementation of the SC-DMAP.
Consultation	Statutory consultation was undertaken with the environmental authorities for SEA in Ireland in relation to scoping for the SEA Environmental Report. Informal transboundary consultation was also undertaken at that time with Northern Ireland. Issues raised were used to inform the overall scope and context of the environmental assessment. Statutory public consultation on the SC-DMAP and the associated SEA Environmental Report and Natura Impact Statement were also undertaken for two periods. The first consultation was a period of 6 weeks and included the draft SC-DMAP, the NIS and the SEA as well as some supporting documents. Subsequently, a further period of consultation took place during August in respect of a supporting workbook document which noted the datasets that had been collected as part of the constraints work. This subsequent consultation lasted 4 weeks. Written submissions and oral feedback received during all periods of public consultations have informed the preparation of the final draft SC-DMAP.

4.2 Recommended Mitigation Measures and how they have been addressed in the Final Draft SC-DMAP

As part of the assessment of the draft SC-DMAP, the SEA Environmental Report specifically suggested mitigation measures to offset negative impacts identified. **Table 4-2** and **Table 4-3** present the SEA mitigation measures and recommendations and how these measures were or were not incorporated into the Final Plan as made.

4.2.1 Overarching-SEA Mitigation

Table 4-2: SEA Mitigation in the Environmental Report Relating to Draft SC-DMAP

SEA Mitigation	How Has this been Integrated into the Final Draft SC-DMAP
• The draft plan shall include policy relating to *the need to demonstrate that projects can be implemented without adverse effects on the integrity of Special Areas of Conservation (SACs) or Special Protection Areas (SPAs). Where adverse effects from proposals remain following mitigation, in line with Habitats Directive Article 6(3), consent for the proposals cannot be granted unless the prerequisites set by Article 6(4) are met*.	This has been addressed in the SC-DMAP through policies OEP 1-3 and supporting text.
• *The draft plan should support the need for all investigative and feasibility studies to be carried out to support decision making in relation to this strategic plan and should also include an environmental appraisal which considers the potential effects on the*	This has been partially addressed in the SC-DMAP through policies OEP 1-3 and MI 1-5 which relate to environmental appraisal.

SEA Mitigation	How Has this been Integrated into the Final Draft SC-DMAP
wider environment, including specifically the Natura 2000 Network.	
• Acknowledging that the draft SC-DMAP goes up to the Administrative Boundary on Ireland's south coast, it is considered essential that the draft SC-DMAP includes a policy relating to the Water Framework Directive and the 3rd Cycle River Basin Management Plan as there is overlap within the 1 nautical mile zone. It is therefore recommended that the draft plan shall include a commitment to implement the relevant measures included in the 3rd Cycle River Basin Management Plan.	New policy WQ 2 added to SC-DMAP to reflect this, stating that plan related projects shall take account of the relevant requirements of the Water Framework Directive (relating to aspects such as supporting cabling/infrastructure impacts near shore and on-land) and the Marine Strategy Framework Directive along with the national requirements implementing these directives.
• It is recommended that delivery of the SC-DMAP shall be achieved through phasing which is paralleled by a proactive improvement of the evidence base including deployment in deeper waters where limitations exist currently in terms of supply chain and technology.	This has been achieved in the SC-DMAP. Policy MA 4 which requires that, in respect of proposed future fixed offshore wind developments within Maritime Areas B, C, and D, they should be granted according to timing, methodology and processes to be determined by MARA in accordance with the MAP Act and government policy. It is further required that detailed surveys and assessment be undertaken at a regional, maritime area and project scale to further inform and refine any project proposals in these Areas within the cascading planning hierarchy as committed to in the Marine Environment and Biodiversity section of the Plan as outlined in Policy MI 1. Policy OEP 2 also requires the application of robust route and site selection and the use of constraints analysis to guide decision making at lower tiers.
• The draft plan should explicitly acknowledge that the Maritime Areas identified within the SC-DMAP will be subject to further, more detailed analysis.	This has been included in the SC-DMAP. The Plan incudes at MA 4 and MI 1 for regional scale surveys in addition to project level surveys, the sharing of data and establishment of a data repository. The Regional Level Surveys (RLS) will particularly guide deployment in Areas B-D. Appendix B also sets out typical project level surveys that will be required.
• The following new policy will be added: *DECC will establish and manage a central, GIS-based, repository of environmental data for the SC-DMAP area which will be used for to inform future revisions of the Plan and to inform the evidence base for environmental assessment of Projects delivered through the SC-DMAP; particularly with respect to informing robust and comprehensive cumulative and in combination assessments.* • *All public stakeholders who hold relevant environmental data for the SC-DMAP area will be expected to contribute to this repository. All data collected through State-funded (in whole or part) research projects will be expected to contribute to this repository. All projects delivered through the SC-DMAP will be expected to share data with the repository. The repository will be accessible to all data contributors.*	This has been integrated into the SC-DMAP. The plan includes MI 1 which requires the establishment of a GIS Data Repository and the requirement that this data should be used to inform lower tier surveys. A specific governance requirement to have the data repository is also included at IGM 1.

4.2.2 Policy Objectives-SEA Mitigation

Table 4-3: SEA Mitigation Measures in the Environmental Report Relating to Draft SC-DMAP

Draft Plan Policy Section Ref.	Proposed Mitigation/Recommendation	How this has been addressed in the Final Plan
Implementation, Governance and Monitoring	**Mitigation:** IGM 3 should be revised in relation to commitments on environmental monitoring to ensure it is fully compliant with the SEA Directive as transposed in Ireland. **Recommendation:** The draft Plan would benefit from more measurable actions aligned to the principles of SMART objective setting and also identification of KPIs to facilitate the regular transparent tracking of those actions and KPIs.	Section 5 of the Plan "Implementation, Governance and Monitoring", states effective monitoring will be key to the success of the SC-DMAP. Implementation of the SC-DMAP will monitor progress of the Plan against environmental, economic and social indicators and use Specific, Measurable, Achievable, Realistic and Timebound (SMART) principles in the setting of Key Performance Indicators (KPI's) for these indicators. Such KPI's will be a feature of the SC-DMAP Implementation Plan. Policy Objective IGM 3 commits to the development of an Implementation Plan within one year following the making of the SC-DMAP which will incorporate SEA monitoring requirements.
Overarching Environmental Protection	**Mitigation**: Until such time as ORE Guidelines are published by the DHLGH, OEP 1 should include for a Guidance Note on the scope and expectations for applications for a typical offshore wind and associated infrastructure, based on current good practice should be provided to assist developers and regulators in meeting basic expectations.	In support of Objective OEP 1, the development and publication of planning guidelines for ORE development are part of the marine planning policy functions of DECC. Progressing these guidelines will be a priority of DECC. As the guidelines to be issued Under Section 7 of the MAP Act are statutory, the Plan approach is to highlight the important role of the forthcoming guidance and, within Appendix D, list several guidance documents and best practice resources to guide project developers and competent planning authorities in the interim. Appendix D specifically states that, until such time as national guidance is available, projects should consider guidance sources as listed from the EU and UK. Compliance is reinforced through Policy Objective B1 which states that "Applications for development permission shall have regard to the guidance and plans, and updates thereof, set out in Appendix D".
Climate Change	**Mitigation: CC 1** - It is recommended that DECC commit to working with the Marine Institute to develop an SC-DMAP area specific Ecosystems Services Map which identifies key services including, but not limited to, climate regulation services. This map will build on work undertaken by NPWS in a 2015 - National Ecosystem and Ecosystem Services Mapping Pilot; EPA funded research in 2018 - Valuing Ireland's Coastal, Marine and Estuarine Ecosystem Services; and DAFM / Marine Institute 2020 report on Natural Capital and Ecosystem Services Mapping.	The recommendation to develop the SC-DMAP Ecosystems Services Map is addressed through an amendment to Policy Objective IGM 1 which includes a new provision that the governance structure to be established within six months following the making of the SC-DMAP will include: • "Coordinating the development of an Ecosystems Services Map which identifies key services including but not limited to climate regulation services for the SC-DMAP Area".
Underwater Noise	Recommendation: UN 3 would benefit from a commitment to developing an evidence base, in partnership with other stakeholders, for future ORE projects in deeper waters in the medium to longer term, to future proof the plan.	DECC supports the development of an evidence base to inform future ORE projects in deeper waters, recognising that each of the four Maritime Areas and especially B, C and D have exceptionally deep waters for ORE development by current international standards. Policy Objective IGM 1 commits the governance structure of the SC-DMAP to agree the scope and coordination of Regional Levels Surveys (RLS). Data from the RLS will augment the evidence base to inform the implementation of the Plan and the planning and development processes for ORE projects in Areas B, C, and D. The scope of the survey work will be agreed through a multi-disciplinary Marine

Draft Plan Policy Section Ref.	Proposed Mitigation/Recommendation	How this has been addressed in the Final Plan
		Ecosystems and Ornithology Working Group and a recommendation made to the SC-DMAP Implementation Programme Body (the "Implementation Body"). The scope of survey work will include data to assist project level design and planning in deep water locations. The survey data will be made available to all project applicants and the competent planning authorities in addition to state bodies, environmental NGOs and the public generally. In addition, through Policy Objective IGM 4, there will be opportunities to include research to assist deep water ORE project development through the monitoring and research programme to be developed with the Marine Institute.
Co-existence	**General Mitigation** – To support the co-existence of fishery activity with OW developments, accurate information on the location and nature of activities for by vessels less than 12 m should be collected by DAFM or DECC in order to inform future decision making and necessary planning conditions. The lack of this data is highlighted in the difficulties encountered section of the Environmental Report. **General Mitigation** – Funding should be made available to specifically research and test co-existence examples to ensure a growing evidence base is developed to help inform the SC-DMAP and future ORE DMAP elsewhere. Research should extend to other jurisdictions where the ORE sector is more mature and are likely to have working examples of successes and important lessons learned from which the State can benefit. **Mitigation CO 1** - This objective should be rewritten to state: *That, in order to promote co-existence between ORE and other existing and future uses in the SC-DMAP, permanent exclusions on activities or usages around or within ORE or transmission infrastructure located in the SC-DMAP should be avoided where possible, save relating to safety and / or environmental protection and / or in other exceptional circumstances where considered warranted by MARA or planning authorities in accordance with their respective roles. The likely requirement for temporary exclusion zones during periods of offshore infrastructure construction and maintenance is recognised. Any such restrictions should, where possible, endeavour to avoid adverse impacts on other maritime users.*	**General Mitigation: Co-existence with Fishing Activity** Section 7.1 of the SC-DMAP has been amended to include the following: *"In the implementation of SC-DMAP co-existence policy objectives, consideration by developers of proposed ORE projects and transmission infrastructure should be given to the best available evidence-based data. In respect of inshore fishers, this may include consideration of evidence gathered by Bord Iascaigh Mhara (BIM) as part of its planned community based, participatory mapping project, which will enable under 12-meter vessel owners to provide validated spatial information on their fishing activities."* BIM, which is an agency overseen by DAFM, have informed DECC that the mapping tool has been developed and data collection will shortly commence on the south coast. Outputs will feed into continued engagement between the state and fishers on SC-DMAP implementation and assist developers in avoiding areas of high fishing activity, where feasible. At project level the Policy Objectives SF1, 2, 3, 4, and 5 incorporate provisions in relation to mandatory engagement between developers of proposed ORE projects and developers of transmission infrastructure with fishers and the seafood sector. SF 3 further references that fishers shall undertake to engage with ORE developers and provide spatial information in relation to their fishing activities. These policy objectives will therefore enable ORE developers to gain further up to date information in relation to inshore fishing activities. **General Mitigation: Research Funding for Co-existence** Policy Objective IGM 4 commits the Department to the establishment of a dedicated offshore wind-maritime research programme in partnership with and managed by the Marine Institute. Under Section 5 "Implementation, Governance and Monitoring", the Department explain that the research programme will be based on international best practice and will explore

Draft Plan Policy Section Ref.	Proposed Mitigation/Recommendation	How this has been addressed in the Final Plan
		interactions between the development of ORE projects and the below-water ecosystem. The overall aim of the programme will be to collect robust scientific data before, during and after the development of ORE in Irish waters, aiming to generate a more effective national level understanding of possible impacts on the wider marine environment. Relevant monitoring requirements will be identified in consultation with key stakeholders. The monitoring programme will inform the application of an ecosystem-based approach for the purpose of supporting proper planning and sustainable maritime usages. **Mitigation in Policy Objective CO 1** The recommended mitigation wording is now integrated within amended Policy Objective CO 1 which states: "In order to promote co-existence between ORE and other existing and future uses within the SC-DMAP area, permanent exclusions on activities or usages around or within ORE in Maritime Areas A, B, C and D or electricity transmission infrastructure located within the SC-DMAP area shall be avoided where possible. This does not apply to exclusions related to marine safety assessed via navigational risk assessments and approved by the Marine Survey Office (MSO), or for environmental protection or in other exceptional circumstances, where considered warranted by the competent authorities in accordance with their respective roles. The likely requirement for temporary exclusion zones during periods of offshore infrastructure construction, maintenance and decommissioning is recognised. Any such restrictions shall endeavour to minimise likely significant adverse effects on other maritime users".
Seafood and Fisheries	**General Mitigation** - It is noted in the Difficulties Encountered section of the SEA Report that data on fishing activity by vessels less than 12 m is not accurate due to the manner in which it is reported. In order for a plan led approach to avoid impacts on fishers in the first instance, accurate information on where and what is being harvested is required. It is therefore recommended that this information is collated and recorded to inform future decision making.	Refer to the above response to General Mitigation: Co-existence with Fishing Activity. In particular: • Section 7.1 of the SC-DMAP has been amended to state that consideration by developers of proposed ORE projects and transmission infrastructure should be given to the best available evidence-based data. In respect of inshore fishers, this may include consideration of evidence gathered by Bord Iascaigh Mhara (BIM) as part of its planned community based, participatory mapping project, which will enable under 12-meter vessel owners to provide validated spatial information on their fishing activities. • Policy Objectives SF1, 2, 3, 4, and 5 incorporate provisions in relation to mandatory engagement between developers of proposed ORE projects and developers of transmission infrastructure. SF 3 further references that fishers shall undertake to engage with ORE developers and provide spatial information in relation to their fishing activities. • These measures of the Plan will enable ORE developers to gain further up to date

Draft Plan Policy Section Ref.	Proposed Mitigation/Recommendation	How this has been addressed in the Final Plan
		information in relation to inshore fishing activities.
Marine Archaeological Heritage	**General Mitigation:** Inclusion of text referencing the importance of considering underwater archaeology and built heritage in route and site selection processes should be included.	Section 7.2 of the Plan "Co-existence with Marine Archaeological and Cultural Heritage" requires development proposals for the deployment, operation and servicing of offshore wind to include measures which protect marine and coastal heritage assets. Underwater archaeology and built heritage will be a key consideration in route and site selection processes for ORE and transmission infrastructure. Policy Objective AH 1 requires that surveys, site investigation and development, shall, where relevant, include measures to protect underwater archaeological and cultural heritage. The objective further requires the protection of onshore archaeological, architectural, and built cultural heritage in the development of associated onshore infrastructure to enable ORE sites in the Plan Area.
Ports and Harbours	**Recommendation:** Supporting text on Ports and Harbours should include an explicit reference to the *Guidance document on the implementation of the Birds and Habitats Directive in estuaries and coastal zones with particular attention to port development and dredging, European Commission (2011).* This should also be added to the list in Appendix D which is related to Policy B1 biodiversity.	Section 8.1 of the Plan "Ports and Harbours" states that providing support for sustainable port and harbour infrastructure development, the SC-DMAP supports that planning for such infrastructure follows the guidance document on the implementation of the Birds and Habitats Directive in estuaries and coastal zones with particular attention to port development and dredging, European Commission (2011). This guidance is also included in Appendix D which lists guidance and plans that applications for development permission shall have regard to.
Community Engagement	**Recommendation:** CE 1 would benefit from a guidance note on minimum standards for developers to ensure they provide a minimum standard of detail. Further clarity on when this plan is to be prepared and if it were part of the Planning Pack would also add clarity to the policy objective.	Section 5 "Implementation, Governance and Monitoring of the Plan" commits to the establishment of the Implementation Body to ensure the effective implementation of the Plan's policy objectives and plan level measures. An output of the Implementation Body will be to develop the SC-DMAP Implementation Plan (Policy Objective IGM 3). The Implementation Plan will be supported by multi-disciplinary Technical Working Groups. To widen the scope of implementation measures, Section 5 of the Plan is amended to state social and community themes will be addressed through the Implementation Plan in addition to environmental and infrastructure themes. Disseminating good practices in public engagement for ORE development and public engagement plans will be included in the scope of the Implementation Plan, the outputs of which will be accessible and communicated with the public and stakeholders including ORE project developers. This aligns with the ecosystems-based approach of the Plan.

4.2.3 AA Mitigation Measures and Recommendations

The NIS, which was prepared to consider whether the SC-DMAP, via its Policy Objectives, will adversely affect the integrity of any European sites, with regard to their qualifying interests and associated conservation objectives, concluded that the SC-DMAP will not result in adverse effects on the integrity of any European Sites either alone or in-combination with other plans or projects. No mitigation was identified as necessary to enable that conclusion to be reached.

SEA Statement

The absence of any specific need for mitigation is related to the integrated nature of the AA process which was applied to the SC-DMAP from the outset. This took the form of an iterative assessment which started with the AA team engaging directly with the SC-DMAP team at an early stage to raise issues and create awareness on key considerations for protection of the Natura 2000 network relating to policy alternatives and subsequent evolution of policies. Furthermore, the SC-DMAP has built safeguards directly in to the plan through its policies thereby setting out at the most fundamental level for the SC-DMAP, the commitment of the Government to respect the objectives EU Habitats Directive. These safeguards include but are not limited to OEP 2, MS 1 and CC 2.

5 HOW CONSULTATION FEEDBACK HAS INFLUENCED THE SC-DMAP

5.1 Introduction

Two periods of statutory consultation were undertaken as part of the SEA process for the SC-DMAP. The first related to SEA Scoping and was undertaken in Q4 2023. This required engagement with designated environmental authorities for SEA under S.I. 435 of 2004, as amended. A Scoping Report was prepared to inform the scoping consultations and an online workshop was also held to discuss the SEA scope with the designated authorities, see below in Section 5.2 for details of issues raised. A non-statutory 9-week public consultation was also undertaken by DECC between August and October 2023. This process included in-person and online stakeholder engagement, as well as consideration of written/digital submissions. The feedback from this non-statutory consultation is included in Public Consultation Findings Report for 2023 which is available under separate cover at www.gov.ie.

The second was a wider statutory public consultation on the draft SC-DMAP alongside the SEA Environmental Report and the NIS, as published on www.gov.ie on 3rd May 2024. All documents were available for inspection and download online. Additionally a series of supporting documents were also included in the consultation pack. These related to the constraints analysis, economic impact and stakeholder engagement. Subsequently, a further period of consultation took place from 1 to 30 August 2024, in respect of the document "Workbook 1 – Draft Environmental Data Log", a supporting workbook document that noted the datasets that had been collected as part of the constraints work. Written submissions and oral feedback received during all periods of public consultations have informed the preparation of the final draft SC-DMAP. The SEA and AA issues raised in the submissions and feedback are recorded in Section 5.3 below. The range of issues / themes raised are also presented in a Public Consultation Findings Report for 2024.

5.2 SEA Scoping Phase

5.2.1 Submissions from Statutory Consultees

The issues raised in the submissions from statutory environmental authorities are presented in **Table 5-1**. below.

Table 5-1: Summary of Issues Raised during Formal SEA Scoping

Summary of Points Raised	How this was Addressed in the Plan / Environmental Reports
Environmental Protection Agency	
Comments on the Plan • Plan should be cognisant of other relevant plans including the marine plans and sectors operating within the marine environment. • Plan should include a clear commitment to integrate and implement the full suite of recommendations and mitigation measures to be developed and presented in the SEA ER and the NIS. • A chapter on SEA related Environmental Monitoring along with relevant environmental thresholds which will trigger remedial action should be included. • Implications of the Plan on Local Authority Plans should be clarified. • The Plan should take account of the areas identified in OREDP II for ORE development and consider the extent to which environmental	• The Plan references its consistency with National Policy and Guidelines. • The Plan includes sections on implementation and monitoring which include the mitigation and monitoring from the outputs of the SEA and AA. It also incorporates the mitigations and recommendations proposed in the SEA ER and Section 4.2 of this SEA statement outlines how these mitigation measures were addressed. • The Plan includes a section on the DMAP identification process. Also a supporting document outlining the process in more detail was provided as part of consultation – The South Coast Designated Maritime Area Plan: Maritime Area Identification Report (BVG, 2024). • Regional, Spatial and Economic Strategy and Local Authority City and County Development Plans have been reviewed and officials consulted as part of the

constraints have played a part in defining these initial areas, as relevant to the Plan area.	development of the plan and referenced within the plan where relevant to plan policy objectives. • SC-DMAP is a statutory plan which has applied environmental constraints analysis to help inform the Maritime Areas identified. The approach used and constraints reviewed have had regard to the draft OREDP II .
Comments on the SEA ER • The SEA ER should assess the potential for likely significant effects associated with developing the different technologies proposed to be developed in the Plan area. • The SEA ER should include a figure showing the hierarchy of how the DMAP fits in with OREDP, climate action plan, marine planning framework and other national and regional plans/programmes and policies. • Consider the list of additional relevant plans and programmes presented. • Potential impact of altered tidal flow/ wave regimes on the sediment erosion/deposition regimes in coastal areas should be considered. • SEA could clarify how dumpsites that are offshore from estuarine or coastal areas are to be taken into consideration, in preparing and implementing the Plan. • The density of renewable energy developments that may be established, should also be a consideration as regards consideration of potential for cumulative effects and the environmental capacity to absorb such developments. • The extent of any coastal / estuarine and terrestrial environment such as onshore grid infrastructure to be considered could also be described. • It should be clarified whether it is proposed to exclude the location of offshore renewable devices in Natura 2000 sites or sites or areas protected under other national or international instruments from development. The requirements of Article 6 of the Habitats Directive should be fully integrated into the environmental assessment. • Servicing locations for ORE arising from the Plan should be covered. Other harbours and ports within the plan area can act as downstream service or maintenance hubs for ORE developments. This could provide opportunities for local employment and support for rural coastal communities.	• The scope of the SC-DMAP has been established as fixed offshore wind, to enable accelerated achievement of Ireland's renewable energy objectives. No other technologies have been considered in this first cycle of the Plan. • The additional plans and programmes have been considered in Chapter 4 of the SEA ER. • The impact of altered tidal flow/wave regimes on the sediment erosion/deposition regimes has been considered in Chapter 7 SEA ER in terms of assessment of alternatives and Chapter 8 SEA ER in terms of assessment of the preferred approach. • The SEA ER records known dump sites in Chapter 5 of the SEA ER. • The potential for cumulative impacts is addressed in Chapter 8 SEA ER Assessment of the preferred approach and Chapter 9 SEA ER – Mitigation and Monitoring. • Linkages with coastal/estuarine and terrestrial supporting infrastructure is considered in Chapter 7 SEA ER – Alternatives and Chapter 8 SEA ER – Assessment to the extent possible. • It is not proposed to fully exclude ORE from Natura 2000 sites at this stage in the planning hierarchy. The constraints analysis prepared to inform the draft SC-DMAP and SEA ER has taken Natura 2000 sites into account and Maritime Area A-D do not overlap with any existing or proposed European sites. It is recognised that greater consideration is needed at project level for the mobile species for which a number of the designations relate and also ex-situ sites which may support these species. An NIS has been prepared to accompany the SC-DMAP and an AA determination has been made by the Minister. • Linkages with coastal/estuarine and terrestrial supporting infrastructure is considered in SEA ER Chapter 7 – Alternatives and Chapter 8 – Assessment to the extent possible.
General Comments on both Plan and SEA ER • A commitment requiring offshore renewable energy developments to fully take account of the relevant requirements of the WFD and MSFD should be included.	• The requirement for further environmental monitoring in relation to significant effects on water quality has been integrated into the SC-DMAP through WQ 2. • The monitoring proposals for water are included in Chapter 9 SEA ER and have and have broadly been integrated / addressed in the final Plan

• Both Plan and SEA should consider the requirement of further environmental monitoring where the potential for significant effects on water quality remains uncertain, even after mitigation has been applied. • A review of the implementation arrangements and governance structures, including lines of responsibility for implementation and delivery, as well as provisions for interim review and progress reporting should be carried out. • The relationship between the Plan, the NMPF, OREDP, Grid Implementation Plan, NPF and the Southern Regional Spatial and Economic Strategy should be clarified. • Under the SEA regulations, Environmental Protection Agency; Minister for Housing, Local Government and Heritage; Minister for Environment, Climate and Communications; and Minister for Agriculture, Food and the Marine should be consulted. • Consider transboundary consultation on the draft plan with any relevant environmental authorities in relation to the exclusive economic zone. SEA protocol under the ESPOO Convention should be considered for any possible transboundary consultations with non-EU Member States. • The Plan and SEA should clearly set out the scope, time period covered by the Plan, remit and implementation related elements of the Plan. • Consideration should be given to whether the provisions for generation of 2GW offshore wind for green hydrogen production is also proposed for the Plan areas or what proportion of the 2GW may be proposed for this area. • The Government's long-term ambition for at least 30GW floating energy should also be considered, where relevant and appropriate to the Plan area. • Where specific measures will be implemented directly, further detail should be provided in the Environmental Report and Plan on the relevant environmental assessments to be carried out at the project stage and relevant mitigation measures to be applied, as appropriate. • SEA and Plan should describe the extent to which existing or planned onshore infrastructure will be taken into account, for example, availability or status of supporting grid connectivity or proposed upgrades to existing grid infrastructure, substations etc., that will support offshore developments in the Plan area.	• The Plan includes a chapter on Implementation and Governance. • The Plan includes information on consistency with national policy and guidelines. • The SEA Scoping contacted all the listed statutory environmental authorities. These were contacted again directly to consult on the draft Plan and environmental reports. • DECC has undertaken transboundary engagements with neighbouring jurisdictions as part of the evolution of the SC-DMAP. • The Plan includes a chapter on Implementation and Governance. • The Plan identifies maritime areas for offshore wind deployments by 2030, or as soon as possible thereafter, as well as for post 2030 deployment. Projects located in some or parts of these maritime areas may ultimately not be directly connected to the onshore transmission system, with possible non-grid offtake solutions including, but not limited to, offshore renewable energy focused on the production of green hydrogen. • The SC-DMAP identifies maritime areas exclusively for deployments of fixed offshore wind. It is possible that future DMAPs may address floating wind and other ORE technologies however this is not currently within the scope of the SC-DMAP. • Recommendations for mitigation and monitoring are provided in the SEA ER and have broadly been integrated / addressed in the final draft Plan. • In-combination impacts with onshore grid infrastructure have been considered to the extent possible at this stage however it has been acknowledged that further assessment will be required for any ORE projects arising from the SC-DMAP.
Department of Housing, Local Government and Heritage	
Archaeology • The proposed plan area contains a rich underwater cultural heritage, including wrecks,	• The SEA ER includes a cultural Heritage baseline in Chapter 5 which covers terrestrial, estuarine and marine heritage features.

archaeological objects underwater, submerged landscapes and marine built heritage structures and features. • Over 18,000 wrecks have been recorded to date in the Wreck Inventory of Ireland database and previously unrecorded wreck sites may await discovery in the area under consideration here. • Underwater cultural heritage should be a core consideration in determining the appropriate locations for offshore wind developments within the plan area • It is recommended that the principle of preservation *in situ* is enshrined in the Plan. • The Environmental Impact Assessment of the Plan should contain a detailed consideration of any potential effects on underwater cultural heritage.	• The constraints analysis prepared to support development of the SC-DMAP has included a number of relevant datasets including wrecks. At project level, assessment will be supplemented by detailed survey work to inform the EIA for any project arising from the SC-DMAP. Previously unrecorded wreck sites would be identified at that stage of the assessment process. • The SEA ER includes a cultural heritage baseline in Chapter 5 which covers terrestrial, estuarine and marine heritage features. • The principle of preservation *in situ* has been included in SEA ER Chapter 9 – Monitoring and Mitigation. • The environmental assessment of the Plan contains an assessment of potential effects in SEA ER Chapter 7 – Alternatives and Chapter 8- Assessment. The assessment is by its nature strategic at the plan scale as detail of locations, activities and technologies are not yet available. Further assessment will supplement the desktop work undertaken at this SEA stage as projects evolve. • The Plan includes policy objectives for co-existence with marine cultural and archaeological heritage to protect this heritage – see AH 1.
Department of the Environment, Climate and Communications (DECC)	
Geological Survey of Ireland • Recommend that the GSI website be consulted for data sets and use of any data should be attributed correctly to Geological Survey Ireland. • GSI provided a list and supporting details of publicly available datasets useful to the environmental assessment.	• The Geological Survey Ireland (GSI) website and data have been used to inform the SEA. Information has been used in SEA ER Chapter 5 – Baseline; Chapter 7 – Alternatives and Chapter 8 – Assessment. • The list of datasets has been reviewed and all have been incorporated into the SEA. • As part of the process to establish the SC-DMAP, DECC has engaged bilaterally with GSI.

5.3 Issues Raised and Submissions from Statutory Public Consultation on the draft SC-DMAP and Environmental Documents

Submissions and observations on the draft SC-DMAP and associated environmental documentation were invited prior to finalisation of the SC-DMAP. The public consultation ran for six weeks and the deadline for receipt of submissions was 14 June 2024. Responses to the submissions received during the full consultation period have been reviewed and responses have been provided by DECC in a Department Report on Public Consultation on the Draft SC-DMAP 2024. A separate Public Consultation Findings Report for 2024 has also been prepared by RPS on behalf of DECC and provides a further detailed overview of submissions received and themes raised during public consultation. These are both available under separate cover. An additional period of public consultation was also undertaken from 1 August 2024 - 30 August 2024. This consultation was limited to the supporting document “Workbook 1- Draft Environmental Data Log”. Submissions received during this period were also reviewed and incorporated in the above-mentioned reports.

The following sections highlight the issues raised in relation to the SEA and AA processes from designated environmental authorities and other stakeholders. Other issues outside the SEA and AA processes are addressed in the consultation and response reports noted above.

5.3.1 Submissions from Designated Environmental Authorities

Four submissions were received from the statutory environmental authorities for SEA in Ireland. Three of these made observations or raised issues relevant to the SEA and AA processes. These three submissions were received from:

- Environmental Protection Agency (EPA);
- Development Applications Unit (DAU), Department of Housing, Local Government and Heritage; and
- Geological Survey of Ireland, as part of Department of Environment, Climate and Communications (DECC).

The key SEA and AA related issues raised in these submissions and how they have been addressed are summarised in **Table 5-2**.

Table 5-2: Summary of Submissions from the Statutory Environmental Authorities During Public Consultation

Consultee	Summary of Points Raised	How were these addressed?
Environmental Protection Agency (EPA)	**Comments on Draft SC-DMAP and SEA ER** • Plan and SEA show the areas considered and identified, there is merit in describing the zone of influence for the assessment also. • Figure 1.2 – Marine Planning in Ireland would be worth including in the Preamble to the Plan and the SEA Non-Technical summary. • The development of ORE arising from the Plan will need to engage in waste management and circularity initiatives supported by the NMPF. There are multiple consenting authorities involved in projects of this type. This should be acknowledged in the SEA and Plan, as appropriate. • Any future amendments to the Plan should be assessed for likely significant effects, using the same method of assessment applied in the "environmental assessment" of the Plan. • Constraints mapping can be improved by including an overview of information on the migration patterns of birds, cetaceans etc. • The monitoring aspects of Marine Institute's monitoring and research programme should be incorporated into the SEA related monitoring programme once it is available. • There is also merit in setting out which plans set key targets, or are crucial in the context of the Plan, and which are included, as they may be impacted by the Plan. • Suggest including a diagram showing what key plan/programmes/policies affecting the Plan, and which are more affected by the Plan.	• Relevant Study Area, representing the Zone of Influence, for the environmental assessments were defined in **Chapter 5** of the SEA Environmental Report. • Figure 1.2 has now been included. See Chapter 8 of this statement for the Addendum to the SEA Environmental Report. • See Chapter 8 of this statement for the Addendum to the SEA Environmental Report. • This SEA Statement includes information in Chapters 4 and 5 on how the SEA process and stakeholder feedback have influenced the Plan. • Best available scientific data, publicly available, was utilised to identify constraints and subsequently contributed to identifying the specific Maritime Areas. SC-DMAP policies ensure that detailed baseline data is utilised to inform the ORE development in the associated relevant, project -level environmental assessments. • The key relevant policies are included in Chapter 4 of the SEA Report with an additional Appendix A with a more comprehensive list. • The Plan includes detailed monitoring programme in consultation with Marine Institute. • Appendix A of the Plan includes a table illustrating how SC-DMAP is consistent with key NMPF objectives.
	Comments on the SEA ER **SEA Methodology** SEA should capture how public participation engagement and transboundary consultation feedback have influenced the Plan. **Data Gaps** Chapter 3 should reinstate that a policy in the Southern Regional Spatial and Economic Strategy, to develop a regional landscape character map, has not been delivered to date.	• Chapter 5 of this SEA Statement provides an outline of the public consultation that took place for SC-DMAP and the associated consultation reports along with the statutory and transboundary feedback received and how these were addressed. Detailed consultation reports are also available at www.gov.ie. • Point related to chapter 3 has been addressed via the Addendum to the Environmental Report, in **Chapter 8** of this SEA Statement. • Additional points noted in relattion to Chapter 5 have been addressed via the Addendum to the Environmental Report, in **Chapter 8** of this SEA Statement, as relevant.

Consultee	Summary of Points Raised	How were these addressed?
	SEA Baseline • Biodiversity, flora and fauna: Information on bird and cetacean migration and fish movement patterns should be included, where available. Suggested research can be utilised. • Air Quality: Consider any relevant air quality information (where available) within or adjacent to ports/harbours in the Plan area, rather than referring to national air quality information. **SEA Objectives (Proposed Changes)** • Biodiversity, Flora and Fauna' objective (viii): "Safeguard **sufficient** space for the natural marine environment to enable…" • Material Assets' objective (vii), "Support the **sustainable use of** marine material assets…" **Assessment of Draft SC-DMAP** • Suggest that providing maps overlying the maritime areas would help set the selected areas in the context of their existing environmental baseline. • The SEA could consider to a greater extent the potential cumulative impacts of the proposed plan taking account of the environmental impacts already existing in the area. • Providing an estimate of the number and height of turbines proposed should be considered. • In relation to the SEA recommendations for IGM-3, more information could be provided regarding the KPIs. **Mitigation** Table 9.3: Coastal macrophyte surveys (saltmarsh, seagrass) may also be required. **Monitoring** • Table 10-2 isn't included in the SEA, or perhaps the reference needs to be updated to refer to Table 9-5? • The Water Objective may need to be updated to take into account of the landfall and cabling related elements of ORE associated with the Plan. • Role of EPA, LAWPRO and coastal communities should also be considered.	• The comments on the SEA objectives, targets and indicators are noted and welcomed and have been reflected upon in the context of the monitoring. The SEO table has also been updated – See Chapter 8 Addendum. • Section 8.3 of Chapter 8 of the SEA Environmental report provided spatial assessment taking the existing baseline and the four Maritime Areas into consideration. A report prepared by BVG Associates, titled South Coast Designated Maritime Area Plan: Maritime Area Identification (available at: https://www.gov.ie/southcoastdmap/) provided a consolidated constraint maps for the environmental attributes assessed. • See Chapter 8 of this SEA Statement for an updated text regarding cumulative effects. • Clarity on the number and height of turbines can only be provided at the project level. • Section 5 of the SC-DMAP states that the Implementation Plan will provide for ongoing monitoring of progress of the Plan against environmental, economic and social indicators for which a set of measurable KPI's will be identified. • Comments on monitoring were noted and have been addressed as relevant in Chapter 7 of this SEA Statement. • Noted. Full scope of surveys will be addressed by the working group as a part of the governance structure. • The reference to Table 10-2 in the ER was a typo and it should have read Table 9-5 as suggested. The final proposed monitoring table is included in this SEA Statement at Table 7-1. • The plan does not address landfall / cabling elements. This aspect will follow, led by EirGrid's work on the offshore and onshore grid. The WFD/MSFD will be taken into account in plan/project level assessments. Notwithstanding that, WQ2 has been added to the final draft SC-DMAP to specifically address WFD and MSFD compliance. • EPA role is included in the SEA monitoring programme as relevant. The monitoring does not fall within LAWPRO scope. • SEA Statement has been prepared in accordance with relevant legislation and EPA's guidance.

Consultee	Summary of Points Raised	How were these addressed?
	• Monitoring under the WFD needs to be included also as SC-DMAP areas overlap with WFD areas (related to landfall and cabling elements for example). • It needs to be demonstrated that assessments under MSFD will be sufficient to track potential impacts in time to address any issues. It is considered that additional monitoring is also likely to be required. **SEA Statement** SEA Statement should be prepared following adoption of the Plan and include components as suggested in the submission.	
Department of Housing, Local Government and Heritage (DHLGH)	**Natural Heritage** • It is important that the competent authority, in making its determination as to whether there will be adverse effects on the integrity of any European sites, is able to do so using clear, precise and definitive conclusions and using the best scientific knowledge. It is recommended that clarity is provided in the AA determination in this respect as the current draft DMAP would suggest that additional scientific knowledge is required to support the promotion of ORE development in areas B-D. • It is recommended that the DMAP should include a clarification that the outcome of the Regional Level Surveys will be analysed in the context of whether the overarching statement that future ORE development in these areas will not have adverse effects on the integrity of European sites, is still valid. The DMAP must address the scenario whereby it can no longer support development in these areas as the Regional Level Surveys may suggest that that adverse effects cannot be avoided or mitigated. • MI 1: the mechanism and resources available to guarantee the delivery of the Regional Level Surveys should be clearly set out in the DMAP as this proposal is crucial to allow development beyond Area A. • MI 2: Makes reference to "*Article 12 (Habitats Directive) Assessment on Annex IV species.*" Article 12 does not	• The final draft SC-DMAP supports development of ORE in Maritime Areas B-D based on best available scientific knowledge. The plan does not contain any project details and furthermore does not confer any development consents on projects that may be proposed in these areas in the future. Notwithstanding that, the SEA process did a need for regional scale data and how this could inform and support overall assessment and decision making at lower tiers. Accepting this, the SC-DMAP included for Regional Level Surveys to inform in particular the appropriate scale and location of proposed ORE developments within Maritime Areas B, C and D and subsequent development permission applications submitted by MAC holders for these Maritime Areas. It emphasises that these Regional Level Survey activities are intended to support, rather than replace, all necessary project level assessments to be carried out by MAC holders and developers of proposed ORE in Maritime Areas B, C and D when projects are proposed in these areas. An AA Determination relating to the final draft SC-DMAP will also be made by the Minister for the Environment, Climate and Communications in accordance with legislative requirements. • It is a requirement of the Plan that development permission applications for ORE development in Maritime Areas B, C and D will be informed by the outcome of the initial Regional Level Surveys. Development permission applications in these Maritime Areas should not therefore be submitted or considered until the outcome of the initial Regional Level Surveys have been made available by DECC via the shared Geographical Information System (GIS) data repository. The scale and location of future ORE developments within Maritime Areas B, C and D will therefore be informed by the outcome of these Regional Level Surveys, in addition to further project specific surveys, mitigation and assessments as required. • The outcome of the Regional Level Surveys will also inform future statutory reviews of the SC-DMAP. The scope of the Regional Level Surveys will be determined by the SC-DMAP Programme Implementation Body taking into account the recommendations made by the

Consultee	Summary of Points Raised	How were these addressed?
	require an "assessment" as such. It is recommended that this is replaced by "Evidence to demonstrate compliance with Article 12 (Habitats Directive) relating to Annex IV species". It also refers to "*Article 5 (Birds Directive) Assessment on wild or migratory bird species*" – this is terminology not used in this Article. Reference to Article 4.4 of the Birds Directive is recommended, to specifically highlight the obligation to strive to avoid pollution or deterioration of habitats outside of protection areas (SPAs). • *Appendix B Table 4: Typical Offshore Pre-consent Surveys Required to Inform Project Level Assessment.* It should be noted that these are examples of the types of data that should be collected and should not be regarded as a definitive list. The National Parks and Wildlife Service (NPWS) reserve the right to determine whether any survey is adequate or when additional information is required. • *Section 5: Implementation, Governance and Monitoring.* With reference to the proposed establishment of the Marine Ecosystems and Ornithology Working Group, it is essential that this Group is involved in reviewing available data, and identifying most important gaps to fill in priority order so that assessments can be conducted at the appropriate level. The Minister is requested to clarify if the Group will address marine mammals and any other relevant species to Habitats Directive and the Wildlife Act (for example, Basking shark). • *Section 6 Marine, Environment and Biodiversity.* This Section requires revision to include reference to use by marine and coastal birds, migratory birds, the areas designated under the Birds Directive and other areas important for birds outside of these SPAs. • OEP3: This Policy Objective makes reference to "*provide for ecological enhancement and recovery of the marine environment that goes beyond measures required for project mitigation*". It is recommended that this is re-phrased	Marine Ecosystems and Ornithology Working Group, both of which will be established as part of the governance structure for the SC-DMAP. MI 1 has been updated to include the following: (b) Within 6 months of the SC-DMAP being made, DECC will establish the SC-DMAP Implementation Programme Body to agree the scope of Regional Level Surveys and the mechanism for making such data standardised and accessible via a GIS Data Repository to be established as an implementation action of the SC-DMAP. • MI 2 has been updated to address these points as follows: • Demonstrate compliance with Article 12 (Habitats Directive) on Annex IV species. • Demonstrate compliance with Article 5 (Birds Directive) on wild or migratory bird species and Article 4.4 (Birds Directive) to strive to avoid pollution or deterioration of habitats outside of protection areas. • Noted. The intent of including the list was to provide some deeper insight into the level of detail that an offshore application may contain, given the limited number of examples in Ireland to date. The Appendix Table is titled "***Typical*** *Offshore Pre-consent Surveys Required to Inform Project Level Assessment"* for the reason that it is not intended to be exhaustive. Furthermore in MI 2 the objective states that applicants **should have regard to** the relevant pre-consent survey requirements and guidance set out in Appendix B and D. Scoping at stakeholder engagement at project development stage will be required to establish project specific requirements. • The final draft SC-DMAP now states: *This working group will be involved in reviewing available data, and identifying the most important gaps to fill in priority order so that assessments can be conducted at the appropriate level. In addition to ornithology, this working group will consider marine mammals and any other relevant species to the Habitats Directive and the Wildlife Act.* • This reference has not been directly included, however a number of policy objectives address the features of note: - MI 2 specifically requires the applicant to (i) Demonstrate compliance with Article 5 (Birds Directive) on wild or migratory bird species and Article 4.4 (Birds Directive) to strive to avoid pollution or deterioration of habitats outside of protection areas and (ii) Demonstrate the need for any derogation from the applicable requirements of the Habitats or Birds Directives. - OEP 2 recognises the need for constraints analysis, route and site selection, and project level assessment to inform the preparation of requisite project-level applications (which may include EIA and/or NIS) and these must address constraints such as the presence of designated sites; attainment of good environmental status; and processes and functions necessary to avoid adverse effects on the integrity of European sites.

Consultee	Summary of Points Raised	How were these addressed?
	to articulate a commitment to no net loss of biodiversity, as set out in Policy 3C1 of the National Biodiversity Action Plan. • MA3 and MA4: The Department recommends that the Minister considers adding an additional clause that states that development will only be assumed to be supported by the DMAP in Maritime Area A where it has been demonstrated that there will be no adverse effects on the integrity of any European site. • OEP2: This Policy Objective makes reference to the potential scenario whereby individual projects promoted under the DMAP may (following project-specific AA) still have adverse effects on European sites and hence only be given permission under the conditions described in Article 6(4) of the Habitats Directive. It is recommended that this scenario is not promoted or supported by the DMAP as this calls into question whether the DMAP itself can be implemented in full, without resulting in adverse effects on a European site. Reference to the changes brought about by the revised Renewable Energy Directive and the Emergency Permitting Regulations in this context may be useful. **Archaeology and Architectural Heritage** • Previously unrecorded wreck sites, including those dating to earlier periods, may await discovery in the SC-DMAP area.	- MS 1 states that applications brought forward for projects in the SC DMAP Area shall consider up to date understanding of baseline conditions, including any future national protected sites (e.g., Marine Protected Areas (MPAs) and European Sites e.g., marine SPAs and SACs) and relevant data available through the GIS Data Repository. This specifically underpins the need for up to date and robust data on which decision making at project level can be made. • OEP 3 now states that applications should “aim towards no net loss” • The SC-DMAP recognises the jurisdiction of the planning authority to determine whether or not to grant development permission for any ORE development arising from the SC-DMAP. This is evidenced for example by the supporting text for MA 3 and MA 4 which clearly states: *In addition, all proposed ORE projects within the SC-DMAP Area will be subject to all necessary project level assessments and consents..* *Without prejudice to future applications and assessments for the award of MACs and development permission by relevant competent authorities, Maritime Area A is identified as the proposed location of a single fixed ORE deployment with an installed capacity of approximately 900 MW.* *It is intended that this development will aim for deployment by 2030, or as soon as feasible thereafter, in order to contribute to Ireland’s legally binding target of reducing greenhouse gas emissions by 51% by the end of this decade. This is contingent on any proposed ORE developer, as well as EirGrid, successfully attaining all project level MAC and development permissions, and adherence to the measures contained in the relevant policy objectives within the SC-DMAP area.* See also response to related point 10 below. • Noted. The intent of the draft text in the policy was to avoid any suggestion of pre-judging applications and to acknowledge the applicable legal framework under the Habitats Directive. Noting the concern raised and confirming that support for promotion of Article 6(4) was not the intention, the text has been amended in OEP 2 and now no longer references Article 6(4). Additional supporting text has been included under protected sites section to state: • In the implementation of Policy Objective OEP 2, should the procedure under Article 6(4) of the Habitats Directive need to be followed, the decision to proceed with a plan or project must meet all the requirements under the law, including that all necessary compensatory measures will be taken to ensure the overall coherence of the Natura 2000 network is protected. • Both SC-DMAP and SEA acknowledge that surveys will be undertaken and data will be collected at the project stage including in relation to underwater archaeology.

Consultee	Summary of Points Raised	How were these addressed?
Geological Survey of Ireland (GSI) [part of Department of Environment, Climate and Communications (DECC)]	**Comments on SEA ER** Recommend using the various GSI data sets, when conducting the EIAR, SEA, planning and scoping processes. Use of our data or maps should be attributed correctly to 'Geological Survey Ireland'.	• Chapter 5 of the SEA Environmental Report has been informed with relevant datasets including those from GSI.

5.3.2 Submissions from Other Stakeholders

Public consultation, as outlined at the start of **Section 5.3**, gave rise to written submissions and survey responses from a range of stakeholders. All submissions have been reviewed and considered prior to finalising the SC-DMAP. A number of comments and issues related to the SEA and AA processes specifically were raised and these are summarised in **Table 5-3** and **Table 5-4**.

Table 5-3: Summary of Issues raised on the SEA of the draft SC-DMAP during Public Consultation

Specific Issues raised in relation to the SEA	How this has been Addressed
Alignment with NMPF and MSP • SEA ER should communicate how it aligns to NMPF policies and how avoidance of significant adverse impacts was first considered. • Limited information on how the SC-DMAP fits into the larger framework of marine spatial planning. **SEA Baseline** • BIM have provided suggestions in relation to Chapter 5 of the SEA Environmental report that relate to review of text under Section 5.3.10, marine litter from aquaculture, evidence supporting statement in relation to sewage discharges and accidental loss, or intentional disposal of, fuel or oil arising from the fishing industry, rephrasing of text and updates to data provided for CFP and invasive species. • SEA should clarify or amend text regarding the type of harvesting at the two sites harvesting seaweed (Pg81) and also acknowledge that seaweed harvesting as a human activity is well established in Irish marine and coastal areas.	**Alignment with NMPF and MSP** • NMPF policies and objectives have been considered while developing the SEA objectives presented in **Chapter 6** of the SEA Environmental Report and these have informed the SEA assessment of SC-DMAP under **Chapter 8** of the SEA Environmental Report. Furthermore Chapter 4 of the SEA ER presents a comprehensive view of inter-related plans, policies, programmes and legislation. Furthermore, throughout the SEA process, mitigation was identified that would, inter alia, avoid significant adverse impacts. This mitigation, including how it was implemented into the Plan, is set out at table 4-2 and 4-3. • Figure 1.2 of the NMPF, Marine Planning in Ireland, outlines how a DMAP, including the draft Plan sits into the framework and Chapter 4 of the SEA ER provides an overview regarding the same. **SEA Baseline** • Points noted in relation to Chapter 5 have been addressed via the Addendum to the Environmental Report, in **Chapter 8** of this SEA Statement, as relevant. • Best available data, publicly available, was utilised to identify constraints and subsequently contributed to identifying the specific Maritime Areas.

Specific Issues raised in relation to the SEA	How this has been Addressed
• Observers made submissions as to the baseline data used for the assessment and constraints identification . **Potential Impacts** • Comments regarding potential impacts were made in relation to the following: GHG emissions from embodied carbon, seabird colonies outsides SPA designations, impacts on plankton levels from tipping point effect of the proliferation of filter feeder attachment to numerous new ORE infrastructure , failure to maintain good environmental status by the ORE development, and noise and EMF impacts. • A general submission was made in relation to how the DMAP will ensure that development maintains good environmental status. **SEA Objectives** • NMPF Aquaculture policies are also included in Table 6.2 as part of the context for the Material Assets objective. • SDG 12 should be 'Responsible Consumption and Production' **SEA Monitoring** • Food Safety impacts are integrated as appropriate under PHH and that aligned with bathing water quality, a target of "No deterioration in Shellfish waters quality as a result of ORE activities related to the SC-DMAP" is included. • MSFD D9 monitoring should be included within PHH, BFF & W. • Fishers are actively consulted and engaged in helping to addressing the knowledge gaps. • Article 10 of the SEA Directive requires monitoring to be informed by qualitative data provided on an ongoing basis during the lifetime of the plan. **UK Sites** • Due consideration of former EU UK sites, and the species they protect, should be taken in accordance with the Bonn and Bern Conventions of which both Ireland and UK are signatories. **Transboundary Effects** • The Irish and Celtic Seas are shared with the UK and there are multiple marine projects and plan/ policies that have not been identified. There is also no assessment of sewage emissions or dumping at sea impacts on the site in question.	• SC-DMAP policies ensure that detailed baseline data is utilised to inform the ORE development in the associated relevant, project -level environmental assessments. **Potential Impacts** • Suggested impacts have been considered as part of both the SEA and AA processes and included consideration of transboundary and cumulative effects. The amended policy objective OEP2 reinforces the requirement that ORE maintain good environmental status. • The SC-DMAP monitoring programme aligns as far as possible with the established monitoring programme required under Article 11 of the MSFD in the context of achieving GES. Key descriptors under MSFD relevant to plankton and filter feeder include biological diversity and marine food webs. **SEA Objectives** • The comments on the Material Assets objective are noted and welcomed and have been reflected upon in the context of the monitoring. The SEO table has also been updated – See Chapter 8 Addendum. All the referenced SDGs have been crosschecked and the goals have been reinstated as relevant in **Chapter 8** of this SEA Statement. **SEA Monitoring** • SEA monitoring table has been updated as suggested to include food safety impacts and MSFD D9 descriptor reference. • SF3 and SF4 referenced in the SEA monitoring table have been amended in the SC-DMAP aiming to ensure effective engagement with the fishers in relation to the FMMS and therefore no change required. • IGM4, which requires the establishment of a dedicated offshore wind-maritime research programme, and IGM 5, which requires developers to gather data which must be submitted to MARA and ultimately added to a common, shared GIS data repository, will support the monitoring for the purposes of article 10. **UK Sites** • Appendix 5.1 has been amended to include further assessment for the former EU sites within the UK. See **Chapter 8** of this SEA Statement. **Transboundary Effects** • See Chapter 8 of this SEA Statement for an updated text regarding transboundary effects. Dumping at Sea location points were considered in the environmental constraints identification and in the first instance, this information has been used to avoid direct overlaps with the Maritime Areas A-D. • Transboundary consultation was undertaken with a range of jurisdictions. Already as part of the development of the SC-DMAP DECC has engaged with Government officials from France and the UK

Specific Issues raised in relation to the SEA	How this has been Addressed
• The Welsh authorities should have been considered as more appropriate and relevant contact. **Relevant Plans and Programmes** • Irish Inshore Fisheries Sector Strategy should be considered under Section 4- Review of Plans and Programmes. **Grid Connection** • Section 7.4.6.3 should clarify that the grid connection will also occur outside the identified maritime areas. **Landscape and Visual Assessment** • Section 8.3.2 inappropriately conflates distance to shore ranges with potential landscape impacts and re-states flawed assumptions presented in OREDP II SEA Scoping Report (2022). • A single fixed ORE deployment with an installed capacity of approximately 900 MW cannot achieve credible spatial flexibility in Area A without introducing unprecedented wind turbine heights (300m), which in turn will have knock on major visual/seascape implications. • Omission of any illustrative visual seascape/landscape impact assessment for Area A raises the very legitimate issue of the SEA's adherence to the SEA Directive (2001/42/EC). • The DMAP should have regard to the National Landscape Strategy 2015 – 2025 and the European Landscape Convention 2000. **Protected Sites and NIS** • The SEA fails to critique this recent new SPA designation for 'Seas off Wexford' and the omission of Waterford Seas, which has also significantly contributed to the close to shore designation of Area A off Waterford. • The SEA fails to challenge the credibility of the Natura Impact Assessment accompanying this Draft Plan. • The SEA fails to robustly evaluate the full biological richness and diversity of the south coast's marine ecosystem. **Compliance with MSFD and Guidelines** • The SEA document identifies the importance of compliance with the MSFD but then ignores it and that prevents ensuring no significant impacts on protected areas under the MSFD.	and the North Western Waters Advisory Council (NWWAC) which includes representatives from the majority of jurisdictions with significant fishing fleets operational in the SC-DMAP. **Relevant Plans and Programmes** • Reference to Irish Inshore Fisheries Sector Strategy has been included in Section 4.3.13. See Chapter 8 of this SEA Statement. **Grid Connection** • Further text has been added to Section 7.4.6.3- 3 Sensitivity Analysis to clarify that grid connection will also occur outside the identified Maritime Areas. See Chapter 8 of this SEA Statement. **Landscape and Visual Assessment** • A Landscape and Visual Impact Assessment (LVIA) has not been carried out at this stage. However, the text in Section 8.3.2 regarding the reference to OREDP II bands has been updated to reflect the publicly available dataset used to inform the constraints identification to aid the selection of the Maritime Areas, see Chapter 8 of this SEA Statement. A detailed Seascape, Landscape and Visual Assessment (SLVIA) will be carried out at project level. The scope for an SLVIA will be appropriately considered within the relevant environmental assessments at the project level. See Chapter 8 of this SEA Statement that outlines a general approach to be taken to conduct a SLVIA for an Offshore Wind Farm (OWF) development. • The National Landscape Strategy, Regional Sea Scape Strategy and Landscape Convention have all fed to the ER. Chapter 4 identifies them in relation to relevant plans and programmes and environmental objectives of relevance. Chapter 5 includes reference under baseline for landscape and seascape. These chapters underpin the assessment in chapter 7 and 8. **Protected Sites and NIS** • Designation of sites for inclusion under the Natura 2000 network is outside the scope of SEA. The SEA assessment has fully acknowledged the existing baseline environment including existing European Sites and other national designations of Ireland that have potential connectivity with the SC-DMAP area to inform the assessment of the SC-DMAP as a whole. • SEA and AA processes have been fully integrated into the evolving Plan and the conclusion of the post-consultation NIS is supported by the SEA. **Compliance with MSFD and Guidelines** • Importance of MSFD compliance has been considered throughout the development of the SEA Environmental Report, including consideration of MSFD objectives in the development of SEA objectives to inform the assessment and also in the assessment of the SC-DMAP alternatives.

Specific Issues raised in relation to the SEA	How this has been Addressed
• SEA ER does not appear to comply with the Government of Ireland's 'Strategic Environmental Assessment - Guidelines for Regional Assemblies and Planning Authorities' (2022). **Table 1 and Table 5-1:** Unproven statement that the draft SC-DMAP is a key mechanism for managing Offshore Wind development protecting and where possible enhancing habitats and species in or depending on the marine. **Assessment of ORE Technology** The SC-DMAP and the environmental assessments would have to be updated to fully assess the impacts of both fixed and floating technologies in the plan. **Cumulative/In-combination Effects** Comments were raised in relation to cumulative impacts of ORE development with maritime activities and in-combination assessment of plans associated with east and west coast developments proposals and Celtic Sea Floating Offshore Wind Leasing Round 5 Project Development Areas. **Assessment of Maritime Areas - seabirds** Statement in Section 8.3.2 that SC-DMAP area supports the seabirds at various stages of their life cycle, such as breeding, foraging and migrating is questionable. **SEA Alternatives** Comments have been raised regarding development of alternatives and associated assessment of the preferred scenarios suggesting inadequate robustness, strategic and limited nature, biased assessment and its focus on Maritime Area A. **Constraints Analysis** Comments have been raised in relation to the weighting of the contribution of different sectors to the constraints analysis, incorporation of data collected by the Fair Seas Coalition, confirmation regarding prioritising environmental constraints over technical constraints and source of data for all heatmaps and how this data has been applied in the creation of these heatmaps. **Regional Surveys** The failure to include up-to-date survey data at this stage contravenes the SEA Directive and undermines the legal validity of the DMAP process.	**Table 1 and Table 5-1:** • Comment regarding the statement in Table 1 and Table 5-1 has been noted and text has been amended. See Chapter 8 of this SEA Statement. **Assessment of ORE Technology** • SEA has assessed impacts of fixed wind which is the only technological scope proposed for this iteration of the SC-DMAP. It does not preclude future iterations considering a wider scope. **Cumulative/In-combination Effects** • See Chapter 8 of this SEA Statement for an updated section on cumulative assessment. **Assessment of Maritime Areas - seabirds** • Text in relation to the SC-DMAP area supporting seabirds at all stages has been clarified, see Chapter 8 of this SEA Statement. **SEA Alternatives** • Robust alternatives have been developed based on consultation with the Plan team and in accordance with EPA guidance. The approach to alternatives has considered various aspects and these have been thoroughly recorded in Chapter 7 of the SEA Environmental Report. **Constraints Analysis** • See Chapter 8 of this SEA Statement for an updated section on GIS spatial model. Further data will be utilised in detail at the project level and will be included in the GIS data repository of the Plan as relevant. The SC-DMAP contains a graphic on the process of Maritime Area Identification showing that the environmental constraints identification and development of heat maps commenced in advance of any technical engagement. Sources of different layers considered in the heatmaps are provided in the Data Log that was published. **Regional Surveys** • The Regional Level Surveys (RLS) are a key component of the SC-DMAP and will be supplemented by other environmental survey work conducted at the project level. Together they will inform the associated environmental assessments at the lower planning tiers.

Table 5-4: Summary of Issues Raised on the AA of the Draft SC-DMAP During Public Consultation

Specific Issues raised in relation to the AA	How this has been Addressed?
• Conclusion of NIS is questionable for stating no adverse effects on EU sites and/or further specificity is needed regarding this conclusion. The extent of assessment or the likelihood of significant effects on a project-by-project basis (p. 23) and how this could result in affects to the wider Natura 2000 network should be clarified. • Over-reliance of NIS on existing and outdated Natura 2000 designations. • The assessment of Annex IV species in the NIS is inadequate. • NIS assessment does not include any assessment of the four areas selected as to whether these areas are the right locations for ORE. The approach may need to be reconsidered. • In-combination effects should consider OREDP and OREDP II plans and Celtic Sea Floating Offshore Wind Leasing Round 5 projects. • Discussion of ***ex situ*** effects on the QIs of the SPAs, particularly Annex I species in the area is missing in the assessment of Policy objectives MA1 to MA3. • NPWS "Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters" is not suitable for the SC-DMAP to follow regarding mitigation of noise impact as it is outdated and was designed primarily to mitigation for sound generated during seismic surveys. • Rationale for exclusion of UK sites from the AA should be provided. • Appendices should include page numbers and clarity regarding the reference to Appendix C on Pg 53 is needed. • North-West Irish Sea SPA has been included in the assessments; however, it has not been included in the associated maps. (Appendix B Figure 4 of the AA Screening and Appendix C Figure 4 of the NIS).	• Further clarification regarding this has been provided in the conclusion of the post-consultation NIS. The extent of the assessment is as documented in the NIS. The likelihood of the SC-DMAP to result in likely significant effects on European sites had already been determined through the AA Screening of the Plan which was completed prior to the preparation of the NIS. The NIS assesses whether the Plan will result in adverse effects on the integrity of European sites with reference to their Conservation Objectives. • The AA takes account of all relevant European sites (designated or proposed) as part of the Natura 2000 network. Natura 2000 designation and associated data is outside the remit of the Plan. • The NIS assesses the SC-DMAP which includes the four Maritime Areas and the supporting policy base. The policy base when implemented in full will ensure no adverse effects on site integrity, as concluded in the NIS. • The post-consultation NIS includes the in-combination assessment of the DMAP with the Ireland's Phase 1 offshore wind projects which are subject to the conditions in their own MACs in addition to the Crown Estate's Offshore Wind Leasing Round 5 in the Celtic Sea. • Ex-situ effects have been considered as part of both the AA and SEA processes. This has included consideration of transboundary and cumulative effects, particularly on mobile animals such as bats, birds, and marine mammals (including Annex IV species - see section 8.3.2 of the SEA Statement also), considering not only areas for which they are the qualifying interests e.g. within SACs and SPAs, but also in the context of their migratory routes and at key nesting, feeding and breeding areas. In many cases, these overlap with other designations. A robust and comprehensive mitigation strategy has been applied to the SC-DMAP as a result of inputs from the SEA and AA processes to ensure significant effects in-situ and ex-situ of the Plan area are avoided. • Policy UN1 in the SC-DMAP has been amended following consultation feedback. • UK sites are considered under the SEA as relevant. • Page numbering has been updated. • Updated maps are now incorporated into the post-consultation NIS.

5.4 Assessment of Final Changes to the SC-DMAP

The draft SC-DMAP and associated documents were subject to public consultation during May and June 2024, with an additional period of consultation in respect of the document "Workbook 1- Draft Environmental Data Log" in August 2024. Following the end of both these consultation periods, all the submissions received were reviewed. In response to the submissions received, revisions were made to the draft SC-DMAP, including its policy objectives. In light of these amendments, further assessment under the SEA process was completed to determine if any of the amendments would result in additional significant negative effects. The assessment of the amendments is documented in Sections 5.5 to 5.7 below.

5.5 Assessment of Newly Added Policies

The following tables set out an assessment of the SC-DMAP policy objectives which have been newly inserted in light of commentary received during the public consultations. New text is shown in green.

5.5.1 New Mitigation (MI) Policies

New policies (MI 4 and MI 5) have been added to the suite of policies addressing Mitigation (MI).

Ref.	Objective
MI 4	*At the project level, all applications for development consents for ORE projects in the Maritime Areas A, B, C and D and associated electricity transmission infrastructure in the SC-DMAP area shall undertake and submit a seascape, landscape and visual impact assessment (SLVIA) and respond to mitigation recommendations informed by such assessments in the design and layout of ORE arrays and related electricity transmission infrastructure. The SLVIA shall be scoped and conducted in accordance with the most relevant and up-to-date published good practice guidance and will consider effects on seascape, landscape and visual resources and receptors identified within a zone of theoretical visibility including areas of high importance to tourism, protected views, landscape and seascape character.*
MI 5	*Any subsequent ORE proposals within the Maritime Areas that could affect existing ORE projects or sites for which permission for ORE has been granted shall in order of preference seek to avoid, minimise or mitigate significant adverse wake effect impacts on these projects through project design. ORE project developers within the Maritime Areas shall consult with each other to identify wake effect impacts.*

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandSeaS
MI 4	+	0	0	0	0	0	+	+	+
MI 5	0	0/-	0	0	0	+	+	0	0

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment and Discussion:

One of the most complex and emotive issues in relation to offshore wind development lies with the visual impacts on communities onshore and how they experience the offshore view. Wind turbines, by their nature are large and it is not possible to "screen" them which might be possible for some onshore infrastructure. As such, the ability to undertake iterative assessment from the earliest opportunity is essential to reducing significant effects.

The draft SC-DMAP has, in the first instance avoided placing any of the Maritime Areas in the highest sensitivity nearshore area. However further work will be required to reduce the impact from individual developments, alone and cumulatively as projects are brought to planning. Negative effects were identified for LandSeaS in the SEA Environmental Report previously.

The new Policy Objective MI 4 recognises that a dedicated seascape, landscape and visual impact assessment (SLVIA) is essential to minimising impacts to areas of high importance to tourism, protected views, landscape and seascape character. The implementation of the policy will have indirect positive effects for LandSeaS in the first instance by ensuring best practice approaches to assessment and mitigation are applied throughout, protecting important views and

Assessment and Discussion:

prospects through design and layout approaches and through appropriate mitigation. This is typically achieved through an iterative assessment process wherein the assessment is repeated a number of times with different layouts, turbine heights etc. to minimise effects overall.

Indirect positive effects are also anticipated for PHH and MA by protecting the visual amenity and ensuring that important views are considered from the outset of project development. Indirect positive effects are also anticipated for CH as the SLVIA will consider heritage character and views also.

Wake effects occur downstream of a turbine. Typically they include a trail in which there is a reduction in wind speeds and an increase in turbulence. This can affect adjacent turbines and / or neighbouring windfarms. This can lead to a decrease in energy production. The inclusion of MI 5 recognises this phenomenon and the potential for it to impact on adjacent sites with resulting indirect positive effects for MA and CF where the potential for significant effects is minimised from the earlier site location / layout perspective reducing potential loses in wind power.

The objective does not reflect other issues associated with wake effect outside of wind power. However it should be noted that these effects can potentially effect birds and bats caught up in the wake which may disrupt their ability to safely negotiate around turbines and / or through neighbouring wind farms.

Mitigations

- MI 5: Acknowledgement of the indirect effect of wake on birds / bats has been included in the SC-DMAP supporting text for this new policy.

5.5.2 New Water Quality (WQ) Policy

A new policy (WQ 2) has been added to the suite of policies addressing the Water Quality (WQ).

Ref.	Objective
WQ 2	*ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure in the SC-DMAP area shall take account of the relevant requirements of the Water Framework Directive (relating to aspects such as supporting cabling/infrastructure impacts near shore and on-land) and the Marine Strategy Framework Directive along with the national requirements implementing these directives e.g. latest River Basin Management Plan.*

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandSeaS
WQ 2	+	+	+	+	0	0	+	0	0

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment and Discussion:

As noted in the SEA Environmental Report, the development of offshore wind can result in deterioration of water quality as a result of installation of infrastructure and ongoing maintenance activities, as well as during decommissioning. The WFD and MSFD outline objectives which must be achieved by each Member State. These objectives are then to be achieved through a process of river basin and marine area planning which set out the measures and the approach for implementation. Coherent spatial planning is crucial for the protection of coastal, transitional and marine waters.

In recognition of this, both the WFD and MSFD were integrated into the Strategic Environmental Objectives identified in Chapter 6 of the SEA Environmental Report under Water and Biodiversity. Furthermore, the following overarching mitigation was included in the SEA: *Acknowledging that the draft SC-DMAP goes up to the Administrative Boundary on Ireland's south coast, it is considered essential that the draft SC-DMAP includes a policy relating to the Water Framework Directive and the 3rd Cycle River Basin Management Plan as there is overlap within the 1 nautical mile zone. It is therefore recommended that the draft plan shall include a commitment to implement the relevant measures included in the 3rd Cycle River Basin Management Plan.* Specific monitoring is also included in the SEA Report relating directly to monitoring of the 11 descriptors in the MSFD.

Assessment and Discussion:

The new policy recognises the importance of these two directives and achievement of their objectives in the context of the SC-DMAP and seeks to implement both SEA mitigation and stakeholder feedback. In addition to the positive effects anticipated for W through the alignment of the requirements under these two directives in national marine plans, indirect positive effects are also anticipated for PHH, BFF, LS and MA through contribution to achieving the stated objectives for Good Status and Good Environmental Status under the directives which are broader in scope than water quality. For example, the 11 descriptors considered for the MSFD include pathways for marine litter, contamination, seabed integrity and commercial fisheries among other more typical ones such as underwater noise, invasive species, food webs and marine biodiversity.

Mitigations

- None required.

5.5.3 New Climate Change (CC) Policy

Ref.	Objective
CC 3	*To increase sustainability, recognising that ORE is inherently a low carbon technology, ORE projects in Maritime Areas A, B, C and D and electricity infrastructure in the SC-DMAP area shall be designed, installed and operated with reasonable measures to reduce through-life carbon emissions and increase the circular economy.*

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandSeaS
CC 3	+	0	0	0	+	+	+	0	0

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment and Discussion:

New Policy CC 3 has been derived from the draft Policy Objective AQ 1 which included reference to *Installation and maintenance vessels should use alternative lower emission fuels and more efficient transport strategies, where possible*. Following consultation, it was considered that a stronger stand-alone policy was needed to proactively address demonstrate *reduced carbon emissions through the life of the ORE development including* design, installation and operation stages. This will have direct positive effects for CF as it will contribute towards cumulative reduced *carbon emissions* on top of the already *inherently low carbon technology*. Indirect positive impacts for AQ and PHH are also anticipated from the shift tow ORE and the cumulative gains that could be achieved throughout the lifetime of such a development. This policy also aims to increase the circular economy that is broadly positive for MA and PHH as it will promotes reuse and recycling of materials at the end of life of the ORE projects which in turn reduces the costs and emissions associated with disposal of the waste materials.

Mitigations

- None required.

5.5.4 New Shipping (S) Policies

New policies (S2 and S3) have been added to the suite of policies addressing Shipping (S).

Ref.	Objective
S 2	*At the project level, all applications for development permissions for ORE projects in Maritime Areas A, B, C and D and associated electricity transmission infrastructure in the SC-DMAP area*

	shall undertake and submit a Navigation Risk Assessment to inform the design and location of projects and in compliance with national and international best standard guidance on safe distance between shipping and ORE infrastructure.
S 3	*A GIS shipping density mapping analysis, based on at least 12 months data, will be prepared by DECC within six months following the making of the SC-DMAP. This mapping analysis shall be used in project level Navigation Risk Assessments and will be made accessible by DECC on a data repository for the SC-DMAP for plan and project level data facilitated through the SC-DMAP Implementation Programme Body.*

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandSeaS
S 2	+	+	0	+	0	0	+	0	0
S3	+	0	0	+	0	0	+	0	0

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment and Discussion:

The addition of these new policies S 2 and S 3 addresses marine safety and as such has potential to effect PHH and MA in particular. The policy S 2 requires the preparation of a specific Navigation Risk Assessment to inform the design and location of projects. Furthermore it requires adherence to best standard guidance on separation distance between shipping corridors and ORE infrastructure. Navigation Risk Assessments are a feature of ORE developments / planning applications. The inclusion of the specific policy on the matter cements the importance of considering risk. This will have positive effects for PHH by ensuring collision risk is considered and mitigated through design. This will also have positive effects for MA by reducing the risk of collision of watercraft with turbines causing damage. There are also indirect positive effects for BFF and W, as the reduced risk of collision ensures additional protection from contamination following a collision event.

Policy S 3 requires data gathering and analysis to better inform the risk assessments with positive effects anticipated for PHH and MA as this data can be used to inform decision making and avoid risk where relevant.

Mitigations

- None required.

5.5.5 New Economic and Employment Growth Potential (EC) Policy

A new policy (EC 2) has been added to the suite of policies addressing the economic and employment growth potential (EC).

Ref.	Objective
EC 2	*The SC-DMAP supports actions of the higher and further education and training sector, Regional Skills Forum, Regional Enterprise Plans and Towards a Learning Region to develop diverse skills and employment opportunities in ORE and support sectors in coastal communities across the Region.*

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandSeaS
EC 2	+	0/+	0/+	0/+	0/+	+	+	0/+	0/+

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment and Discussion:

There are significant economic benefits associated with the SC-DMAP to be gained in the regional hinterland throughout all stages of development. This includes services such as accommodation, food and beverage for staff associated with different phases. It also includes direct employment of staff by developers and indirect employment through contractors and their suppliers. To maximise economic and employment opportunities there needs to be investment in indigenous supply chains and skill sets. Ireland has strong capabilities in the surveying, engineering and environmental and social assessment skills which can be harnessed to upskill to the specifics needed for ORE developments.

The inclusion of this new policy delivers actions that develop education, skills and training and as such will have indirect positive effects for PHH and MA in the short to long term as more people with the necessary skills become available nationally, regionally and locally to harness the economic and employment benefits across a range of sectors and services which can add to more traditional skills and services. The mix of skills and training available will however require a focus on more than just hard engineering. Knowledge of environmental and social assessment skills will be critical, in all stages from pre-planning through to operation and decommissioning. This would include marine ecology, marine processes and ornithology among others. These environmental and social specialisms can become significant limiting factors in supply chains resulting in delays to permitting, planning and maintenance phases. As such, with the broad skill mix in place there is potential for indirect positive effects for BFF, W, LS, LandSeaS and CH as these issues can be addressed in a timely manner from project concept to delivery. If the skill set is too narrow then this opportunity will be lost and could impact negatively on reaching CF objectives and targets.

Mitigations

- None required.

5.6 Assessment of Substantively Updated Policies

The following tables set out an updated assessment of the SC-DMAP policy objectives, which have been substantively modified in light of commentary received during the public consultations i.e. amendments which go beyond minor edits and clarification. It assesses the potential for significant effects on the environment. New text is shown in green, and deleted text is shown in red strike through.

5.6.1 Updated Mitigation Policy MI 1

Ref.	Objective
MI 1	(a) Proposed ORE developments and associated transmission infrastructure shall use relevant data made available ~~collected~~ through the GIS Data Repository to support requisite statutory environmental assessments at project level (which may include EIA and/or AA). ~~assessments. as this data is completed and made accessible~~ (b) Within 6 months of the SC-DMAP being made, DECC will establish the SC-DMAP Implementation Programme Body ~~Board~~ to agree the scope of Regional Level Surveys and the mechanism for making such data standardised and accessible via a GIS Data Repository to be established as an implementation action of the SC-DMAP. (c) Applications for development of ORE in Maritime Areas B, C and D in the SC-DMAP Area, shall ~~should~~ only be submitted to and considered by the planning authority when the data meeting the scope of the ~~from completed~~ initial Regional Level Surveys is available through the GIS repository, to inform requisite statutory environmental assessments at project level (which may include EIA and/or AA) in-combination and cumulative assessments. The scope of the Regional Level Surveys, and a decision regarding whether they will be carried out by the State, MAC holders, or both, will be determined by the SC-DMAP Implementation Programme Body ~~Board.~~ (d) The design, scale and location of future ORE developments within Maritime Areas B, C and D should be informed by the outcome of the Regional Level Surveys.

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandSeaS
MI 1	+	+	+	+	0	0	+	0	+

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment and Discussion:

As noted in the SEA Environmental Report, Policy Objective MI 1 directly addresses the need for a common pool of data at a regional scale which all prospective developers can access and use to increase the scope of data available to use. Improvements in data is considered positive.

The proposed updates to the policy in subsections (a) to (d) clarify matters of scope i.e. that subsections (c) and (d) of the policy applies to Maritime Areas B, C and D and associated transmission infrastructure in the SC-DMAP Area. It also clarifies that a Programme Body rather than a Programme Board is envisaged at this time and that the elements of the policy are firm commitments and therefore shall be implemented. These additions are considered neutral as they bring further clarity to the intent of the policies.

Subsection (d) adds a new commitment which states that design, scale and location of future ORE developments within Maritime Areas B, C and D will be informed by the outcome of the Regional Level Surveys. This clarification adds additional strength to the policy as it clearly links the need for regional data to future ORE developments. The Regional Level Surveys will be used to inform project cumulative effects assessments at lower planning and decision making tiers and as such are needed to inform design, scale and location. The addition of subsection (d) will have direct positive effects for BFF in particular but also positive effects for W and LS as further inter-related information is gleaned from the regional surveys. Indirect benefits for MA are also anticipated as more data is available to developers on which to consider design, scale and location of their developments.

No significant negative effects from the proposed amendment.

Mitigation

- None required.

5.6.2 Updated Mitigation Policy SF 1

Ref.	Objective
SF 1	Developers of proposed ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure within the SC-DMAP area shall in order of preference avoid, minimise or mitigate likely significant adverse effects with existing fishing and seafood activity. A ~~should~~ ~~maintain a~~ record of engagement and actions with Irish-registered fishers and the wider seafood sector regarding proposed survey, installation and operation activity will be maintained, and developers shall seek to ~~should~~ optimise infrastructure design and layout to maximise opportunities for co-existence with fishing and seafood activity, where feasible. ~~Where feasible, a reduction of potential adverse impacts should be investigated through avoiding areas of identified high fishing activity or, failing this, through minimising and/or mitigating impacts on fishing activity, including through optimising windfarm layout to facilitate co-existence.~~

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandSeaS
SF 1	+	0	0	0	0	0	+	0	0

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment and Discussion:

As previously noted in the SEA Environmental Report, SF 1 recognises the importance of engagement between fishers and developers in achieving co-existence. The policy updates clarify that the policy applies to ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure within the SC-DMAP area. Furthermore the policy updates seek to strengthen consistency with the intent of the National Marine Planning Framework in terms of co-existence with sea fisheries by promoting a hierarchy of avoiding, minimising or mitigating significant adverse impacts with existing fishing and seafood activity. This alignment is positive for both PHH and MA as it leads to greater clarity for all parties and ensures policy coherence across the planning hierarchy.

No significant negative effects from the proposed amendment.

Assessment and Discussion:

Mitigation

- None required.

5.6.3 Updated Mitigation Policy SF 6

Ref.	Objective
SF 6	Any FMMS shall ~~should~~ include Cable Management Plan (CMP) which: - Explores~~ing~~ options and identify~~ing~~ies appropriate site-specific, substrate-specific inter-array and/or offshore transmission cable protection measures that can be installed to mitigate the risk of cable exposure and unintentional cable snagging by seafood/fishing activity - ~~Consideration should be given to~~ Considers prioritising the burial of cables at a suitable depth where possible, as well as other types of cable protection measures compatible with relevant types of fishing for each area - Considers aquaculture activities in relation to land access routes and timing of construction / maintenance activities - Identifies risk mitigation measures and include requirements for fishing trials over the cables and other inspections considered relevant on an appropriately regular basis.

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandSeaS
SF 6	+	+	+	+	0	0	+	+	0

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment and Discussion:

As assessed previously, the requirement for a cable management plan in SF 6 is considered directly positive for PHH and MA as they clearly establish the need to have explored options and design mitigation early in development planning. Indirect positive effects were also anticipated for other environmental factors notably BFF, W, LS as they will benefit from early integration into considerations as part of cable routing processes. Indirect benefits are also possible for CH where traditional fishing activities can continue.

The additional considerations in terms of aquaculture activities further strengthens the positive effects for MA where other marine users can be considered early in the cable routing process and at other key points in the life cycle of an ORE project. The second addition seeks to improve the evidence base in relation to fishing activities near cables and ensure that suitable mitigation measures can be identified on a case by case basis as part of project development to ensure co-existence of fisheries and ORE can be achieved.

No significant negative effects from the proposed amendment.

Mitigation

- None required.

5.6.4 Updated Mitigation Policy AH1

Ref.	Objective
AH 1	~~ORE~~ Surveys, site investigations and development of ORE in Maritime Areas A, B, C and D and associated electrical transmission infrastructure in the SC-DMAP area, ~~including associated ORE and transmission infrastructure~~, shall ~~should~~, where relevant, include measures to protect underwater archaeological and cultural heritage in the SC-DMAP area and:

(a) Comply with the National Monuments Act as amended, and the Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 ~~when commenced~~, and have regard to guidance of the National Monuments Service including "Frameworks and Principles for the Protection of the Archaeological Heritage" for assessment(s) to avoid or ~~and~~ mitigate impacts on ~~with~~ marine archaeological and cultural heritage features.

(b) Undertake early consultation with the Underwater Archaeology Unit of the National Monuments Service and engage qualified archaeologist(s) to prepare assessments including an Underwater Archaeological Impact Assessment and Archaeology Management Plan, as relevant.

(c) Comply with all relevant licencing procedures including geophysical survey licences, dive survey licences and detection device consents.

(d) Support the protection of onshore archaeological, architectural, and built cultural heritage in terrestrial plans and projects for ~~in~~ the development of associated onshore infrastructure to enable ORE sites in the SC-DMAP area subject to carrying out assessment at plan and/or project level for these activities as required, and the outcome of planning and/or conservation guidance, as relevant.

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandSeaS
AH 1	+	0	0	0	0	0	+	+	+

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment and Discussion:

The proposed changes to AH 1 seek to add further clarity to the policy scope and to strengthen the protection of sites and settings of marine and coastal heritage. The introductory text has been amended to specify that the policy relates to ORE in Maritime Areas A, B, C and D and associated electrical transmission infrastructure in the SC-DMAP area. Subsection (a) provides further clarifications in terms of commencement of the Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 and the naming of specific heritage documents which should underpin assessments i.e. Frameworks and Principles for the Protection of the Archaeological Heritage. A new subsection (c) has been added to confirm that project development must comply with relevant licensing procedures. Subsection (d) has also been amended to include a reference to built heritage and a caveat that support is subject to carrying out assessment at plan and/or project level for these activities as required, and the outcome of planning and/or conservation guidance, as relevant.

The various elements of the policy update further strengthen the requirement that robust planning and environmental assessment processes are put in place, with indirect positive effects for CH and additional benefits for PHH, MA and LandSeaS in terms of sustainable development of ORE in the context of the associated tourism and cultural context in which they exist.

No significant negative effects from the proposed amendment.

Mitigation

- None required.

Recommendation

- Inclusion of text referencing the importance of considering underwater archaeology and built heritage in route and site selection processes as identified previously in the SEA Environmental Report remains relevant. This has now been included in Section 7.5 of the SC-DMAP.

5.7 Assessment of Other Updated Policies

The following tables set out an updated assessment of the SC-DMAP policy objectives, which have been subject to minor updates and amendments in light of commentary received during the public consultations. It assesses the potential for significant effects on the environment. New text is shown in green, and deleted text is shown in red strike through.

Table 5-5: SEA Assessment of Proposed Changes to Maritime Areas (MA)

Proposed Amendment to Policy Objective	Assessment
MA 1: To support Ireland's legally binding climate objectives through enabling achievement of 5 GW of offshore wind which aims to be deployed by 2030, or as soon as feasible thereafter, 20 GW by 2040, and 37 GW by 2050, by providing for the strategically managed and sustainable development of fixed offshore wind technology in Maritime Areas A, B, C and D and associated offshore electricity transmission ~~system~~ infrastructure within the SC-DMAP area. The development of fixed offshore wind brought forward under this Plan is considered to be of strategic and national importance to the State.	Amendments are clarifications on timing and scope to bring consistency across the policies. No significant negative effects arising from the proposed amendment.
MA 2: That the development of ORE within the SC-DMAP area will exclusively relate to fixed offshore wind technology and may incorporate projects that are directly connected to the Irish onshore electricity transmission system, as well as projects with alternative offtake solutions and therefore not connected to the Irish onshore electricity transmission system.	Amendments are clarifications on scope to bring consistency across the policies. No significant negative effects arising from the proposed amendment.
MA 3: Maritime Area A will contain the first development of fixed offshore wind within the SC-DMAP area, to be developed by the winner of the second ORE ~~ORESS 2.1 auction,~~ auction, which aims to deploy by 2030, or as soon as feasible thereafter and will be connected to the Irish onshore electricity transmission system.	Amendments are clarifications on scope to bring consistency across the policies. No significant negative effects arising from the proposed amendment.
MA 4: ~~Following SC-DMAP being made,~~ A MAC will be the entry point for all future ORE in Maritime Areas B, C and D and associated transmission infrastructure development in the SC-DMAP area. The award of MACs in respect of proposed future ORE developments within Maritime Areas B, C, and D, shall be granted according to timing, methodology and processes to be determined by MARA in accordance with the MAP Act, consistent with Government policy.	The amendment acknowledges the requirement for MAC for all ORE development in Maritime Areas B,C and D and consistency with Government policy. No significant negative effects arising from the proposed amendment.

Table 5-6: SEA Assessment of Proposed Changes to Mitigation (MI)

Proposed Amendment to Policy Objective	Assessment
MI 1: (a) Proposed ORE developments and associated transmission infrastructure shall use relevant data made available ~~collected~~ through the GIS Data Repository to support requisite statutory environmental assessments at project level (which may include EIA and/or AA). ~~assessments, as this data is completed and made accessible~~ (b) Within 6 months of the SC-DMAP being made, DECC will establish the SC-DMAP Implementation Programme Body ~~Board~~ to agree the scope of Regional Level Surveys and the mechanism for making such data standardised and accessible via a GIS Data Repository to be established as an implementation action of the SC-DMAP. (c) Applications for development of ORE in Maritime Areas B, C and D in the SC-DMAP Area, shall ~~should~~ only be submitted to and considered by the planning authority when the data meeting the scope of the ~~from completed~~ initial Regional Level Surveys is available through the GIS repository, to inform requisite statutory environmental	See Section 5.6.1 for assessment of this document.

Proposed Amendment to Policy Objective	Assessment
assessments at project level (which may include EIA and/or AA) in-combination and cumulative assessments. The scope of the Regional Level Surveys, and a decision regarding whether they will be carried out by the State, MAC holders, or both, will be determined by the DMAP Implementation Programme Body ~~Board.~~ (d) The design, scale and location of future ORE developments within Maritime Areas B, C and D should be informed by the outcome of the Regional Level Surveys.	
MI 2: At the project level, all applications for development consents for ORE projects and transmission infrastructure relating to ~~emanating from~~ any SC-DMAP policy objective should have regard to the relevant pre-consent survey requirements and guidance set out in Appendix B and D. Applications for development consent that may give rise to likely significant effects on the environment shall ~~should~~ be accompanied by one or more of the following, as relevant: • Ecological Impact Assessment Report. • Environmental Report. • Environmental Impact Assessment Report if required under the relevant legislation (statutory document). • Natura Impact Statement if required under the relevant legislation (statutory document). • Demonstrate compliance with Article 12 (Habitats Directive) ~~Assessment~~ on Annex IV species. • Demonstrate compliance with Article 5 (Birds Directive) ~~Assessment~~ on wild or migratory bird species and Article 4.4 (Birds Directive) to strive to avoid pollution or deterioration of habitats outside of protection areas. • Demonstrate the need for ~~An assessment of~~ any ~~proposed~~ derogation from the applicable requirements of the Habitats or Birds Directives.	The amendments are broadly minor word changes. In the second half of the policy the terminology has been amended from "assessment of" to "demonstrate compliance with" specific legislation including the newly added Article 4.4 reference. This is considered an improvement to the policy as it aligns more closely with legal requirements. No significant negative effects arising from the proposed amendment.
MI 3: Any Licence application that may need to be made to MARA under Part 5 of the MAP Act for the purposes of carrying out the Regional Level Surveys~~. as well as Licence applications by MAC holders in Areas A, B, C and D for the purposes of ORE project specific site investigations and marine environmental surveys~~ in the SC-DMAP area, should be prioritised where practicable ~~should be treated as priority~~ by MARA, subject to compliance with Part 5 of the MAP Act and any relevant regulations. Any licence application submitted to MARA for the purposes of site investigations and marine environmental surveys, by EirGrid in respect of transmission infrastructure, or by the State or MAC holders in respect of ORE projects in Maritime Areas A, B, C and D should also be prioritised where practicable.	The amendment replaces the requirement to treat licence applications as a priority to "prioritised where practicable". This minor amendment recognises that there may be issues outside the control of the regulator that mean prioritisation is not practical in all cases. No significant negative effects arising from the proposed amendment. The amendment also now specifically references specific site investigations and marine environmental surveys. This clarification on scope is considered positive as it ensures all stakeholders are clear on the remit of the policy. No significant negative effects arising from the proposed amendment.
NEW POLICY MI 4	See assessment under Section 5.5.1 of this document.
NEW POLICY MI 5	See assessment under Section 5.5.1 of this document.

Table 5-7: SEA Assessment of Proposed Changes to Implementation, Governance and Monitoring (IGM)

Proposed Amendment to Policy Objective	Assessment
IGM 1: A governance structure to facilitate the implementation of the SC-DMAP will be established within six months following the making of the SC-DMAP, and will include: (A) A SC-DMAP Implementation Programme Body ~~Board~~, headed by the Department of the Environment, Climate and Communications, which, inter alia, will: • Oversee the implementation of the SC-DMAP. • Agree, having regard to the recommendations from the Marine Ecosystems and Ornithology Working Group, the scope and coordination of Regional Levels Surveys to inform the project application assessment and development stage of Maritime Areas B, C and D. • Convene and chair a six monthly ~~bi annual~~ meeting of all SC-DMAP governance working groups within a single 'Collaborative Forum' for the duration of the SC-DMAP to discuss all proposed ORE projects and enabling infrastructure to be brought forward under the Plan and cumulative and in-combination effects. • Facilitate a data repository for the SC-DMAP including a common, shared, GIS data repository for Plan and project level data. (B) A Marine Ecosystems and Ornithology Working Group whose role will include: • Advising the SC-DMAP Implementation Programme Body ~~Board~~ on the monitoring of and implementation of the SC-DMAP. • Recommending the scope of the Regional Level Surveys. • Coordinating the development of an Ecosystems Services Map which identifies key services including but not limited to climate regulation services for the SC-DMAP area.	The proposed amendments include for clarification in relation to a Programme Body rather than Programme Board, involvement of the Marine Ecosystems and Ornithology Working Group for scope and coordination of RLS and clarify bi-annual to be, more specifically, six-monthly. No significant negative effects arising from the proposed amendment. A new bullet point has been added requiring the development of an Ecosystems Services Map which identifies key services including climate regulation services. This will be positive for all environmental receptors as it will bring greater clarity and certainty to the complex services which are provided by the marine environment and at the land / sea interface. This will further help to inform planning and decision making at project level in terms of approach to ensure these services are protected and supported in line with the national policy under the NMPF.
IGM 2: Include a cross section of biodiversity representatives as part of the governance framework for the implementation of the SC-DMAP to ensure that marine biodiversity objectives are central to the implementation and monitoring of the SC-DMAP and any remedial or corrective action required.	This policy is strengthened in the context of biodiversity through the inclusion of the reference to cross section of biodiversity representatives as part of the governance framework for the implementation of the SC-DMAP with a positive effect arising from the proposed amendment.
IGM 3: To monitor the implementation the SC-DMAP, an Implementation Plan will be developed within one year following the making of the SC-DMAP. It will incorporate SEA monitoring requirements to monitor any identified significant environmental effects of implementation of the SC-DMAP.	No changes proposed.
IGM 4: Establish a dedicated offshore wind-maritime research programme in partnership with, and managed by, ~~MI~~ the Marine Institute.	Minor wording change for clarity. No significant negative effects arising from the proposed amendment.
IGM 5: To support the Maritime Authorisation Database provided for in the MAP Act, MACs and development permissions, for projects within the SC-DMAP area should include conditions requiring developers to gather data, including ecological data, to inform the requisite statutory environmental assessments at project level (which may	Minor wording changes to reflect that the elements of the policy are considered requirements rather than requests and further clarity on the required environmental assessments at the project level. No significant negative effects arising from the proposed amendment.

Proposed Amendment to Policy Objective	Assessment
include EIA and/or AA) and data relevant to cumulative and in-combination assessment. Data gathered shall ~~will~~ be submitted to MARA in a format to be determined by MARA within three months of being collected. The data shall ~~will~~ be added to a common, shared GIS data repository for use by the projects and Government Departments and State bodies.	

Table 5-8: SEA Assessment of Proposed Changes to Overarching Environmental Protection (OEP)

Proposed Amendment to Policy Objective	Assessment
OEP 1: Applications for development permission for ORE development in Maritime Areas A, B, C and D and associated electricity transmission infrastructure ~~applications for development for ORE and associated infrastructure~~ within the SC-DMAP area shall ~~should~~ have regard to, as appropriate, ~~to~~ Guidelines issued under section 7 of the MAP Act including any ~~forthcoming~~ Marine Planning Guidelines for ORE. Applications shall ~~should~~ also include, where relevant, the ~~proposed~~ management plans listed in ~~at~~ Appendix C. The appropriate stages of the relevant management plans will be subject to public consultation as part of the planning application process and, subject to any conditions imposed, will form part of any subsequent development permission. ~~The proposed management plans will then form part of the public consultation and assessment process and final plans may be submitted for approval by the consenting authority prior to construction.~~	Amendments are clarifications on scope to bring consistency across the policies. Furthermore it provides clarity that the appropriate stages of the relevant management plans listed in Appendix C will be subject to public consultation as part of the planning application process and, subject to any conditions imposed, will form part of any subsequent development permission. These are positive additions to the policy as they bring further clarity. No significant negative effects arising from the proposed amendment.
OEP 2: ~~To ensure robust project assessments and to contribute to best practice for projects brought forward under the Plan.~~ The following considerations shall be integrated into all stages of decision making for ORE and electricity transmission infrastructure projects, including but not limited to constraints analysis, route and site selection, and project level assessment to inform the preparation of requisite project-level applications (which may include EIA and/or AA): • Environmental constraints such as the presence of designated sites. • The attainment of good environmental status. • The processes and functions necessary to avoid ~~ensure no~~ adverse effects on the integrity of European Sites. ~~should be integrated in to all stages of in to all stages of decision making including but not limited to constraints analysis, route and site selection and project level assessment for EIAR and NIS preparation.~~ ~~If it cannot be concluded that a plan or projects for ORE and/or electricity transmission infrastructure will not adversely affect the integrity of European Sites following mitigation, it will be a matter for the competent authority to determine if permission should be granted in accordance with the requirements of Article 6(4) of the Habitats Directive and all necessary compensatory measures must be taken to ensure the overall coherence of the Natura 2000 network is protected.~~	The main update to the policy includes removal of the reference to Article 6(4) of the Habitats Directive as it pertains to planning consent. It is noted that the reference is relocated into the supporting text in Section 6 of the Plan. This is to ensure that there is no confusion which could consider Art 6(4) as a policy. Rather it is a step in a broader process that includes a number of other steps before Art 6(4) could be considered. This includes principles of avoidance, mitigation and alternatives. The revision of the text is noted and as it will be relocated and therefore clarified in the SC-DMAP this proposed amendment will have no significant negative effects arising from the proposed amendment. The amendment to the policy to include reference to different stages of ORE and electricity transmission infrastructure projects into which the suggested considerations should be integrated is a positive amendment that will contribute towards protection of site integrity of EU sites, and other designated sites in Ireland and achievement of good environmental status.
OEP 3: ~~To contribute to the ecological enhancement of the marine environment, projects~~ Applications for development	This policy objective is strengthened with respect to biodiversity with the clarification that the applications for

Proposed Amendment to Policy Objective	Assessment
permission for ORE development in Maritime Areas A, B, C and D should, through a project-specific Nature Enhancement and Rehabilitation Plan, aim towards no net loss and provide for ecological enhancement and recovery of the marine environment. This should target ~~that goes beyond measures required for project mitigation and which~~ contribution to European, national and local biodiversity policies, including any National Nature Restoration Plan. Measures should be ~~and are~~ commensurate with and proportional to the scale/footprint of the development area, and any part of the maritime area, which may be adversely affected by the development ~~and potential environmental effect of the project.~~ Nature enhancement measures are separate, and in addition, to the mitigation hierarchy. Projects which incorporate features that enhance or facilitate species adaptation or migration, or natural native habitat connectivity will be supported, subject to the outcome of statutory environmental processes and the outcome of planning and/or licensing processes, as relevant. ~~statutory environmental assessment processes and subsequent decision by the competent authority, and where they contribute to the policy objectives of this SC-DMAP.~~	ORE development permission in Maritime Areas A, B, C and D will aim towards no net loss in addition to the enhancement and recovery of marine environment. With respect to biodiversity, the policy now includes that nature enhancement measures are separate and additional to those identified through the application of the mitigation hierarchy. These measures should be proportional to the scale/footprint of the development area, and any part of the maritime area, which may be adversely affected by the development. This is beneficial with respect to European Sites and their qualifying interests. No significant negative effects arising from the proposed amendment.

Table 5-9: SEA Assessment of Proposed Changes to Biodiversity (B)

Proposed Amendment to Policy Objective	Assessment
B 1: Applications for development permission for ORE and associated electricity transmission infrastructure shall ~~should~~ have regard to the ~~following~~ guidance and plans as relevant, and updates thereof, set out in Appendix D.	Minor wording amendments to add clarity. No significant negative effects arising from the proposed amendment.

Table 5-10: SEA Assessment of Proposed Changes to Protected Marine Sites (PMS)

Proposed Amendment to Policy Objective	Assessment
MS 1: ~~To ensure that statutory reviews of the SC-DMAP and projects~~ Applications brought forward for projects in the SC-DMAP area ~~under this Plan must~~ shall consider ~~the~~ up to date understanding ~~evolution~~ of baseline conditions, including any future national protected sites (e.g., Marine Protected Areas (MPAs) and European Sites e.g., marine SPAs and SACs) and relevant data available through the GIS Data repository. ~~which includes additional future national protected sites e.g., Marine Protected Areas (MPAs) and European Sites e.g., marine SPAs and SACs and data from regional level survey activities and projects~~. This up to date ~~augmented~~ baseline shall ~~should~~ inform the requisite statutory environmental assessments at project level (which may include EIA and/or AA) including cumulative and in-combination assessment.	The amendments clarify further the need to consider the most up to date baseline information and recognise that future additional relevant matters will need to be considered, notably the designation of any future MPAs and EU sites in due course. Further clarification on incorporation of relevant RLS data into the applications for ORE development in Maritime Areas B, C and D and required environmental assessments to be informed by this up-to-date baseline information is provided. All these amendments further strengthen the policy. No significant negative effects arising from the proposed amendments.

Table 5-11: SEA Assessment of Proposed Changes to Water Quality (WQ)

Proposed Amendment to Policy Objective	Assessment
WQ 1: ~~To protect and improve water quality,~~ ORE and electricity transmission infrastructure projects shall ~~should~~ carry out comparative analysis of routes and installation techniques, including the use of modelling to determine the scale of sediment plume relative to the sensitivity of the	Minor text clarifications to clarify scope of the policy and reflect the policy as a requirement. No significant negative effects arising from the proposed amendment.

Proposed Amendment to Policy Objective	Assessment
environmental receptors e.g., wading birds or aquaculture sites as part of project level assessments.	
NEW POLICY WQ 2	See assessment under Section 5.5.2 of this document.

Table 5-12: SEA Assessment of Proposed Changes to Marine Litter (ML)

Proposed Amendment to Policy Objective	Assessment
ML 1: Proposals for ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure projects in the SC-DMAP area shall ~~should~~ comply with Marine Litter Policy 1 set out within the NMPF. Specifically, priority shall ~~should~~ be given within project design to solutions ~~proposals~~ that, in order of preference, facilitate the prevention, reuse and recycling of waste. Where waste is expected to be generated, a waste management plan shall ~~should~~ be established ~~in place~~ to prioritise a hierarchy of avoid, minimise or mitigate in relation to marine litter. The waste management plan shall ~~should~~ explicitly address waste and litter generated during development ~~enabling~~, construction, operation and decommissioning of ORE and associated infrastructure. ~~development~~	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.
ML 2: ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure projects in the SC-DMAP area brought forward under this Plan shall ~~should~~ assess the impacts of electromagnetic field (EMF) in the Marine Environment as part of the statutory environmental assessment at the project level and use the most effective techniques available to industry to, in order of preference, avoid, minimise or mitigate likely significant adverse effects from EMF impacts. ~~minimise electromagnetic field (EMF) in the marine environment, including where necessary, through project design mitigation e.g., prioritisation of cable burial where possible. Projects should gather evidence to inform the project level impact assessment.~~	Amendment to clarify scope of the policy and to require an assessment of the impacts of EMF as part of statutory assessments. This specific requirement for assessment in statutory documents at project level i.e. EIAR / NIS adds further clarity and strength to the policy. The hierarchy of avoid, minimise or mitigate likely significant adverse effects from EMF impacts is considered positive. No significant negative effects arising from the proposed amendment.

Table 5-13: SEA Assessment of Proposed Changes to Underwater Noise (UN)

Proposed Amendment to Policy Objective	Assessment
UN 1: Applications for ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure projects in the SC-DMAP area shall ~~should~~ demonstrate that they have had regard to guidance relating to underwater noise including ~~NPWS~~ DAHG Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters and updates thereof. ~~and propose~~ Appropriate mitigation measures for any activity that may generate underwater noise shall be included in applications. Until such time as the ~~NPWS~~ DAHG guidance is updated projects shall ~~should~~ have regard to the underlying research this guidance is based on, and updates to this research.	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.
UN 2: Projects for ORE in Maritime Areas A, B, C and D and electricity transmission infrastructure in the SC-DMAP area shall ~~To~~ minimise the risk of disturbance on biodiversity and the cumulative effects of underwater noise along with other pressures such as increased sedimentation, survey and installation works. ~~should, so far as possible, be programmed to be carried out at separate~~	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. In addition the request to programme works to be carried out at separate times has been deleted. This is to reflect concerns that circumstances may require flexibility e.g. a short period of cumulative noise sources may be preferable to a longer period of disturbance from consecutive

Proposed Amendment to Policy Objective	Assessment
~~times to reduce potential for noisy or other disturbing activities occuring to occur at the same time affecting and which could affect the same area.~~	activities. This will be dependent on the nature of the sensitivity of the species, time of year, nature of the nose source etc. No significant negative effects arising from the proposed amendments.
UN 3: ~~To support MSFD descriptor 11 that the introduction of offshore renewable energy, including underwater noise is at levels that do not adversely affect the marine environment~~. Projects for ORE in Maritime Areas A, B, C and D and electricity transmission infrastructure in the SC-DMAP area shall use, as relevant, ~~should consider techniques~~ the most effective techniques available to industry for noise abatement such as adjusting the parameters of ~~the~~ pile stroke, soft-start piling activities, avoiding piling in periods of ecological importance, delaying piling if mammals are spotted, or using acoustic deterrent devices or sound barriers where appropriate ~~(where suitable)~~ to, in order of preference, avoid, minimise or mitigate ~~to reduce those impacts~~ likely significant adverse effects on marine fauna. ~~Best available techniques should be used to reflect the emerging evidence base on noise abatement for offshore wind developments in Maritime Areas A-D water greater than 45m.~~	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. Furthermore the policy has been amended to reflect the mitigation hierarchy of avoid, minimise or mitigate likely significant adverse effects on marine fauna. This addition is considered positive. No significant negative effects arising from the proposed amendment.

Table 5-14: SEA Assessment of Proposed Changes Air Quality (AQ)

Proposed Amendment to Policy Objective	Assessment
AQ 1: To reduce ~~a~~ reliance on fossil fuels, and reduce associated emissions and air pollution, projects for ORE in Maritime Areas A, B, C and D and electricity infrastructure in the SC-DMAP area shall ~~should~~ comply with existing regulatory and policy commitments to offshore and vessel management air pollution protocols as set out in the International Convention for the Prevention of Pollution from Ships (MARPOL). ~~MARPOL and Ireland's enacting legislation. Installation and maintenance vessels should use alternative lower emission fuels and more efficient transport strategies, where possible.~~	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. New Policy CC 3 related to carbon emissions assessed in Section 5.5.3 is included in the Plan in place of the deleted text at the end of this policy. No significant negative effects arising from the proposed amendment.

Table 5-15: SEA Assessment of Proposed Changes to Climate Change (CC)

Proposed Amendment to Policy Objective	Assessment
CC 1: ~~To support Ireland's climate and renewable energy objectives by providing for ORE development. In addition to delivering renewable energy,~~ Project developers for ORE and associated electricity transmission infrastructure in Maritime Areas A, B, C and D shall ~~should~~ demonstrate the integration of a multi-benefit approach into the design of ~~to~~ their project, which may include the delivery of carbon sequestration, biodiversity enhancement, coastal management, water quality management or other ecosystem services through the project design and/or mitigation.	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.
CC 2: ~~To support the role played by the marine environment in carbon storage and carbon sequestration,~~ Development of ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure in the SC-DMAP area should avoid impacts on natural carbon storage and carbon	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. Inclusion of reference to carbon storage in addition to sequestration is positive with respect to climate change. No

Proposed Amendment to Policy Objective	Assessment
sequestration and include consideration of the integrity of European sites. Project-specific impacts on carbon storage and sequestration resources, biodiversity enhancement, managing coastal erosion e.g., through stabilising sediment and impacts on opportunities for natural carbon sequestration shall ~~should~~ be considered and any losses in natural storage or sequestration resources or opportunities shall ~~should~~ be quantified and offset ~~compensated for~~.	significant negative effects arising from the proposed amendment.
NEW POLICY CC 3	See assessment under Section 5.5.3 of this document.

Table 5-16: SEA Assessment of Proposed Changes to Co-Existence (CO)

Proposed Amendment to Policy Objective	Assessment
CO 1: ~~That~~ In order to promote co-existence between ORE and other existing and future uses within the SC-DMAP area, permanent exclusions on activities or usages around or within ORE in Maritime Areas A, B, C and D or electricity transmission infrastructure located within the SC-DMAP area shall ~~should~~ be avoided where possible. This does not apply to exclusions ~~save relating~~ related to marine safety assessed via navigational risk assessments and approved by the Marine Survey Office (MSO), or exclusions required for environmental protection or in other exceptional circumstances, where considered warranted by ~~MARA or~~ the competent authorities ~~statutory authorities~~ in accordance with their respective roles. The likely requirement for temporary exclusion zones during periods of surveying, as well as offshore infrastructure construction, maintenance and decommissioning is recognised. Any such restrictions shall ~~should, where possible~~, endeavour to minimise ~~avoid~~ likely significant adverse effects ~~impacts~~ on other maritime users.	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. The amendments also introduce a caveat to exclusions where safety and environmental protection are specifically referenced along with other exceptional circumstances which was a mitigation identified in the SEA Environmental Report. No significant negative effects arising from the proposed amendment.
CO 2: Developers of ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure in the SC-DMAP area shall accurately map their respective development sites, including electricity export and inter array cables as laid post installation, and after any relevant intervention during operation and decommissioning. ~~development~~ This location and coordinate data shall be made available to MARA and other maritime users, including fishers, in a format that can be downloaded on navigation systems including a suitable plotter format which can be installed within fishing vessels.	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.

Table 5-17: SEA Assessment of Proposed Changes to Aquaculture, Sea Food and Fisheries (SF)

Proposed Amendment to Policy Objective	Assessment
SF 1: Developers of proposed ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure within the SC-DMAP area shall in order of preference avoid, minimise or mitigate likely significant adverse effects with existing fishing and seafood activity. A ~~should maintain a~~ record of engagement and actions with Irish-registered fishers and the wider seafood sector regarding proposed survey, installation and operation activity will be maintained, and developers shall seek to ~~should~~ optimise infrastructure design and layout to maximise opportunities for co-existence with fishing and seafood activity, where feasible. ~~Where feasible, a reduction~~	See section 5.6.2 for assessment

Proposed Amendment to Policy Objective	Assessment
~~of potential adverse impacts should be investigated through avoiding areas of identified high fishing activity or, failing this, through minimising and/or mitigating impacts on fishing activity, including through optimising windfarm layout to facilitate co-existence.~~	
SF 2: Developers of proposed ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure ~~with~~in the SC-DMAP area, as well as the seafood/fishing sector, shall ~~should~~ take into account the objectives and principles established in the 'Seafood/ORE Engagement in Ireland - A Summary Guide' and its successors, regarding protocols for constructive cooperation and engagement between the ORE and seafood sectors. Proposed developers of ORE projects and transmission infrastructure shall ~~should~~ document these efforts as part of maintaining a record of engagement under Policy Objective SF1 and a Fisheries Management and Mitigation Strategy (FMMS).	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement and include cross-reference to SF 1 and FMMS. No significant negative effects arising from the proposed amendment.
SF 3: Developers of proposed ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure in the SC-DMAP area shall prepare a Fisheries Management and Mitigation Strategy (FMMS) in consultation with identified local fishers post the award of any required Maritime Usage Licences and prior to any surveys being carried out and/or applications for development consent being made. ~~shall be prepared by developers of proposed ORE projects and transmission infrastructure, interests~~. All efforts shall ~~should~~ be made to agree the FMMS with those interests. Those fishers shall ~~interests must~~ also undertake to engage with developers and provide spatial information in a timely manner to enable completion of the FMMS. For each commercial ~~The FMMS should identify management and mitigation measures for each commercial~~ fishery that can establish within a reasonable timeframe to developers of prospective ~~offshore wind~~ ORE projects and transmission infrastructure, ~~through the provision of spatial information~~, that they would be adversely affected by the development, the FMMS shall identify management and mitigation measures. The FMMS shall ~~will~~ be updated and amended by developers throughout the lifetime of a project as appropriate. ~~and as necessary.~~	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.
SF 4: As part of an FMMS, developers of prospective ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure in the SC-DMAP area, shall consult with local seafood/aquaculture interests and other interests as appropriate, and shall prepare an Aquaculture Management and Mitigation Strategy (AMMS) where relevant. All efforts shall ~~should~~ be made to agree the AMMS with those interests. The AMMS shall ~~should~~ identify management and mitigation measures to ensure that ~~potential adverse impacts~~ likely significant adverse effects of ORE and transmission infrastructure development on seafood/aquaculture activity are, in order of preference, avoided, minimised ~~and~~ or mitigated.	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.
SF 5: Developers of proposed ORE projects in Maritime Areas A, B, C and D and electricity transmission infrastructure in the SC-DMAP area shall maintain a Fisheries Liaison Officer (FLO) to facilitate direct, effective, constructive consultation and engagement on an ongoing	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.

Proposed Amendment to Policy Objective	Assessment
basis with Irish-registered fishers and wider seafood sector members operating within the SC-DMAP area at all stages of any offshore wind project ~~pre-construction,~~ including development, ~~and during~~ construction, operation and maintenance and decommissioning.	
SF 6: Any FMMS shall ~~should~~ include Cable Management Plan (CMP) which: - Explores~~ing~~ options and identify~~ingies~~ appropriate site-specific, substrate-specific inter-array and offshore transmission cable protection measures that can be installed to mitigate the risk of cable exposure and unintentional cable snagging by seafood/fishing activity - ~~Consideration should be given to~~ Considers prioritising the burial of cables at a suitable depth where possible, as well as other types of cable protection measures compatible with relevant types of fishing for each area - Considers aquaculture activities in relation to land access routes and timing of construction / maintenance activities - Identifies risk mitigation measures and include requirements for fishing trials over the cables and other inspections considered relevant on an appropriately regular basis.	See section 5.6.3 for assessment.
~~SF 7: Developers of proposed ORE projects and transmission infrastructure shall engage with potentially impacted seafood sector members and Irish-registered fishers to ensure that risks associated with fishing/seafood activity over the cables are minimised. A cable risk mitigation plan shall be submitted with any application for development involving the laying of cables within the SC-DMAP area and include requirements for fishing trials over the cables and other inspections considered relevant on an appropriately regular basis.~~	This policy has been integrated into changes made to SF 1 and SF 6. See Section 5.6 of this report for an assessment of these modified policies. No significant negative effects arising from the proposed amendment.

Table 5-18: SEA Assessment of Proposed Changes to Shipping (S)

Proposed Amendment to Policy Objective	Assessment
S 1: Applicants ~~Applications~~ for ORE development in Maritime Areas A, B, C and D and associated electricity transmission infrastructure in the SC-DMAP area and associated surveys ~~applications~~ shall ~~should be subject to consultation~~ consult with local/regional port and harbour authorities and the Marine Survey Office ~~Maritime Safety Directorate~~ prior to submitting planning or licence applications. ~~and~~ Any consequent surveys or works ~~and~~ shall comply with all relevant legislation and ~~required~~ Marine Notices ~~to avoid any disruption~~ to minimise disruption to shipping ~~shipping lanes~~ in the SC-DMAP area.	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. Change of reference from avoid any disruption to minimise disruption to shipping is noted but the addition of compliance with all relevant legislation and Marine Notices is also noted. The legislation and notices will ensure disruptions are regulated and controlled appropriate to the area. No significant negative effects arising from the proposed amendment.
NEW POLICY S 2	See assessment under Section 5.5.4 of this document.
NEW POLICY S 3	See assessment under Section 5.5.4 of this document.

Table 5-19: SEA Assessment of Proposed Changes to Tourism and Recreation (T)

Proposed Amendment to Policy Objective	Assessment
T 1: The SC-DMAP supports ~~support~~ and facilitates coexistence between ORE development and the ~~a thriving~~ tourism sector subject to carrying out statutory environmental assessment at plan and project level for these activities as required (which may include SEA, EIA and/or AA) and the outcome of planning and / or licensing processes as relevant.	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.

Table 5-20: SEA Assessment of Proposed Changes to Telecommunications (TEL)

Proposed Amendment to Policy Objective	Assessment
TEL 1: The SC-DMAP supports the principle of coexistence of ORE development with digital telecommunications infrastructure, subject to carrying out requisite statutory environmental assessment at plan and/or project level (which may include SEA, EIA and/or AA) and the outcome of planning and licensing processes, as relevant. No exclusions shall ~~should~~ be placed on the deployment, operation or maintenance of subsea telecommunications cables within or around ORE developments or the associated cabling, unless required for safety, environmental reasons or other exceptional circumstances. Project route selection for ORE cables shall ~~should~~ seek to avoid the need for exclusions in the first instance and project developers shall ~~should~~ consult with service providers to understand limitations on each sector's respective ~~their~~ existing and/or planned infrastructure.	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.

Table 5-21: SEA Assessment of Proposed Changes to Marine Archaeological Heritage (AH)

Proposed Amendment to Policy Objective	Assessment
AH 1: ~~ORE~~ Surveys, site investigations and development of ORE in Maritime Areas A, B, C and D and associated electrical transmission infrastructure in the SC-DMAP area, ~~including associated ORE and transmission infrastructure~~, shall ~~should~~, where relevant, include measures to protect underwater archaeological and cultural heritage in the SC-DMAP area and: (a) Comply with the National Monuments Act as amended, and the Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 ~~when commenced~~, and have regard to guidance of the National Monuments Service including "Frameworks and Principles for the Protection of the Archaeological Heritage" for assessment(s) to avoid or ~~and~~ mitigate impacts on ~~with~~ marine archaeological and cultural heritage features. (b)Undertake early consultation with the Underwater Archaeology Unit of the National Monuments Service and engage qualified archaeologist(s) to prepare assessments including an Underwater Archaeological Impact Assessment and Archaeology Management Plan, as relevant. (c) Comply with all relevant licencing procedures including geophysical survey licences, dive survey licences and detection device consents. (d) Support the protection of onshore archaeological, architectural, and built cultural heritage in terrestrial plans	See section 5.6.4 for assessment of this document.

Proposed Amendment to Policy Objective	Assessment
and projects for ~~in~~ the development of associated onshore infrastructure to enable ORE sites in the SC-DMAP area subject to carrying out assessment at plan and/or project level for these activities as required, and the outcome of planning and/or conservation guidance, as relevant.	

Table 5-22: SEA Assessment of Proposed Changes to Land and Sea Interactions (LS)

Proposed Amendment to Policy Objective	Assessment
LS 1: The SC-DMAP supports the coordination of land and sea interactions and the alignment of terrestrial plans and policy at national, regional, and local level that deliver sustainable onshore infrastructure to enable ORE in Maritime Areas A, B, C and D and electricity transmission infrastructure ~~offshore wind energy~~ in the SC-DMAP area. This support is subject to the carrying out ~~of all~~ the requisite statutory environmental assessments at plan and/or project level (which may include SEA, EIA and/or AA), cumulative and in-combination assessment of plans and projects and the outcome of planning and / or licensing processes, as relevant.	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.
LS 2: The SC-DMAP supports the location and siting of onshore infrastructure, enabling ORE in Maritime Areas A, B, C and D and electricity transmission infrastructure within the SC-DMAP area, which takes into account the risks associated with coastal change and flooding, avoids locations that are most at risk such as areas where managed retreat may be necessary and are in accordance with Local Authority Development Plans and Coastal Change Management Plans. This support is subject to the carrying out of the requisite statutory environmental assessments at plan and/or project level (which may include SEA, EIA and/or AA), cumulative and in-combination assessment of plans and projects and the outcome of planning and / or licensing processes as relevant.	Minor text clarifications to clarify scope of the policy and the inclusion of the support being subject to carrying out the requisite statutory environmental assessments at plan and project level; including AA. This is broadly positive for all environmental receptors. No significant negative effects arising from the proposed amendment.

Table 5-23: SEA Assessment of Proposed Changes to Ports and Harbours (PH)

Proposed Amendment to Policy Objective	Assessment
PH 1: The SC-DMAP supports, in accordance with national policy, the alignment of terrestrial planning with marine planning at regional and local level to provide for the sustainable development of port and harbour infrastructure that enables the development of ORE in Maritime Areas A, B, C and D and electricity transmission infrastructure within the SC-DMAP area. This support is subject to the carrying out of the requisite statutory environmental assessments at plan and/or project level (which may include SEA, EIA and/or AA) and the outcome of planning and / or licensing processes as relevant.	Minor text clarifications to clarify scope of the policy and inclusion of reference to harbours. No significant negative effects arising from the proposed amendment.

Table 5-24: SEA Assessment of Proposed Changes to Electricity Transmission System (ETS)

Proposed Amendment to Policy Objective	Assessment
ETS 1: The SC-DMAP supports the ~~To prioritize the~~ sustainable development of offshore and onshore transmission infrastructure that ~~supports and~~ enables the sustainable development of offshore wind capacity within	Minor text clarifications to clarify scope of the policy and the inclusion of the support being subject to carrying out the requisite statutory environmental assessments at plan and project level; including AA. This is broadly positive for all

Proposed Amendment to Policy Objective	Assessment
the SC-DMAP area, which is considered to be of critical and strategic importance. This objective relates to the development of the electricity transmission infrastructure for both grid-connected and non-grid connected ORE projects, as well as projects seeking to connect to another country(s) via hybrid-interconnection. This support is subject to the carrying out of requisite statutory environmental assessments at plan and/or project level (which may include SEA, EIA and/or AA), the implementation of relevant environmental directives such as the Birds and Habitats Directives and EIA Directive and transposing national legislation, cumulative and in-combination assessment of plans and projects and the outcome of planning and / or licensing processes as relevant.	environmental receptors. No significant negative effects arising from the proposed amendment.
ETS 2: The SC-DMAP supports ~~To support~~ the integration and alignment of terrestrial planning with marine planning at regional and local level that provides for the sustainable development of transmission infrastructure to enable ORE development in the SC-DMAP area. This support is subject to the carrying out of the requisite statutory environmental assessment at plan and/or project level (which may include SEA, EIA and/or AA) and the outcome of planning and / or licensing processes as relevant.	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.
ETS 3: To avoid, minimise and mitigate likely significant ~~potential associated~~ adverse environmental and social ~~impacts~~ effects and reduce development costs, existing offshore and onshore infrastructure required to connect offshore wind generation to the onshore electricity transmission system shall ~~should~~ be used ~~utilized~~ to as great an extent as possible, with additional provisions for future proofing of offshore electricity transmission system assets. This utilisation is subject to the carrying out of the requisite statutory environmental assessment at plan and/or project level (which may include SEA, EIA and/or AA) and the outcome of planning processes, as relevant.	Minor text clarifications to clarify scope of the policy and the inclusion of the support being subject to carrying out the requisite statutory environmental assessments at plan and project level; including SEA, EIA and AA. This is broadly positive for all environmental receptors. No significant negative effects arising from the proposed amendment.

Table 5-25: SEA Assessment of Proposed Changes to Economic and Employment Growth Potential (EC)

Proposed Amendment to Policy Objective	Assessment
EC 1: The SC-DMAP supports actions under Government's Offshore Wind Industrial Strategy (2024) and through regional and local level plans that support research, innovation, skills development, enterprise, jobs growth and the sustainable development of economic clusters in the ORE ~~offshore renewable energy~~ sector to support the development and operation of ORE projects in the SC-DMAP area. This support is subject to the carrying out of the requisite statutory environmental assessments at plan and/or project level (which may include SEA, EIA and/or AA) and the outcome of planning and/or licensing processes as relevant.	Minor text clarifications to clarify scope of the policy and the inclusion of the support being subject to carrying out the requisite statutory environmental assessments at plan and project level; including SEA, EIA and AA. No significant negative effects arising from the proposed amendment.
NEW POLICY EC 2	See assessment under Section 5.5.5 of this document.

Table 5-26: SEA Assessment of Proposed Changes to Community Engagement (CE)

Proposed Amendment to Policy Objective	Assessment
CE 1: To facilitate continued engagement with South Coast stakeholders, including local coastal communities and fishers, holders of a MAC for ORE and associated electricity transmission infrastructure in the SC-DMAP Maritime Areas shall ~~should~~ prepare and publish a Public Engagement Plan concerning all matters relating to the ~~Permitted Maritime Usage~~ proposed maritime activity.	Minor text clarifications to clarify scope of the policy and reflect the policy elements which are a requirement. No significant negative effects arising from the proposed amendment.

6 PREFERRED SCENARIO AND REASONS FOR CHOOSING THE FINAL DRAFT SC-DMAP

6.1 Introduction

The consideration of alternatives is a requirement of Article 5(1)[3] of the SEA Directive (2001/42/EC). Article 5(1) of the directive does not prescribe at what stage consideration of alternatives should be undertaken, however, to present a useful input into the plan making process, all guidance points to considering alternatives as early as possible. Guidance also recognises that multiple layers of alternatives may exist, particularly for plans of this nature. Given the nature of the Plan, alternatives have been primarily considered at the strategic level.

6.2 Approach to Alternatives

Both the DECC Plan team and the SEA team were conscious of the need for iteration with regard to alternatives and, as such, alternatives were first considered during the SEA Scoping stage. The basis for alternatives discussions was the EPA Guidance: Developing & Assessing Alternatives in Strategic Environmental Assessment, 2015. This guidance points to achieving four key criteria for identification of alternatives and broad categories of alternatives that might be considered in **Figure 6.1**.

Figure 6-1: Criteria for Alternatives Considered [Source: EPA Guidance, 2015]

In the context of the SC-DMAP the criteria considered were:

- **Realistic:** Does the alternative achieve the objectives of national policy and objectives in relation to climate, marine planning and renewable energy? Does the alternative have the capacity to deliver the required outcomes from the plan i.e. contribute to Ireland achieving its decarbonisation and climate objectives, including a 51% reduction in greenhouse gas emissions by 2030 and the related electricity sectoral emissions ceiling, and a legally binding path to net-zero emissions no later than 2050, as required under the Climate Action and Low Carbon Development Act, 2015 (as amended) (the "Climate Act 2015"). Is the alternative "within the legal competence of the plan-making authority"?

[3] Directive 2001/42/EC On the assessment of effects of certain plans and programmes on the environment, EC 2001

- **Reasonable:** Do the alternatives consider baselines and trends in environmental quality, and do they reflect the legal requirement under inter-related environmental protection legislation such as the Habitats Directive and the Climate Act 2015 (as amended)?
- **Viable:** Are the alternatives technically possible and feasible within the timeframe of the plan?
- **Implementable:** Are the alternatives capable of being put into action, within a realistic timeframe, and are there adequate resources including supporting infrastructure and supply chains to facilitate implementation.
- The SEA Scoping Report included a series of high-level considerations on alternatives for discussion under a range of categories as shown in **Figure 6.2.** Furthermore the report provided an outline of types of alternatives that could be relevant to the SC-DMAP – see **Table 6-1**.

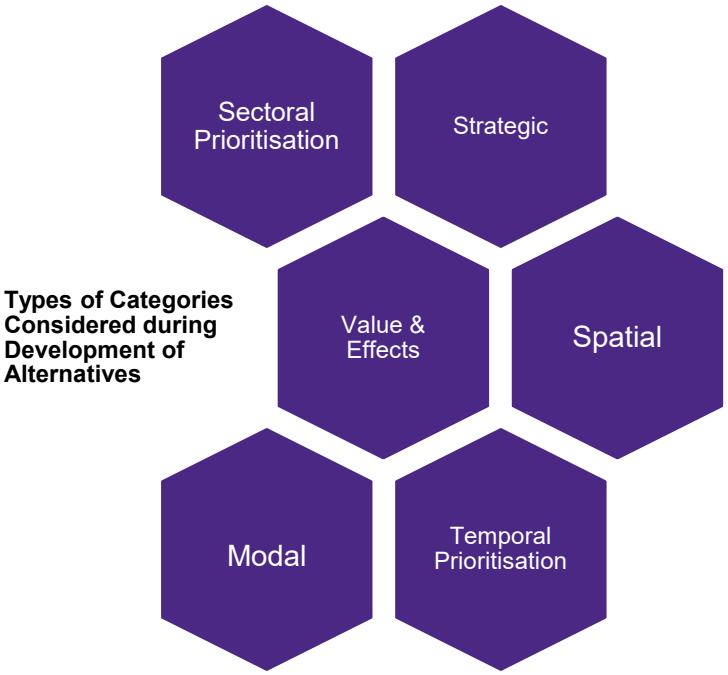


Figure 6-2: Alternatives Categories Considered

Table 6-1: Early Consideration of Alternatives for the SEA Scoping Phase

Alternative Type	Description	Example Considerations with Respect to the SC-DMAP
Strategic	High-level options that achieve a given objective.	• Spatial versus policy based
Value and Effects Oriented	Alternatives that address policy priorities, cultural values or safety issues. Such alternatives are most appropriate for addressing public perceptions, concerns and values. Alternatives that address issues identified during scoping. Such alternatives are effective at mitigating potential significant effects.	• Public participation and engagement • Zoning for ORE areas • Zoning to include protection of e.g. fisheries, recreation, biodiversity areas etc.
Spatial	Alternative locations for the implementation of planning objectives.	• Location of activities within the SC-DMAP area – zoning • Suitable locations for different infrastructure elements

Alternative Type	Description	Example Considerations with Respect to the SC-DMAP
Modal	Different technical/ mode alternatives to achieve the same objective	• Different methods to achieve policies/priorities can include for example: – Legal; – Administrative; – Financial; – Education / awareness / training; and – Related research and development. • Consideration of policy support for/ exclusion of specific technologies and the mix of technologies brought forward e.g. fixed base wind only or wider ORE considerations.
Sectoral and/ or Temporal Prioritisation	Alternatives that look at sectoral feasibility and needs at the strategic level, policies can be formulated to promote one sector versus another. Alternatives for the timing of implementation of plan/ programme measures. These are most suitable at the local level for addressing infrastructure development.	• Identification of sub-areas for prioritisation • Sub-areas aligned to grid capacity

Following the scoping phase, the early consideration of alternatives was developed further based on statutory scoping feedback, wider public non-statutory consultation feedback and through two focused internal workshops with DECC in Quarter 1 of 2024. Based on this input, a list of possible SC-DMAP specific alternatives was generated which could be assessed. In the first instance the alternatives were assessed to determine if they met all the criteria outlined in **Figure 6.1**. This initial assessment in relation to the core criteria is recorded **Table 6-2.** Those alternatives meeting the criteria were brought forward for further detailed assessment under the Strategic Environmental Objectives (SEO) outlined in Chapter 6 of this Environmental Report.

In the case of the spatial alternatives, a bespoke approach was developed to identify areas for ORE development. The approach is presented below.

Table 6-2: Long List of Alternatives Considered in the SEA Environmental Report

Alternative	Realistic	Reasonable	Viable	Implementable	Outcome
Strategic Alternatives					
A developer led approach versus a Government led approach	✓	X	X	X	While a developer led approach can be considered **realistic** as it is likely to deliver some additional capacity toward achieving climate commitments, there is less certainty about achieving the timelines required by the Climate Act 2015 (as amended). A developer led alternative is not considered a **reasonable, viable or implementable** alternative. As envisaged in the NMPF, a DMAP will be a management plan for a specific area of our marine waters and can be used to develop multi-activity area plans; to promote use of specific activities, including ORE; and/or for the purposes of the sustainable use and protection of particular marine environments. Provisions for the use of forward spatial planning and the establishment of DMAPs have been subsequently provided for in national legislation through the MAP Act. Reflecting the newly established plan-led regime for ORE development, the Government's Phase Two Policy Statement of March 2023 further required that post Phase One ORE projects in Ireland will be exclusively located in DMAPs. **Not brought forward for assessment. See Chapter 7 of the SEA Environmental Report for further details.**
Use of OREDP versus use of DMAP.	✓	X	X	X	Despite being a non-statutory plan, the application of the OREDP to deliver ORE capacity can be considered **realistic** as it would, if implemented deliver additional capacity towards achieving climate commitments. However, using OREDP is not considered **reasonable, viable or implementable** in the context of Part 2, Chapter 3 of the MAP Act. This provides that DMAPs, which may include plans specifically focused on a single sectoral area, such as ORE, are prepared by a Competent Authority. In this instance, the Minister for the Environment, Climate and Communications (the Minister) is the Competent Authority to prepare DMAPs for the development of ORE for the Irish maritime area, including those DMAPs that will seek to assist in achieving the Government's objective of 5 GW of offshore wind by 2030, and further post 2030 ORE targets. This designation includes the preparation of an initial South Coast ORE DMAP, which is the focus of this draft DMAP. **Not brought forward for assessment. See Chapter 7 of the SEA Environmental Report for further details.**
Roll out of ORE DMAPs for whole country versus a focus on regional roll out.	✓	X	X	X	Roll out of ORE DMAPs for whole country to deliver ORE capacity can be considered **realistic** as this would move toward delivery of additional capacity toward achieving climate commitments. However, it is not considered a **reasonable, viable or implementable** alternative to an SC-DMAP. The Phase 2 policy approved by Government determined that the establishment of the first ORE DMAP will be located off the South Coast of Ireland. This reflects the requirement to ensure that projects in Phase 2 are developed in proximity to available onshore grid capacity that

Alternative	Realistic	Reasonable	Viable	Implementable	Outcome
					will connect offshore wind generation to the onshore transmission system, and crucially the objective to accelerate ORE deployment to contribute to Ireland's climate and renewable energy objectives. The decision further reflects analysis by Ireland's transmission system operator (TSO), EirGrid, that there is sufficient current available onshore grid capacity to connect up to 900 MW of offshore wind capacity to the onshore transmission system along the South Coast in the short to medium term, and also further potential for connection through additional capacity and / or alternative offtake connections in the future. **Not brought forward for assessment. See Chapter 7 of the SEA Environmental Report for further details.**
Spatial Alternatives					
Spatial plan or spatial and objectives based plan.	X	X	X	X	A spatial only plan is not considered a **reasonable, realistic, viable or implementable alternative**. Part 2, Chapter 3 of the MAP Act requires that the Competent Authority must prepare a DMAP Proposal which includes information on the objectives of the NMPF that the DMAP Proposal seeks to attain or assist in the attainment of; geographical areas of the maritime area proposed to be the subject of the DMAP; existing DMAPs or existing maritime usages, or both, proposed to be taken into consideration during the preparation of the DMAP. **See Chapter 7 of the SEA Environmental Report for further details.**
Geographic Extent to include marine only or marine and terrestrial interface.	✓	X	X	X	ORE deployed within the SC-DMAP will interface with the terrestrial environment through landfalls and connection to the onshore grid and furthermore will require transport support from roads, rail and ports. The potential for environmental impacts via this supporting infrastructure is therefore possible. However, whilst it must have regard to land-sea interactions as appropriate with a view to promoting integration and coherence between maritime and terrestrial planning, the DMAP's jurisdiction is the maritime area and, as such, policy making for the terrestrial planning area is not considered a **reasonable, viable or implementable** alternative for the SC-DMAP. **Not brought forward for assessment. See Chapter 7 of the SEA Environmental Report for further details.** *NOTE: While the study area for the draft SC-DMAP is confined to the marine area only, the SEA baseline and assessment study areas extend into the terrestrial area to identify and assess direct and indirect impacts of the draft SC-DMAP.
Scope of considerations in the SC-DMAP	X	✓	✓	✓	Under the MAP Act, DMAPs can be prepared for geographic areas, sectoral areas or both and, as such, this DMAP is the first sectoral DMAP proposed for ORE. Increasing the scope of the plan is outside the SC-DMAP jurisdiction of ORE and as such is not considered a **realistic** alternative for the SC-DMAP. **Not brought forward for assessment. See Chapter 7 of the SEA Environmental Report for further details.** Notwithstanding that, ORE projects developed under the DMAP will have to consider the receiving environment and how they can impact on and address baselines and trends in

Alternative	Realistic	Reasonable	Viable	Implementable	Outcome
					environmental quality. An alternative that focusses more broadly on wider environmental effects has been considered under effects based alternatives, **See Chapter 7 of the SEA Environmental Report for further details.**
Identification of sub-areas versus whole DMAP focus.	✓	✓	✓	✓	Consideration of facilitating ORE development throughout the entire geographical area of the SC-DMAP does deliver on a plan led approach as intended by the MAP Act and the NMPF, as does identification of sub-areas for ORE development. Alternatives in this regard are considered **realistic** as they will contribute to achieving the climate objective and targets, they are **reasonable** in that they can address baselines and trends in environmental quality, they are technically possible and feasible and will deliver within the timeframes required and are therefore considered **viable** and **implementable**. **See Chapter 7 of the SEA Environmental Report for further details.**
Effects Based Alternatives					
Multiple benefits plan that addresses climate, biodiversity, sustainability, flooding etc. versus a climate and OW target driven plan.	✓	✓	✓	✓	The NMPF outlines that a DMAP will be a management plan for a specific area of our marine waters and can be used to develop multi-activity area plans; to promote specific activities, including ORE; and/or for the purposes of the sustainable use and protection of particular marine environments. This presents opportunities to explore other related benefits from the plan including climate, biodiversity, sustainability, heritage and social. Alternatives in this regard are considered **realistic** as they will contribute to achieving the climate objective and targets, they are **reasonable** in that they can address baselines and trends in environmental quality, they can also be integrated into **viable** and **implementable** ORE approaches. **See Chapter 7 of the SEA Environmental Report for further details.**
Modal Alternatives					
Consideration of all ORE technologies under the DMAP rather than focus on fixed wind only for the first iteration	**X**	**X**	**X**	**X**	This is not considered a reasonable, realistic, viable or implementable alternative. Timelines are a key consideration for the development of ORE capacity and currently the only proven deliverable technology for Ireland is fixed wind within depths less than 70m. This does not preclude additional deeper fixed wind and / or other technologies including floating wind, tidal or wave in the future however they will not be delivered within the first cycle of the SC-DMAP and as such are not considered **reasonable, realistic, viable or implementable** in the first iteration of the SC-DMAP. Furthermore a decision by Government was made in 2023 to locate Ireland's first ORE DMAP off the South Coast to reflect *inter alia,* the existence of a substantial maritime area with sea depth levels that are consistent with future development of fixed offshore wind projects. **Not brought forward for assessment. See Chapter 7 of the SEA Environmental Report for further details.**

SEA Statement

Alternative	Realistic	Reasonable	Viable	Implementable	Outcome
Prioritisation Alternatives					
Prioritise to available grid capacity or not	✓	✓	✓	✓	While it is acknowledged that sufficient available onshore grid capacity may constrain some development in the short to medium term, there may be other considerations to apply phasing to the SC-DMAP area which can be considered. **See Chapter 7 of the SEA Environmental Report for further details.**
Map Based Alternatives					
Areas suitable in principle for OW Development	✓	✓	✓	✓	Consideration of spatial extent of technical and environmental constraints within SC-DMAP area which would represent higher risk in terms of OW development. **See Chapter 7 of the SEA Environmental Report for further details.**

6.3 Assessment Parameters

The approach used for assessing alternatives for the Plan was an objectives-led assessment. Each alternative was assessed against a set of strategic environmental assessment objectives. The assessment compared the likely impacts in terms of the SEO to see how alternatives perform in relation to the stated environmental objectives.

The following notation was used in the assessment tables:

Symbol	Meaning
Plus (+)	Indicates a potential positive environmental impact
Minus (-)	Indicates a potential negative environmental impact
Plus/minus (+/-)	Indicates that both positive and negative environmental impacts are likely or that, in the absence of further detail, the impact is unclear
Zero (0)	Indicates neutral or no significant impact

Under each alternative a discussion was presented to support the assessment parameters shown and the reason for choosing the preferred alternative. Assessments included qualitative and, where possible, quantitative information.

6.4 Alternatives Considered

6.4.1 Strategic

No strategic alternatives were identified as reasonable, realistic, viable and / or implementable.

A “Do Nothing” alternative was not considered reasonable, realistic, viable and / or implementable for the following reasons:

The Policy Statement on the Framework for Phase Two Offshore Wind approved by Government in March 2023 provided that all post Phase One ORE developments in Ireland would be situated in maritime areas identified for this purpose by Government through the establishment of DMAPs. There are a number of factors that prioritised the south coast for the first such DMAP. These include:

- √ There is a substantial marine space off the South Coast of Ireland with sea-depths suitable for immediate and future developments of fixed offshore wind.
- √ The Irish Celtic Sea contains a very significant offshore wind resource, which will contribute to the accelerated and cost-effective achievement of renewable energy and decarbonisation objectives, and bolster security of supply.
- √ As identified by EirGrid, there is sufficient immediate available onshore grid capacity along the South Coast, to connect up to approximately 900 MW of ORE capacity to the onshore transmission system.
- √ The SC-DMAP area is within proximity to a number of significant port facilities which have the potential to enable accelerated installation and servicing of these future developments and provide a significant source of regional and local economic and employment growth. This proximity should further minimise associated installation and servicing costs.
- √ There is a significant population and industrial base along the South Coast that is well placed to stimulate and benefit from the secure and cost-effective long-term supply of green energy that will be provided by implementation of the SC-DMAP once established.

A Plan for fixed bottom wind development on the south coast in line with Government Policy and short-term grid capacity.

The SC-DMAP aims to provide for achievement of Government’s ORE objectives and legally binding wider decarbonisation obligations, both in respect of 2030 and beyond. The SC-DMAP in its current iteration exclusively relates to development of fixed ORE technology. This is due to the fact that fixed ORE is a proven technology that has and is being delivered at scale and in a cost-effective manner globally. By way of

comparison, floating offshore wind is not as mature a technology, and while there are examples of floating windfarms in Europe and internationally, the technology is still evolving to make it a viable alternative to fixed ORE in terms of scale and cost-effectiveness for deployment in the 2030 window. While this may gradually change, it is not anticipated that floating offshore wind will be able to deploy as quickly or cost effectively as fixed offshore wind for the foreseeable future.

The Government is committed to future deployment of all ORE technologies, and both fixed and floating offshore wind technology which will make an important contribution to achieving the long-term objective of a climate neutral economy by 2050 (see s.1.4.1 of the Future Framework for ORE Policy Statement). By contrast to the relatively shallow waters on the South East coast, which are uniquely suited to fixed technology, floating technology will be particularly suited to deeper waters in the western part of the Irish Celtic Sea and off the West Coast, due to technological constraints/limitations on deployment of fixed ORE in these waters. Under the Future Framework for ORE Policy Statement 2024, Actions 2-4 commit to future DMAPs, deploying floating offshore wind at scale beyond 2030 in strategic locations and investigating the feasibility of floating wind demonstrator sites. Furthermore, the Policy Statement calls for the maximisation of competitive technologies in the short term, which the first cycle of the SC-DMAP.

6.4.2 Spatial

6.4.2.1 Sub-Areas

Description of Alternative
• **Area 1:** Use of DMAP area entirely
• **Area 2:** Use of discrete Sub-areas

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandSeaS
Area 1	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-
Area 2	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Discussion:

Area Alternative 1 considered identification of a final draft SC-DMAP area throughout the entirety of which ORE development can take place. This permits maximum flexibility for developers, and decision makers on development applications, to identify exactly where and how much capacity can be achieved. This approach addresses the concept of plan led, focussing on a broad maritime area off the south coast and, as such, would be consistent with the NMPF. This approach would be broadly positive for CF and MA as it is likely that developers will identify sites and proposals for ORE, contributing to the overall targets and objectives for the SC-DMAP. However, this flexibility has potential for medium to long term negative effects on all environmental receptors, especially PHH, LandSeaS and CH where development is proposed close to shore and also for W, BFF, LS from multiple uncoordinated proposals. A review of ORE related foreshore licences off the south coast [Plate 1 below] prior to the change in Government approach indicates the high level of speculative surveying that was ongoing in the general SC-DMAP area. Such surveying can have negative impacts for BFF in particular and CH from repeated noise, vibration and sediment disturbance.

This approach also has potential for significant adverse impact on sensitive receptors both on a project by project and a cumulative basis. Under Area Alternative 1 individual projects could be located in heavily constrained areas of the nearshore impacting negatively on coastal biodiversity designations, protected land and sea views, access to shore and disruption of recreation, impacts on fishing and aquaculture among others.

Area Alternative 2 considered identification of sub-areas for ORE development based on constraints analysis of both environmental and engineering issues. While this approach does have potential for direct and indirect negative effects on all environmental receptors, it provides the greatest opportunity to avoid

Discussion:

impacts to sensitive receptors in the first instance through consideration of sensitivities including but not limited to impact on habitats and species, intrusion on landscape and seascape views, deterioration in water quality, interruption of shipping lanes, collision risk to birds and impact to fisheries. This significance can be further reduced through addition of thoughtful policies to ensure overall sustainability. By designating areas within the wider DMAP, Alternative 2 seeks to ensure that areas of high environmental sensitivity are discounted at an early stage. .

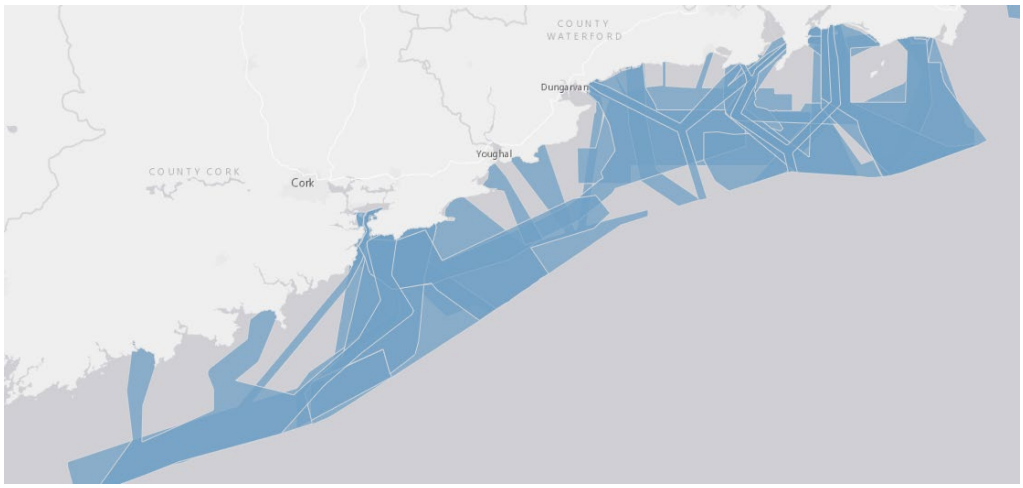


Plate 1: Overview of speculative licenses off the south coast.

Preferred Environmental Alternative: More certainty and planning control will lead to better outcomes in the longer term therefore Area Alternative 2 is the preferred environmental alternative. The environmental and technical constraints analysis carried out to support the development of the draft SC-DMAP has afforded greater understanding of the sensitivities in the wider area and as such avoidance and mitigation are being applied at the earliest opportunity.

How has this been integrated into the plan: The SC-DMAP has identified four sub-areas, termed Maritime Areas A-D. These areas have been identified following technical and environmental constraints analysis which has sought to avoid direct effects on sensitive receptors as far as possible, and subsequent assessment of the levelized cost of energy. The policy base has taken this further and included specific policies to support integration with other sectors and activities and mitigation policies to ensure project level assessments are robust.

Mitigation: **Area Alternative 2** should ensure that the policy supports a feedback loop to accommodate new data e.g. from site specific surveys, monitoring etc. as it becomes available. This will in turn guide phasing and support cumulative and in-combination assessments at project level for development permission applications within Maritime Areas.

How has this been integrated into the plan: The SC-DMAP provides for regional and project level surveying alongside coordinated data collation into an accessible GIS repository. Policy MS 1 also explicitly requires applications brought forward in the SC-DMAP area to consider up to date understanding of baseline conditions, including any future protected sites. It also requires applications brought forward for Maritime Areas B, C and D to incorporate relevant data from the Regional Level Surveys (RLS). This up to date baseline will then inform the requisite statutory environmental assessments at project level (which may include EIA and/or AA) including cumulative and in-combination assessment.

6.4.3 Effects Based

6.4.3.1 Multiple Benefits versus Target Focus

Description of Alternative
• Benefits 1: This alternative considers actions and policy related to the ORE sector only.
• Benefits 2: This alternative considers actions and policy related to inter-related policy on climate, water, biodiversity, health etc.

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandS
Benefits 1:	+	+	0	0	+	+	+	0	0
Benefits 2:	+	+	0	+	+	+	+	+	+

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment Discussion

Benefits Alternative 1 will have direct positive effects for CF and MA as it will contribute to reduction in the reliance on fossil fuels and encourage / facilitate the shift to renewable energies, contributing to the transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy. It will also have indirect positive impacts for BFF, PHH and AQ which are impacted by the effects of climate change, including emissions associated with burning of fossil fuels for transport, heat, industry etc. There will also be indirect positive effects for PHH resulting from marine related employment in the hinterland of the SC-DMAP area.

Benefits Alternative 2 has potential for direct and indirect positive effects on all environmental receptors as it acknowledges and facilitates interaction across a wide range of inter-related policy. Most notable is potential for multiple benefits to BFF by integrating opportunities for protection and enhancement of habitats and species, W by integrating consideration of coastal flooding and flood risk and integrating MSFD and WFD compliance into the proposals and also PHH by ensuring integration with benefits in the social arena linking to health and recreation in terrestrial planning. The approach contributes to the support of marine material assets (including fisheries, shellfish, military activity and infrastructure) and resources by maximising opportunities for co-existence, co-location and co-benefits and by proactively addressing conflicts with other environmental protection objectives. Of particular note is alignment with the 11 descriptors for Good Ecological Status or GES under the MSFD. These descriptors cover key issues of biodiversity, sea floor integrity, and underwater noise among others. The opportunity to support achievement of GES should be maximised to the extent possible under the SC-DMAP.

It is noted that the SC-DMAP is limited to consider and actively plan for ORE, as noted above, however, it must do so in the context of other environmental commitments at national and EU level. It is possible to apply the mitigation hierarchy to avoid conflicts between ORE and other sensitive receptors at the earliest opportunity through the use of tools such as constraints analysis, site or route selection and thoughtful policy base, which can then cascade down through the planning hierarchy achieving further refinements where possible. However, beyond constraints there are also opportunities which can be considered at the earliest stage to ensure sustainable use of limited natural resources. This would include opportunities for avoidance of inshore areas to protect amenity, protection of provisioning services such as fisheries and aquaculture sites, protection of European sites, better safeguarding of ecosystems including opportunities to contribute to the ecological enhancement of the marine environment and ensuring integrity of nature based networks is maintained. Engaging with benefits as well as constraints at an early stage will ensure that the wider ecosystem led approach is applied. This would have long term positive impacts for all SEOs.

Assessment Discussion

Preferred Environmental Alternative: **Benefits Alternative 2** is the preferred environmental alternative. It recognises the wider opportunities which can deliver greater benefits overall, allowing the State to meet more compliance targets for other areas such as MSFD.

How has this been integrated into the plan: Constraints analysis has been used to support development of the SC-DMAP. This recognises the potential for a wider opportunity framework as envisaged under Benefits Alternative 2 providing for long term sustainability of the wider area. For example, the SC-DMAP has avoided direct impacts on European sites in identifying sub-areas. Furthermore the SC-DMAP has included supporting and protective policies for a range of environmental issues and a specific policy on multiple benefits at CC 1. Moreover, through requirements for ORE projects to have regard for updated baseline data, including future marine site designations, such as MPAs, the establishment of a GIS data repository, and Regional Level Surveys, the SC-DMAP will continue to provide for wide environmental protection throughout the implementation of the Plan.

6.4.4 Modal

No modal alternatives were identified as reasonable, realistic, viable and / or implementable.

6.4.5 Prioritisation

6.4.5.1 Grid Capacity

Description of Alternative
• Grid Capacity 1: Identify broad Offshore Wind (OW) Development Areas within the SC-DMAP that are suitable for offshore wind development now and / or in the future.
• Grid Capacity 2: Identify only Offshore Wind Development Areas in the first SC-DMAP that can be accommodated by existing onshore grid capacities i.e. 900MW in the short to medium term.
• Grid Capacity 3: Identify broad Offshore Wind Development Areas within the SC-DMAP that are suitable for offshore wind development now and / or in the future and also identify and prioritise a specific area that can be accommodated by existing onshore grid capacities i.e. 900MW in the short to medium term.

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandS
Grid Capacity 1:	0/-	0/-	0/-	0/-	0/-	+/-	+/-	0/-	0/-
Grid Capacity 2:	0	0	0	0	0/+	+	+	0	0
Grid Capacity 3	0	0	0	0	0/+	+	+	0	0

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment Discussion

The establishment of the SC-DMAP gives effect to the decision by Government and the Oireachtas in 2023 that, as part of the new national plan-led regime for ORE, all post-Phase One offshore wind developments in Ireland will be located within maritime areas identified for this purpose by Government through the establishment of DMAPs. In light of this, the decision was made to prepare the first DMAP for the maritime

Assessment Discussion

area off the South Coast, reflecting analysis by Ireland's transmission system operator (TSO), EirGrid, that there is sufficient current available onshore grid capacity to connect up to 900 MW of offshore wind capacity to the onshore transmission system at this location. Beyond the 900 MW, it is intended that additional future offshore wind development, for deployment beyond 2030, will also follow under the SC-DMAP, however additional / alternative grid connection will be required to accommodate this. Other ORE developments beyond fixed wind may also follow into the future. It is noted that the three options are broadly similar in terms of environmental effects in so far as they relate to the same areas and impact sources. The environmental impacts relate to delays in addressing climate change more broadly. The key differences are therefore driven by policy approach rather than environmental impact.

Grid Capacity 1 alternative considers an approach wherein large areas are identified which are, in principle, suitable to offshore wind developments based on a broad constraints analysis. This alternative will have direct positive effects for CF and MA in that it presents a way forward for harnessing the OW resource in the SC-DMAP area. However, it lacks certainty on where and how much. This is a "plan led lite" approach where developers take the lead on timelines and scope. This has potential for indirect negative impacts for all receptors if delays are introduced which perpetuate the climate crisis.

Grid Capacity 2 alternative aligns with grid capacity in the short to medium term to deliver up to 900 MW of capacity but does not assist in longer term planning beyond 2030 or provide for anticipated evolution of alternative non-grid off-take solutions that can utilize ORE capacity that is not directly connected to the onshore electricity transmission system. This alternative will have direct positive effects for CF and MA in the short term as it is clear on the scale and extent of OW in the first phase. It can be aligned with onshore capacity, reducing design and consenting risks. This alternative has potential for indirect positive effects for all other receptors in the medium to long term as a result of its overall contribution to climate targets achieved by a development of 900 MW. The area for OW development does have potential for indirect negative impacts for PHH, BFF, LS, W, CH and LandSeaS associated with construction and operation/maintenance.

The exclusive alignment of identified ORE development areas with available grid capacity brings forward the certainty and transparency however it is noted that a full impact assessment process would be required to confirm the exact extent of the site and the layout of turbines within the site and grid connection required. The delivery of up to 900 MW would in the short to medium term have indirect positive impacts for all receptors but a lack of focus beyond the first project has potential for longer term negative impacts where data gaps / surveys etc. cannot be targeted. This alternative does limit the scope of potential impacts to a smaller defined area.

Grid Capacity 3 alternative addresses the short to medium certainty by identifying an area suitable for up to 900 MW of grid capacity but also identifies further areas which can be accommodated for connection through additional capacity and / or alternative offtake solutions for ORE not directly connected to the onshore grid. This provides greater certainty for stakeholders on the short to medium term plans. It supports phasing which in turn allows for introduction of new technologies, better supporting infrastructure, continuous improvement, lessons learned, greater data resolution, and monitoring outputs to inform continuous improvement and adaptive management. It also allows for enhancement or promotion of social benefits and time for people to adapt. With this alternative it would be important to ensure additional information collected could be fed back into the decision-making as it became available. This alternative has potential for direct positive effects for CF and MA in the short term to medium term and indirect positive effects for all other receptors in the medium to long term. It facilitates scaled cumulative impact assessment.

The total area(s) for OW developments is however larger and therefore there is a recognition that indirect negative impacts may occur for PHH, BFF, LS, W, CH and LandSeaS, more so than in the Grid Capacity 2 alternative where a more limited area would be identified. This alternative adds a degree of certainty in the short term to stakeholders on the scale and extent of proposals in the wider area but also acknowledges the stated intent of the Government Policy that grid capacity is an initial limitation but it is intended to add additional future OW development, for deployment beyond 2030 including by way of alternative off-take solutions.

Assessment Discussion

Preferred Environmental Alternative: Grid Capacity 3 is the preferred environmental alternative as it aligns with Government policy to deliver offshore wind beyond 2030 with a view to providing a transition to a net zero economy no later than by 20250. Furthermore it delivers certainty in the short term on location and scale but also allows for future phased delivery which allows stakeholders a series of opportunities including: continuous improvement in evidence base, application of lessons learned, new technology advances and further focussed data collection.

How has this been integrated into the plan: The Plan provides that a proposed fixed offshore windfarm located in Maritime Area A will be directly connected to the onshore electricity transmission system. It additionally provides that prospective developments located in the remaining Maritime Areas B, C and D may either be directly connected to the onshore transmission system or otherwise, should alternative offtake arrangements be available.

6.4.6 Map Based Spatial Assessment for Draft SC-DMAP

The spatial assessment of the SC-DMAP area to identify suitable Maritime Areas for offshore wind development was carried out by BVG Associates (BVGA) and Gavin & Doherty Geosolutions (GDG), supported by RPS, on behalf of DECC. Full details are provided in the BVG Associates *South Coast Designated Maritime Area Plan: Maritime Area Identification* report, April 2024, which is available under a separate cover on the draft SC-DMAP consultation webpage https://www.gov.ie/southcoastdmap/.

A bespoke approach to assessment was developed to identify Maritime Areas for development within the wider SC-DMAP geographic area, as was originally identified in the Sc-DMAP Proposal. This included constraints analysis across multiple technical and environmental criteria in order to remove areas considered unsuitable for windfarm development. From the remaining areas, four (referred to as Maritime Area A-D) were identified based on analysis of environmental, technical and costs considerations. In due course MAC holders would be able to apply for planning in accordance with the mitigations included in the final draft SC-DMAP as made and subject to all necessary environmental assessment and legislative requirements

The identification of the Maritime Areas or the award of MACs does not confer planning consent for any offshore wind developments.

6.4.6.1 Broad Spatial Alternatives Considered

Four broad spatial alternatives were considered to identify a preferred spatial alternative.

- Consideration of Levelized Cost of Energy (LCOE) only to identify optimum areas;
- Consideration of Technical Constraints only to identify optimum areas;
- Consideration of Environmental Constraints only to identify optimum areas; and
- Multi-criteria analysis applying technical, environmental and LCOE considerations to identify optimum areas.

The broad spatial alternatives were assessed against the criteria in **Figure 6.1** and this assessment is recorded in **Table 6-3**.

Table 6-3: Broad Spatial Alternatives Considered

Alternative	1*	2*	3*	4*	Outcome
Consideration of Levelised Cost of energy (LCOE)	✓	X	✓	X	In this alternative the cost of delivery of electricity is the only consideration. LCOE combines a range of technical aspects to derive a lifetime cost per unit energy.[4] Key aspects that have a large

[4] LCOE is the revenue required (from whatever source) to earn a rate of return on investment equal to the weighted average cost of capital (WACC) over the life of the wind farm. Tax and inflation are not modelled. In other words, it is the lifetime average cost for the

Alternative	1*	2*	3*	4*	Outcome
only to identify optimum areas					impact on LCOE are water depth, wind speed, distance from port, and distance to grid connection. If only LCOE were considered then the Maritime Area(s) would be identified close to shore, thereby minimising: water depth, distance to port, and grid connection distance. This application of LCOE considerations is shown in **Figure 6-3**. This alternative is **realistic** in that it can contribute to achieving the required outcomes from the Plan. It is also technically **feasible** and would represent a lower cost alternative. However this alternative is not considered **reasonable** or **implementable**. A development of this nature in the darkest green areas shown on **Figure 6-3**. does not address requirements under inter-related environmental protection legislation, notably the Habitats and Birds Directives (proximity to and interaction with coastal European sites in particular, with potential to cause disturbance of / or destruction of habitats and species which are qualifying interests of these sites); the Water Framework Directive and the Marine Strategy Framework Directive (potential to negatively impact water quality and in turn water dependant receptors including population using the nearshore area for recreation and foodstuffs, and flora and fauna). An ORE development in this broad area is also likely to meet significant resistance from stakeholders due to potential for significant impact to landscape/seascape/ visual, commercial activity e.g. aquaculture, tourism and recreational activities e.g. sailing. This is likely to result in significant opposition and delays in delivery of the necessary ORE to meet Ireland's climate targets and to comply with the legal requirements of the Climate Act 2015. **Not brought forward for assessment**
Consideration of Technical Constraints only to identify optimum areas	✓	X	✓	X	In this alternative, technical constraint is the only consideration and the development of ORE would be located within the depth contour of 75m, and away from surface bedrock. Technical constraints would include: Bathymetry; Seismic activity; Ground condition; Significant wave height; Tidal currents; Extreme gust wind speed; Mean wind speed; Aggregate and material extraction areas; location of grid connection. This application of technical considerations is shown in **Figure 6-3**. As with LCOE only, considering technical constraints only does not address requirements under inter-related environmental protection legislation, notably the Habitats and Birds Directives (proximity to and interaction with coastal European sites in particular, with potential to cause disturbance of / or destruction of habitats and species which are qualifying interests of these sites); the Water Framework Directive and the Marine Strategy Framework Directive (potential to negatively impact water quality and in turn water dependant receptors including population using the nearshore area for recreation and foodstuffs, and flora and fauna). An ORE development in this broad area is also likely to meet significant resistance from stakeholders due to potential for significant impact to landscape/seascape/visual, commercial activity e.g. aquaculture, tourism and recreational activities e.g. sailing. This is likely to result in significant opposition and delays in delivery of the necessary ORE to meet Ireland's climate targets and to comply with the legal requirements of the Climate Act 2015. **Not brought forward for assessment.**
Consideration of Environmental Constraints only to	✓	X	✓	X	In this alternative environmental constraint is the only consideration. In such a circumstance the development of ORE would be located outside any area of greatest cumulative environmental constraint

energy produced, quoted in today's prices. LCOE is used to evaluate and compare the cost of electricity production from different technologies and at different locations.

Alternative	1*	2*	3*	4*	Outcome
identify optimum areas					considering environmental factors such as: Aquaculture; Commercial Fisheries; Fish and Shellfish; Industry Shipping and Navigation; Aviation; Military; Obstruction and Wrecks; Designated Sites Marine Habitats; Marine Historic Environment; Marine Infrastructure; Marine Mammals and Megafauna; Offshore Ornithology; Seascape and Landscape; and Tourism & Recreation. This application of environmental considerations is shown in **Figure 6-3**. In this case, several overlapping constraints with the technical considerations would occur resulting in a more rounded consideration of the wider area. However, this alternative does not take into account timelines and LCOE of ORE project deliverability, including issues such as supply chain presence and available technology, all of which would result in risk to viability. Environmental considerations only would likely drive the areas identified as suitable very significantly further from shore. While this would reduce risk to landscape and seascape for example, it would also result in driving areas into water depths that cannot currently support construction of a windfarm. As such, it is likely that binding 2030 targets would be missed, compromising objectives of the SC-DMAP. As this alternative is not considered reasonable or implementable, **it was not brought forward for assessment.**
Multi-criteria analysis applying technical, environmental and LCOE considerations to identify optimum areas	✓	✓	✓	✓	In this alternative, environmental and technical considerations are used to refine areas suitable for ORE development. Only after that is LCOE applied to optimise the most suitable areas. This alternative uses a multi-criteria approach to assess the SC-DMAP area and identify suitable areas in which ORE developments can be progressed subject to all necessary project level assessments and consents. By considering environmental, technical and cost constraints, this alternative achieves the criteria of **reasonable, realistic, viable and implementable**. This alternative will contribute to achieving Ireland's climate targets and national, climate objective. It can also ensure baselines trends in environmental quality are taken into account and requirements under other environmental legislation can be integrated into decision making. Considerations of technical constraints will also ensure that the outputs are technically viable and implementable on the ground. As this alternative is considered to meet the relevant criteria, **it was brought forward for assessment. See section 7.4.6.3 of the SEA Environmental Report.**

***1= Realistic 2=Reasonable 3=Viable 4=Implementable**

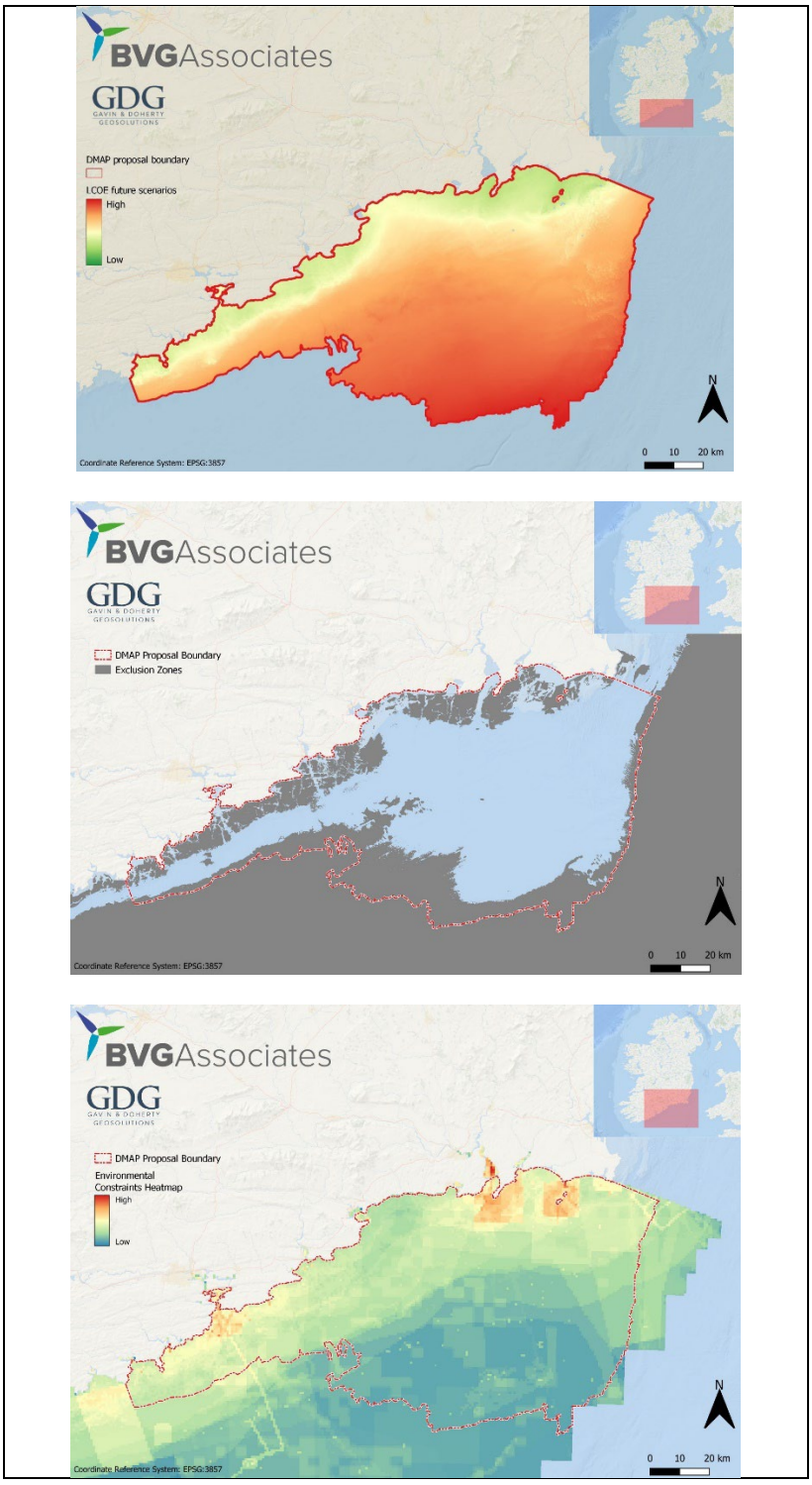


Figure 6-3:Outputs Based on Alternatives 1-3 with LCOE for Future Areas (Top), Technical (Middle) and Environmental (Bottom) Constraints Prioritised

6.4.6.2 Map Assessment Process Overview

The overall process for consideration of map based spatial alternatives and identification of areas suitable for offshore wind energy as part of the SC-DMAP is listed below and further detail is provided in the BVG Associates *South Coast Designated Maritime Area Plan: Maritime Area Identification Report*, April 2024 which is available under separate cover on the SC-DMAP consultation webpage - https://www.gov.ie/southcoastdmap/.

- Identification of Constraints
- Data Gathering
- Sensitivity Analysis
- GIS Spatial Model Outputs

The spatial analysis of the SC-DMAP area was carried out with reference to two outputs:

- A single prioritised area suitable for up to 900 MW capacity to be auctioned in Ireland's second offshore wind auction, later in 2024; and
- Further blocks in the draft SC-DMAP area, to be considered for deployment at a later date.

6.4.7 Output Map

Following analysis of technical and environmental constraints four areas were identified as suitable for ORE development based on the analysis – **Figure 6-4.** This stage of the process considered best available desk-top data and applied analysis tools designed to avoid, as far as possible, known technical and environmental constraints that could be impacted by the implementation of the SC-DMAP.

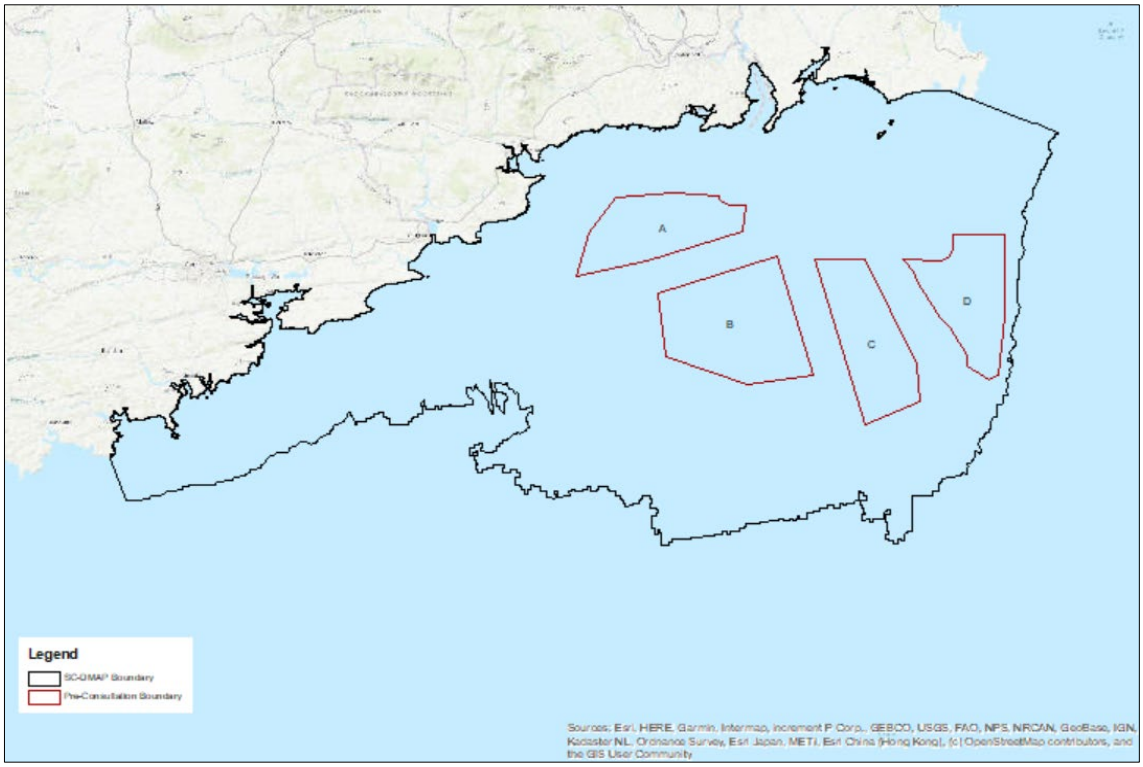


Figure 6-4: Maritime Areas A-D (draft SC-DMAP)

Following feedback from stakeholders during the subsequent consultation, amendments were made to two of the four areas to reduce overlaps with scallop fishers (Area B) and cabling (Area D). These are shown in **Figure 6-5**.

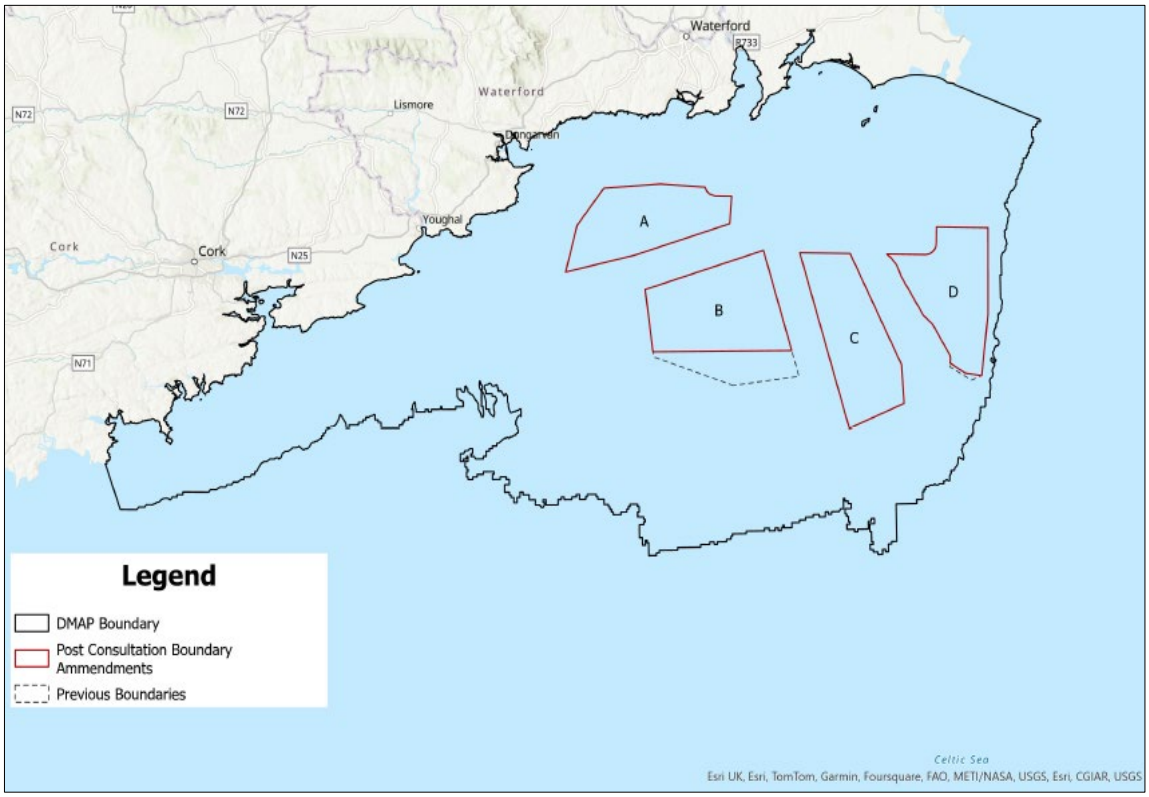


Figure 6-5: Amended Maritime Areas A-D (final draft SC-DMAP)

It was acknowledged that all of the areas identified will require further detailed and site specific survey at lower tiers of planning to support best available desk-top data used in this analysis. The identification of these areas does not in any way confer development consent and as such, any projects brought forward will be subject to the full rigours of the planning consent procedures for such projects in accordance with the law and all requisite environmental assessments.

6.4.8 Preferred Alternative and Reason for Choosing

The preferred alternative for the SC-DMAP is as follows:

- A Plan for ORE on the **south coast** in line with Government Policy and short-term grid capacity.

The Policy Statement on the Framework for Phase Two Offshore Wind approved by Government in March 2023 provided that all post Phase One ORE developments in Ireland would be situated in maritime areas identified for this purpose by Government through the establishment of DMAPs. There are a number of factors that prioritised the south coast for the first such DMAP. These include:

- √ There is a substantial marine space off the South Coast of Ireland with sea-depths suitable for immediate and future developments of fixed offshore wind.
- √ The Irish Celtic Sea contains a very significant offshore wind resource, which will contribute to the accelerated and cost-effective achievement of renewable energy and decarbonisation objectives, and bolster security of supply.
- √ As identified by EirGrid, there is sufficient immediate available onshore grid capacity along the South Coast, to connect up to approximately 900 MW of ORE capacity to the onshore transmission system.
- √ The SC-DMAP area is within proximity to a number of significant port facilities which have the potential to enable accelerated installation and servicing of these future developments and provide a significant source of regional and local economic and employment growth. This proximity should further minimise associated installation and servicing costs.

- √ There is a significant population and industrial base along the South Coast that is well placed to stimulate and benefit from the secure and cost-effective long-term supply of green energy that will be provided by implementation of the SC-DMAP once established.

A Plan for fixed bottom wind development on the south coast in line with Government Policy and short-term grid capacity.

The SC-DMAP aims to provide for achievement of Government's ORE objectives and legally binding wider decarbonisation obligations, both in respect of 2030 and beyond. The SC-DMAP in its current iteration exclusively relates to development of fixed ORE technology. This is due to the fact that fixed ORE is a proven technology that has and is being delivered at scale and in a cost-effective manner globally. By way of comparison, floating offshore wind is not as mature a technology, and while there are examples of floating windfarms in Europe and internationally, the technology is still evolving to make it a viable alternative to fixed ORE in terms of scale and cost-effectiveness for deployment in the 2030 window. While this may gradually change, it is not anticipated that floating offshore wind will be able to deploy as quickly or cost effectively as fixed offshore wind for the foreseeable future.

The Government is committed to future deployment of all ORE technologies, and both fixed and floating offshore wind technology which will make an important contribution to achieving the long-term objective of a climate neutral economy by 2050 (see s.1.4.1 of the Future Framework for ORE Policy Statement). By contrast to the relatively shallow waters on the South East coast, which are uniquely suited to fixed technology, floating technology will be particularly suited to deeper waters in the western part of the Irish Celtic Sea and off the West Coast, due to technological constraints/limitations on deployment of fixed ORE in these waters. Under the Future Framework for ORE Policy Statement 2024, Actions 2-4 commit to future DMAPs, deploying floating offshore wind at scale beyond 2030 in strategic locations and investigating the feasibility of floating wind demonstrator sites. Furthermore, the Policy Statement calls for the maximisation of competitive technologies in the short term, which the first cycle of the SC-DMAP.

- Inclusion of four maritime areas (as identified in figure 6-5) suitable for further development of offshore wind. These areas are in line with the Government mandated plan led approach and were identified following constraints analysis (environmental, technical and cost) and stakeholder feedback;
- A policy base integrating environmental protections, based on the principles of robust data collection, developing an evidence base, tiered assessment through the planning hierarchy and the application of the NMPF approach of avoid, minimise, and mitigate adverse impacts; and
- A policy base reflecting robust governance within a defined marine planning regime and including collaboration between key stakeholders.

7 MEASURES TO MONITOR SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE IMPLEMENTATION OF THE FINAL DRAFT SC-DMAP

7.1 Introduction

Article 10 of the SEA Directive requires that monitoring be carried out in order to identify, at an early stage, any unforeseen adverse effects due to implementation of the SC-DMAP, and to be able to take remedial action. Monitoring is carried out by reporting on a set of indicators, which enable positive and negative impacts on the environment to be measured. The environmental indicators of relevance to the SC-DMAP were identified from the SEA process. These will be used to identify unforeseen adverse effects from implementation of the SC-DMAP.

7.2 Responsibility for Monitoring

A monitoring programme has been developed to facilitate monitoring of environmental effects during implementation of the SC-DMAP. This is focused on key impact issues identified during the assessment phase. Where possible, thresholds for action have been included to ensure that action is taken where unforeseen impacts are identified.

To ensure efficient use of national resources for monitoring, the SC-DMAP monitoring programme aligns as far as possible with the established monitoring programme required under Article 11 of the MSFD for the following descriptors as indicators and targets in the context of achieving GES are already in place:

- Descriptor 1- Biological diversity
- Descriptor 2- Non-indigenous species
- Descriptor 3 – Population of commercial fish / shellfish
- Descriptor 4 – Marine food webs
- Descriptor 5 - Eutrophication
- Descriptor 6 – Sea Floor integrity
- Descriptor 7 – Hydrographical conditions
- Descriptor 8 – Contaminants
- Descriptor 9 – Contaminants in fish/shellfish
- Descriptor 10 – Marine litter
- Descriptor 11 – Introduction of energy including underwater

Further to this wider programme, additional plan specific monitoring will be undertaken as presented in **Table 7-1**. Text in blue presents amendments to the table in response to consultation feedback.

7.2.1 Monitoring Supports Within the SC-DMAP

Complementary to the SEA monitoring programme are the suite of policy objectives under Implementation, Governance and Monitoring (IGM) in the final draft SC-DMAP. This includes IGM 1 which requires the establishment of a SC-DMAP Implementation Programme Body; IGM 3 which requires development of an Implementation Plan to incorporate SEA monitoring requirements to monitor any identified significant environmental effects of implementation of the SC-DMAP; IGM 4 which requires he establishment of a dedicated offshore wind-maritime research programme; and IGM 5 which requires developers to gather data which must be submitted to MARA and ultimately added to a common, shared GIS data repository.

In addition to IGM policies. The Mitigation (MI) policies also support and contribute to monitoring. MI 1 requires the scoping, design and implementation of Regional Level Surveys (RLS) which will provide additional monitoring data which can then be shared though the data repository also to be established under MI 1.

This comprehensive suite of policy objectives will support active monitoring of the effects of implementation of the plan and ensure there is reporting and governance in place to manage remedial actions should they be required.

Table 7-1: Environmental Monitoring Programme

SEA Issues	Monitoring Requirement – Indicator and Targets (changes post consultation highlighted in blue text)	Remedial Actions
Population and Human Health (PHH) • Impacts on coastal communities as a result of ORE development in SC-DMAP Area. • Disruption to recreational activities (marine and coastal)-indirect impacts on bathing water quality. • Impacts on employment opportunities.	**Indicator PHH 1:** Changes in bathing water quality for beaches within the SC-DMAP area. **Target:** No deterioration in bathing water quality as a result of ORE activities related to the SC-DMAP. **Indicator PHH 2:** Publication of Public Engagement Plans (PEP) by holders of a MAC for ORE Developments in the SC-DMAP Maritime Areas as required in CE 1. **Target:** All holders of a MAC in the SC-DMAP Maritime Areas to have published a PEP to support their applications. **Indicator PHH 3:** Commission the preparation of economic impact analysis of the ORE sector in the region to inform the evidence base for SC-DMAP monitoring. **Target:** Create a baseline economic analysis of the ORE sector in the region (it is noted that the Southern Region is preparing Ports and Harbour Strategy and this may be relevant, if available). See also Monitoring under **MSFD Descriptors: 3, 8, 9 and 10**	• Where bathing water quality is showing deterioration in beaches within the SC-DMAP area, this will be reviewed by DECC and the EPA to establish if there is evidence that pressures are related to the implementation of the SC-DMAP. A tailored response will be developed in consultation with any relevant authorities in such a circumstance. • If the required publication of Public Engagement Plans is not being adhered to or if the quality of the plans is not sufficient, DECC will provide guidance to ensure a sufficient standard is reached. This will be analysed and if necessary, addressed as part of the collaborative forum within the SC-DMAP Governance structure. • New data and evidence base will be used by the SC-DMAP governance structures including the SC-DMAP Implementation Programme Body to identify further actions to encourage economic benefits in the region served by the SC-DMAP. This issue may be considered by the SC-DMAP collaborative forum. • Use of the most up to date data and/or evidence to inform the evidence base for SC-DMAP monitoring including sharing of data with the data repository for the SC-DMAP, where appropriate and relevant, which includes a common, shared GIS repository.
Biodiversity, Flora and Fauna (BFF) • Loss or damage to habitats (structures attached to the seabed) and / or non-mobile species from ORE structures. • Generation of underwater noise. • Barriers to species movement. • Suspended sediment and increased turbidity, as a result of smothering or scouring. • Collision risk (above and below surface).	**Indicator BFF 1:** Condition of European sites designated for marine components or with connectivity to the marine environment [data source: NPWS 6 yearly Article 17 reporting]. **Target:** No deterioration in the condition of European sites identified in the NIS as a result of offshore renewable energy infrastructure. **Indicator BFF 2:** Levels of anthropogenic impulsive sound sources from ORE activities. **Target:** The spatial distribution, temporal extent, and levels of anthropogenic impulsive sound sources from ORE activities not to exceed levels that adversely affect populations of marine animals [MSFD Monitoring Programme].	• Where there is evidence that the condition of European sites is found to be deteriorating because of ORE in the SC-DMAP area, this will be investigated by the SC-DMAP Marine Ecosystems and Ornithology Working Group to establish if and how the pressures are related to the implementation of the Plan. A tailored response will be developed in consultation with any relevant authorities in such a circumstance, where appropriate. • Use of the most up to date data to inform the evidence base for SC-DMAP monitoring including sharing of data with the data repository for the SC-DMAP, where appropriate and relevant, which includes a common, shared GIS repository.

SEA Issues	Monitoring Requirement – Indicator and Targets (changes post consultation highlighted in blue text)	Remedial Actions
• Impacts of marine pollution from accidental release of pollutants from ORE infrastructure and/or vessels.	**Indicator BFF 3:** Regional survey results for marine mammals and sea birds. **Target:** No barrier to movement of mobile species. See also Monitoring under **MSFD Descriptors: 1, 2, 4, 8, 9, 10 and 11**	
Land and Soil (LS) • Impacts on the integrity of marine processes for the protection of coastal habitats and places within and influenced by the SC-DMAP.	**Indicator LS 1:** Rates of coastal change in beach and seabed sediment levels and volumes, coastal vegetation lines and nearshore sediment reservoirs / sinks as monitored by the OPW as part of their pilot coastal survey monitoring programme along the south coast. **Target:** No increase in coastal erosion risk as a result of activities / infrastructure associated with SC-DMAP. See also Monitoring under **MSFD Descriptors: 6 and 7.**	• Should this issue arise, DECC will engage with the OPW and relevant Local Authorities to determine if there is evidence that increased risk of coastal erosion is due to activities associated with the SC-DMAP. The most up to date data and evidence base will be used to inform the SC-DMAP governance structures including the SC-DMAP Implementation Programme Body which will work with the OPW and relevant Local Authorities to agree any further actions required. This will include coordination with relevant Local Authorities with regard to their Coastal Change Management Plans. • Use of the most up to date data to inform the evidence base for SC-DMAP monitoring including sharing of data with the data repository for the SC-DMAP, where appropriate and relevant, which includes a common, shared GIS repository.
Water (W) • Impacts on water quality leading to deterioration in status of waterbodies influenced by the SC-DMAP.	**Indicator W 1:** Status of waterbodies within or adjoining the SC-DMAP area as relevant to WFD and MSFD. **Target:** No deterioration in status as a result of ORE activities related to the SC-DMAP. See also Monitoring under **MSFD Descriptors: 5, 7 8 and 9.**	• Review the effectiveness of implementation of policy objective WQ1 to inform the SC-DMAP governance structures including the SC-DMAP Implementation Programme Body which will liaise with the EPA to agree additional measures, if required. •
Climatic Factors (C) • Impacts of increased renewable energy usage on greenhouse gas emissions.	**Indicator C 1:** Contribution of the SC-DMAP to cumulative % of offshore renewable energy (ORE) target achieved in line with Climate Action Plan commitments i.e. “at least” 5GW offshore renewable energy [data source: DECC]. **Target:** Installed ORE capacities of 5 GW offshore renewable energy by 2030, 20 GW by 2040 and 37 GW by 2050.	• Review the contribution of the SC_DMAP towards progressing on CO^2 emission reduction in Ireland. This will include a review of contribution of the SC-DMAP towards achieving carbon budgets and electricity sectoral emission ceilings under the National Climate Action Plan, as well as reviewing data from EPA Greenhouse Gas Emissions Trends and Inventories, SEAI Ireland Energy Statistics, research and actions of the Climate Action Regional Offices, actions and implementation progress under Local Authority Climate Action Plans adjoining the SC-DMAP area *inter alia*.

SEA Issues	Monitoring Requirement – Indicator and Targets (changes post consultation highlighted in blue text)	Remedial Actions
		• Collaborate with the Southern Regional Assembly and coordinate with regional key performance indicators that monitor progress for a green region , through the Regional Development Monitor (RDM) tool (https://rdm.geohive.ie/).
Material Assets (MA) • Impacts on fishers using the SC-DMAP area. • Impacts on tourism in the region.	**Indicator MA 1:** Volume of fishing activity and landings of fish stocks at key relevant locations to be agreed with DAFM . **Target:** No consistent net loss in fishing activity and volume / value of landings compared to 2024 figures directly arising from SC-DMAP related activities. **Indicator MA 2:** Net visitor numbers and bed nights at key locations to be with Failte Ireland. **Target:** No net loss in volume / value of tourism compared to 2024 figures directly arising from SC-DMAP related activities. See also Monitoring under **MSFD Descriptors: 3, 4 and 9.**	• Review the effectiveness of measures and outcomes of preparing and implementing Fisheries Management and Mitigation Strategies (FFMS) prepared by developers of ORE projects under Policy Objectives SF3 and SF4 and provide additional guidance if required. Issue to be addressed through the SC-DMAP collaborative forum, and Seafood/ORE working Group. • Review the effectiveness of Policy Objective T1 and CO 1 and work with Fáilte Ireland to identify further guidance if required. • Use most up to date data and evidence base to inform the SC-DMAP governance structures including the SC-DMAP Implementation Programme Body which will work with DAFM / BIM to agree any further actions required.

8 ADDENDUM TO THE ENVIRONMENTAL REPORT

This is the addendum to the Environmental Report for the SC-DMAP. This chapter serves two purposes:

1. To provide clarification and/or additional information following comments in the submissions received during the consultation period on the draft Plan and Environmental Report; and.
2. To identify where the Environmental Report has been updated following consideration of comments received in submissions during the public consultation period.

It should be noted that this document supplements and should be read in conjunction with the original Environmental Report. The clarifications and additional information contained herein (shown in italicised blue text) have been provided in order to increase the usefulness of the document for the public and decision makers. Significant deletions (such as dates for report publications or incorrect baseline text) are denoted with a strikethrough. The amendments proposed however are not of such an extent that changes to the content or outcome of the assessment contained within the Environmental Report will be required.

8.1 Amendments by Chapter

8.1.1 Non-Technical Summary

Feedback: Figure 1.2 – Marine Planning in Ireland would be worth including in the Preamble to the Plan and the SEA Non-Technical summary.

Amendment: The following graphic is added to the non-technical summary of the Environmental Report.

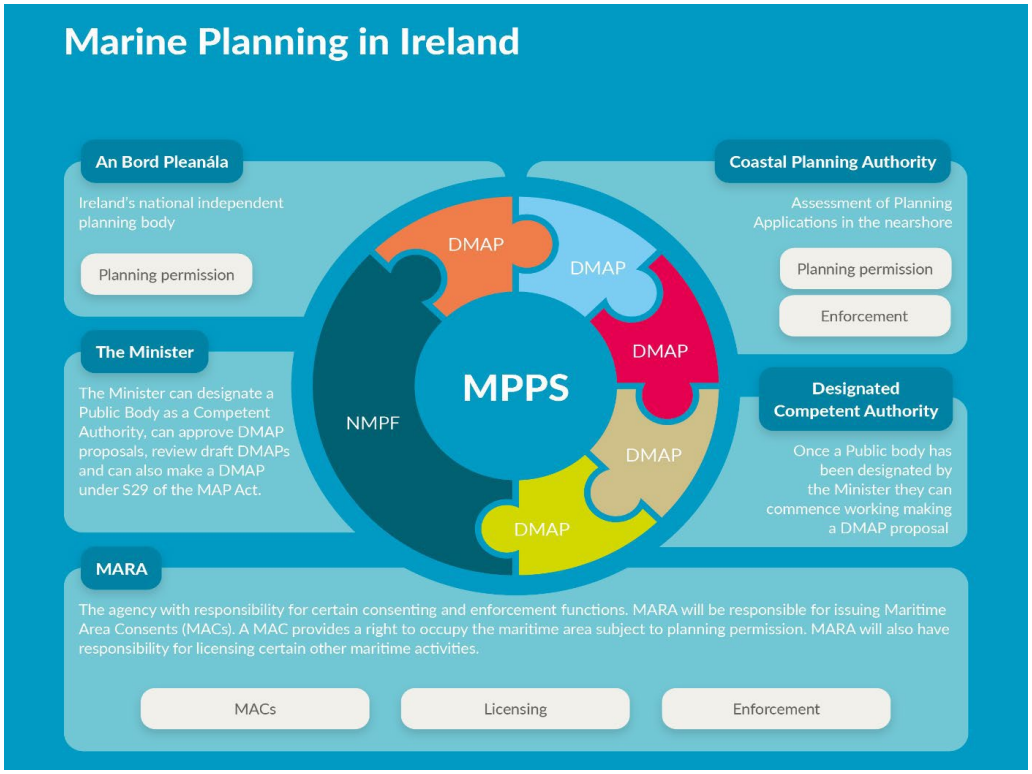


Figure 2: Marine Planning in Ireland

Feedback: Unproven statement in **Table 1 of the Non-Technical Summary** that draft SC-DMAP is a key mechanism for managing Offshore Wind development protecting and where possible enhancing habitats and species in or depending on the marine.

Amendment: Text has been amended in Table 1 under Relationship to the Draft SC-DMAP column for Nature as follows:

The draft SC-DMAP is a key policy mechanism ~~for managing~~ that aims to guide the ORE development in the identified Maritime Areas ~~such that~~ while ensuring that it protects and, where possible, enhances habitats and species in or depending on the marine through environmentally oriented policy objectives.

8.1.2 Chapter 4: Relevant Plans and Programmes

Feedback*:* Irish Inshore Fisheries Sector Strategy should be considered under Section 4- Review of Plans and Programmes.

Amendment: The following text has been added to Section 4.3.13 in relation to Irish Inshore Fisheries Sector Strategy.

The Irish Inshore Fisheries Sector Strategy 2019-2023, prepared by Inshore Fisheries Forum in 2019 is a 'bottom-up' strategy, to chart a sustainable future for the sector and guide the implementation of the Seafood Operational Programme 2016-2022. Additionally, it will influence the creation of the EU legal framework to replace the European Maritime and Fisheries Fund from 2020 and contribute to the development of a Maritime Spatial Plan for Ireland in 2019/2020.

8.1.3 Chapter 5: Relevant Aspects of the Current State of the Environment (Baseline)

Section 5.2- State of the Environment Overview

Feedback: Unproven statement in Table 5-1 of the SEA ER, that draft SC-DMAP is a key mechanism for managing Offshore Wind development protecting and where possible enhances habitats and species in or depending on the marine.

Amendment: Text has been amended in Table 5-1 as follows:

The draft SC-DMAP is a key policy mechanism ~~for managing~~ that aims to guide the ORE development in the identified Maritime Areas ~~such that~~ while ensuring that it protects and, where possible, enhances habitats and species in or depending on the marine through environmentally oriented policy objectives.

Section 5.3.2.2.6 - Invasive Alien Species

Feedback: BIM's Alien Species report can be utilised to update the baseline information in relation to Invasive Alien Species in marine environment.

Amendment: The following paragraph in **Section 5.3.2.2.6- Invasive Alien Species** has been updated as follows:

~~There is currently limited information on the presence and impacts of IAS in Irish marine waters and so an accurate assessment of the level of the pressure cannot be made at this time. Ireland is endeavouring to improve its understanding of the presence, distribution and impact of IAS in Irish marine waters.~~ BIM's report on Alien Species and Aquaculture from 2023 recognises the potential for both aquaculture to impact and be impacted by invasive species. There were about 45 alien species recorded in Irish waters during GiMaRIS surveys between 2010 and 2022 and locations for each species are provided in the report. The report also states a strong baseline on marine alien species has been established, and it is crucial to continue building on this progress to safeguard both the environment and the aquaculture industry in the future.

Section 5.3.6.1- Aquaculture and Sea Fisheries

Feedback: SEA should clarify or amend text regarding the type of harvesting at the two sites harvesting seaweed (Pg81) and also acknowledge that seaweed harvesting as a human activity is well established in Irish marine and coastal areas.

Amendment: The following two paragraphs have been amended in Section 5.3.6.1 Aquaculture and Sea Fisheries:

Aquaculture is divided primarily between finfish, shellfish and seaweed species, and an aquaculture licence is required for this activity. Some aquaculture takes place on land but the vast majority of aquaculture activity takes place in the marine environment on the foreshore, with the main activity concentrated on the south, west and northwest coast. Seaweed harvesting is a well-established activity in Irish marine and coastal

areas. It is estimated that there are currently approx. 270 harvesters that are consistently involved in harvesting wild seaweed nationally, primarily on a part-time basis (MTU, 2022)[5].

There are 105 licenced aquaculture sites present within the overall geographical area of the draft SCDMAP. The majority of which are licensed to farm Pacific Oysters (Crassostrea gigas). The spatial data available on Licensed Aquaculture Sites reveal there are also two sites that harvest brown seaweed.

Section 5.3.10- Existing Environmental Problems Relevant to the Draft SC-DMAP

Feedback: BIM have provided suggestions in relation to Chapter 5 of the SEA Environmental report that relate to review of text under Section 5.3.10, marine litter from aquaculture, evidence supporting statement in relation sewage discharges and accidental loss, or intentional disposal of, fuel or oil arising from the fishing industry, rephrasing of text and updates to data provided for CFP and invasive species.

Amendment: Following bullet points under Material Assets in Table 5-17: Key Existing Environmental Problems Relevant to the Draft SC-DMAP has been amended as follows:

- There has been a ~~dramatic escalation in the fishing~~ significant increase of effort of some inshore fisheries stocks for instance (e.g. razor clams) in recent years, while others are under long-term pressure. Overfishing is a serious and pervasive global issue across all marine territories Other issues documented include lack of bycatch reduction plans, and “poor monitoring control and enforcement of the landing obligation (LO) risks overfishing, particularly in 2019.” CFP requirements are also reported as being implemented too slowly in the Communication from the European Commission to the European Parliament and the Council on the State of Play of the Common Fisheries Policy and Consultation on the Fishing Opportunities for 2020.[6]
- A significant amount of marine litter also comes from the fisheries sector (20% of the marine litter); lost gear contributes to “ghost fishing” where marine life becomes entangled. As stated in the 2023 Annual Economic Report (AER) on the European Union (EU)[7], other waste from fishing disposed at sea includes sewage discharges and accidental loss, or intentional disposal of, fuel or oil, despite such emissions being regulated by MARPOL.

8.1.4 Chapter 6- Framework for Assessment

Section 6.3- Assessment Approach

Feedback*:* Following feedback was received in relation to Table 6-2:

- Biodiversity, Flora and Fauna’ objective (viii): “Safeguard **sufficient** space for the natural marine environment to enable…”
- Material Assets’ objective (vii), “Support the **sustainable use of** marine material assets…”
- NMPF Aquaculture policies should also be included as part of the context for the Material Assets objective.
- SDG 12 should be ‘Responsible Consumption and Production’.

Amendment: The SEOs and Guiding Questions in Table 6-2 of the SEA Environmental Report informed the assessment of the alternatives, preferred scenario and draft SC-DMAP. However, minor amendments have been made to Table 6-2 as follows in blue font where relevant to incorporate the feedback from consultation. These amendments do not alter the previous assessment.

Table 6-2: SEO and Guiding Questions

[5] Munster Technological University, 2022. Socio-Economic Study of Seaweed Harvesting in Ireland.

[6] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2019:274:FIN

[7] Scientific, Technical and Economic Committee for Fisheries, 2023; EC, 2024. Available at: https://stecf.ec.europa.eu/data-dissemination/aer_en

SEA Statement

SEA Environmental Objective(s)	To What Extent will the SC-DMAP contribute to….	Related NMPF and SDG Policies for Context
Population and Human Health (PHH) Objective: (v) To ensure bathing waters are not prevented from achieving excellent status as a result of the SC-DMAP (vi) To ensure the quality standards for water quality in shellfish water are not compromised as a result of the SC-DMAP (vii) To maintain access to the coastal and marine resource for tourism and recreation. (viii) To avoid significant disruption, disturbance or nuisance to local communities.	• Inclusive public access to and within the SC-DMAP area? • Opportunities for co-existence and co-operation with other activities in the SC-DMAP area? • Future provision of services for tourism and recreation activities particularly in the coastal adjacent area? • A net increase in marine related employment in the hinterland of the SC-DMAP? • Enhancement or promotion of social benefits? • Addressing transboundary impacts beyond the SC-DMAP area?	**NMPF Policies:** • Environmental – Ocean Health Policy 1 • Biodiversity Policy 1 and 2 • Water Quality Policy 1 • Sea-floor and Water Column Integrity Policy 1 and 2 • Co-existence Policy 1 • Access Policy 1 • Rural Coastal and Island Communities Policy 1 **Strategic Development Goals:** • SDG 3 - Good Health and Wellbeing • SDG 7 - Affordable and Clean Energy • SDG 11 - Sustainable Cites and Communities • SDG 13 – Climate Action • SDG 14 - Life below Water
Biodiversity, Flora and Fauna (BFF) Objective: (vi) Preserve, protect, maintain and where appropriate restore marine biodiversity (and terrestrial aspects on which the marine biodiversity is reliant), particularly EU designated sites and protected species. (vii) Avoid, minimise or mitigate disturbance impacts on mobile species, within or reliant on the marine area, resulting from SC-DMAP. (viii) Safeguard sufficient space for the natural marine environment to enable continued provision of ecosystem goods and services within the SC-DMAP area. (ix) Contribute to achieving the environmental objectives under the MSFD and the WFD (x) Maintain and protect marine protected areas and ensure integrity of the network is not impacted as a result of the SC-DMAP.	• Achieving MSFD targets relating to biodiversity, non-indigenous species? • Safeguarding aquatic ecosystems and space for the provision of ecosystem goods and services? • Avoiding, minimising, or mitigating disturbance impacts on mobile aquatic species? • Preserving, protecting, maintaining and / or restoring protected areas and ensuring integrity of the network is not impacted? • Protecting and conserving ecological corridors? • Monitoring and research as part of the implementation of the draft plan? • Ongoing engagement with MPA process and Celtic Sea sensitivity mapping? •	**NMPF Policies:** • Environmental – Ocean Health Policy 1 • Biodiversity Policy 1, 2, 3, 4 • Protected Marine Sites Policy 1 and 2 • Water Quality Policy 1 and 2 • Sea-floor and Water Column Integrity Policy 1, 2 and 3 **Strategic Development Goal:** • SDG 14 - Life below Water • SDG 15 - Life on Land
Land and Soil (LS) Objective: (iii) Maintain the integrity of marine processes for the protection of coastal habitats and places within and influenced by the SC-DMAP.	• Maintaining the integrity of marine processes for the protection of coastal habitats and areas influenced by the SC-DMAP? • Maintaining character of seabed and sediments?	**NMPF Policies:** • Environmental – Ocean Health Policy 1 • Sea-floor and Water Column Integrity Policy 1, 2, and 3

SEA Statement

SEA Environmental Objective(s)	To What Extent will the SC-DMAP contribute to….	Related NMPF and SDG Policies for Context
(iv) Protect the quality and character of the seabed and its sediments and avoid significant effects on seabed morphology and sediment transport processes.	• Avoiding affecting seabed morphology and sediment processes?	• Seascape and Landscape Policy 1. **Strategic Development Goal:** • SDG 14 - Life below water • SDG 15 - Life on Land
Water (W) Objective: (vii) Contribute to achieving the objectives under the MSFD and the WFD i.e. achievement or maintenance of Good Environmental Status (GEnS) and Good Ecological Status (GEcS). (viii) Protect, maintain, and where possible improve status of classified water bodies within the Plan area in line with requirements of the WFD and MSFD. (ix) Avoid pollution of the coastal and marine environment (x) Reduce marine litter resulting from terrestrial and marine dumping (xi) Minimise generation and propagation of manmade noise within the marine environment. (xii) Promote energy transmission technologies and configurations which seek to minimise EMF within the marine environment.	• Achieving the objectives under the MSFD and the WFD? • Pollution prevention of the coastal, marine and freshwater environment from ORE related activity? • Ensuring minimal noise pollution within the marine environment? • Ensuring EMF is minimised?	**NMPF Policies:** • Environmental – Ocean Health Policy 1 • Water Quality Policy 1 and 2 • Sea-floor and Water Column Integrity Policy 1,2 and 3 • Marine Litter Policy 1 • Underwater Noise Policy 1 • Transmission Policy 1 and 2 **Strategic Development Goal:** • SDG 3 - Good Health and Well-Being • SDG 6 - Clean Water and Sanitation • SDG 7 - Affordable and Clean Energy • SDG 14 - Life below Water
Air Quality (AQ) Objective: (iv) Avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air, including transboundary considerations. (v) Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency. (vi) Avoid adversely impacting on air quality, with particular regard to known existing concentrations of transport and industrial related pollution close to the coast.	• Avoiding adverse impacts on air quality, with particular regard to known pollution from ORE activities? • Mitigating effects on human health and the environment from emissions? • Promoting air quality improvement measures?	**NMPF Policies:** • Air Quality Policy 1 and 2 • Transboundary Policy 1 **Strategic Development Goal:** • SDG 3 - Good Health and Well-Being • SDG 11 - Sustainable cites and communities
Climatic Factors (C) Objective:	• Reduction of greenhouse gas emissions? • Reduction in reliance on fossil fuels and encourage renewable energy use?	**NMPF Policies:** • Climate Change Policy 1 • Climate Change Policy 2,

SEA Statement

SEA Environmental Objective(s)	To What Extent will the SC-DMAP contribute to….	Related NMPF and SDG Policies for Context
(iv) Minimise existing and avoid new emissions of greenhouse gases across all sectors. (v) Decrease the usage of fossil fuels and increase renewable energy usage. (vi) Reduce the environmental, social and economic vulnerability to the impacts of climate change and/or improve resilience to climate and coastal change	• Reduction in the environmental, social, and economic risks from climate change? • Improving resilience to climate and coastal change? • Achievement of Ireland's 2030 and longer-term renewable energy and legally binding decarbonisation objectives, including the overarching objective to deliver a net zero greenhouse gas emissions Irish economy by 2050.	• Protected Marine Sites Policy 3 • ORE Policy 1, • Transmission Policy 1 **Strategic Development Goal:** • SDG 3 – Good Health and Well-Being • SDG 7 – Affordable and Clean Energy • SDG 11 - Sustainable cites and communities
Material Assets (MA) Objective: (v) Contribute to transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 (vi) Address conflicts with other environmental protection objectives. (vii) Support sustainable use of marine material assets (including fisheries, shellfish, military activity and infrastructure) and resources by maximising opportunities for opportunities for co-existence, co-location and co-benefits. (viii) Ensure continuity and safety of navigation (marine and air).	• Supporting marine material assets by maximising co-location and co-benefit opportunities? • Avoiding conflict with other environmental protection objectives? • Transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy? • Ensuring continuity and safety of marine and air navigation? • Enhancing future energy security at regional and national level through displacing volatile fossil fuel imports with indigenous green energy? • Maximising opportunities for co-existence between ORE and commercial fisheries, through minimising overlaps between ORE development areas and commercially significant fisheries, avoiding the most ecologically sensitive fisheries spawning/nursery areas, as well as mitigatory measures that enhance co-existence opportunities. •	**NMPF Policies:** • Co-existence Policy 1 • Protected Marine Sites Policy 1 • Infrastructure Policy 1 • Defence and Security Policy 1 • ORE Policy 1, 10 and 11 • Transmission Policy 1 • Fisheries Policy 2, 3, 4 and 6 • Aquaculture Policies 1, 2 and 3 • Transboundary Policy 1 **Strategic Development Goal:** • SDG 8 - Decent Work and Economic Growth • SDG 9 - Industry, Innovation and Infrastructure • SDG 11 - Sustainable Cites and Communities • SDG 12 - ~~Life below water~~ Responsible Consumption and Production • SDG 14 - Life below Water
Cultural Heritage (CH) Objective: (v) Protect places, features, buildings and landscapes of cultural, historical archaeological or architectural heritage. (vi) Protect the site and setting of marine and coastal historic environment features. (vii) Protect known wrecks and historic and cultural features within the DMAP area.	• Protecting, conserving, or enhancing places, features, buildings, and landscapes of cultural, archaeological, or architectural heritage significance? • Protecting the site and setting of marine, freshwater and coastal historic environment features? • Protecting historical and cultural features (including wrecks)? • Ensuring opportunities to enhance cultural/historic knowledge and understanding are incorporated?	**NMPF Policies:** • Heritage Assets Policy 1 • Seascape and Landscape Policy 1 • Transboundary Policy 1 **Strategic Development Goal:** • SDG 11 - Sustainable cites and communities

SEA Environmental Objective(s)	To What Extent will the SC-DMAP contribute to….	Related NMPF and SDG Policies for Context
(viii) Incorporate opportunities to enhance cultural/historic knowledge and understanding.		
Landscape (LandS) Objective: (iii) Protect and maintain landscape character and visual amenity, including geo-heritage. (iv) Recognise and respect the value of wider (non-designated) landscapes and seascapes.	• Valuing and protecting diversity and local distinctiveness of wider (non-designated) landscapes /seascapes? • Protecting and enhancing the landscape / seascape including geo-heritage?	**NMPF Policies:** • Heritage Assets Policy 1 • Seascape and Landscape Policy 1 **Strategic Development Goal:** • SDG 11 - Sustainable cites and communities

8.1.5 Chapter 7: Consideration of Alternatives

Section 7.4.6.3- 3: Sensitivity Analysis

Feedback: For clarity text should be included in Section 7.4.6.3 to reflect that this grid connection will also occur outside the identified maritime areas.

Amendment: The following text has been added to Section 7.4.6.3- 3 Sensitivity Analysis in relation to grid connection.

The ratings only apply to the offshore array area and do not consider the grid connection cable route, which would be evaluated separately once project locations are confirmed. It is however, noted that the grid connection will also occur outside the identified Maritime Areas and the scope of the SC-DMAP does not extend to landfall and cabling related elements.

Section 7.4.6.3- 4: GIS Spatial Model

Amendment: Section 7.4.6.3-4: GIS Spatial Model of the SEA Environmental Report has been updated as follows:

To support the identification of constraints associated with the SC-DMAP Study Area, a Geographic Information System (GIS) database was developed, compiling available consent and technical constraint data within the Study Area.

Once all scores for the environmental constraints were agreed, the datasets were loaded into an ArcGIS ArcMap document. The larger Study Area allowed for the inclusion of all possible environmental constraints within the wider project area.

The adopted methodology was designed to compute the level of cumulative constraints within the SC-DMAP or proposed 'Maritime Areas' within it. This is to facilitate analysis of constraints individually and in-combination within the areas for the plan and supporting environmental reports (SEA, AA Screening, NIS, etc.) Summing the constraint scores for each topic allows for comparison of sensitivities within areas of the SC-DMAP and summing all the topics in the final heatmap expresses the overall level of constraint. No single constraint is assumed to exclude development, although a score of 5 does indicate the highest sensitivity to wind development. ~~In order to accentuate the constraints with higher sensitivity, squaring of individual constraints was implemented.~~

The datasets (known as vector datasets) were then turned into raster gridded datasets with each cell assigned a score as per the scores assigned to each environmental constraint in the dataset. The raster datasets were created to be the same size and have the same 10-metre cell configuration so that multiple raster datasets could be combined. In order to show the contrast between the sensitivities in the final heatmaps, each individual constraint score was squared (so scores 1, 2, 3, 4, 5 are mapped to 1, 4, 8, 16, 25 respectively).

The raster datasets were aggregated into environmental constraints (as per the scoring spreadsheet) such as Subtidal and Intertidal Ecology, Marine Mammals and Megafauna etc. See image of a typical Model Builder below from ArcGIS; the aggregation method used in the 'Raster Calculator' as shown below in Figure 7-5, is a simple sum for each cell. Combining the raster datasets by environmental constraint allowed the summed value of overlaying cells to be output in the heatmap for each constraint (or theme). Finally, all environmental constraint specific raster heatmaps were combined in the model builder into one overall raster which used the same scoring rationale outlined in Table 7-6.

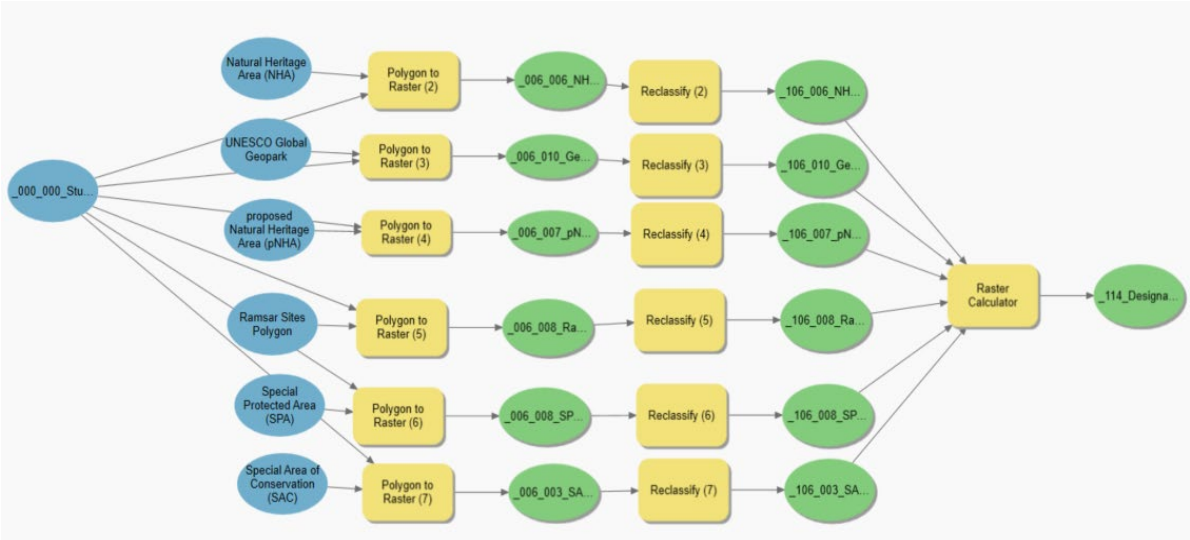


Figure 7-5: Example of Raster Layers feeding into the Model Builder

Certain themes may contribute more to the mapping, if there are more constraints that coincide in the same area or cell. The cells with the highest score have multiple overlapping constraints from multiple themes. When analysing constraints in our environmental reports, each constraint is assessed individually regarding its impact on wind development.

~~The constraint layers were each turned into raster gridded datasets with each cell assigned a score as per the tables above. The constraint layers were created to be the same size and have the same 10-metre cell configuration so that multiple raster datasets could be combined.~~

~~Each constraint layer was rescaled so that the maximum value was the sensitivity score assigned. These layers were then squared to increase the contrast between the low and high constraint areas. They were then aggregated into a single layer.~~ The final heatmap raster scores were therefore the squared ~~maximum~~ values of all the datasets combined ranging from 35 for the least constrained areas to 270 for the most constrained. Areas closer to shore generally displayed higher cumulative constraints, in particular, the areas south of Cork Harbour, south of Waterford Estuary and around the Saltee Islands as shown in Figure 7-5.

While Figure 7.6 highlights the areas of higher cumulative constraint, it was acknowledged that this is liable to allow areas of the highest sensitivity, scoring a 5, to become out-scored by a number of lower scoring layers. Locations which score a 5 have therefore been excluded individually, with the exclusions noted in Table 7-5 and Table 7-4 applied. Figure 7.7 shows the same sensitivity data, but with exclusions, locations with sensitivity score 5, and areas where the score is above 129 (i.e. within 60% of the maximum ratings) excluded. This is to ensure areas of high cumulative constraint (which may be due to a large number of lower sensitives layers combining) are removed from consideration. A 60% threshold was chosen as it removed areas of high cumulative constraint whilst still allowing sufficient room for development of offshore wind farms to meet the stated objectives of the draft SC-DMAP.

Figure 7.8 shows the consolidated impact of all technical exclusions. The draft SC-DMAP area is excluded at its southern and eastern perimeter by the 75 m depth contour. This limit was applied as significant supply chain constraint is likely as projects access these deeper waters, with a limited number of installation vessels suitable for installing foundations of the size and weight required. A number of exclusion lines cross the area from the south east corner heading north. These relate to submarine cables, pipelines and navigation routes.

Figure 7.9 shows the combined technical and environmental exclusions.

8.1.6 Chapter 8: Assessment of the Preferred Scenario

Section 8.3 of the SEA ER that provided the spatial assessment of the Maritime Areas has been updated following the amendments made to these areas post-consultation as shown in figure 8-1a and 8-1b. The following consultation feedback have also been addressed through the updated assessment.

Feedback: *Statement in Section 8.3.2 that SC-DMAP area supports the seabirds at various stages of their life cycle, such as breeding, foraging and migrating is questionable.*

Feedback: *Section 8.3.2 inappropriately conflates distance to shore ranges with potential landscape impacts and re-states flawed assumptions presented in OREDP II SEA Scoping Report (2022).*

Section 8.3: Spatial Assessment of Sites (Updated)

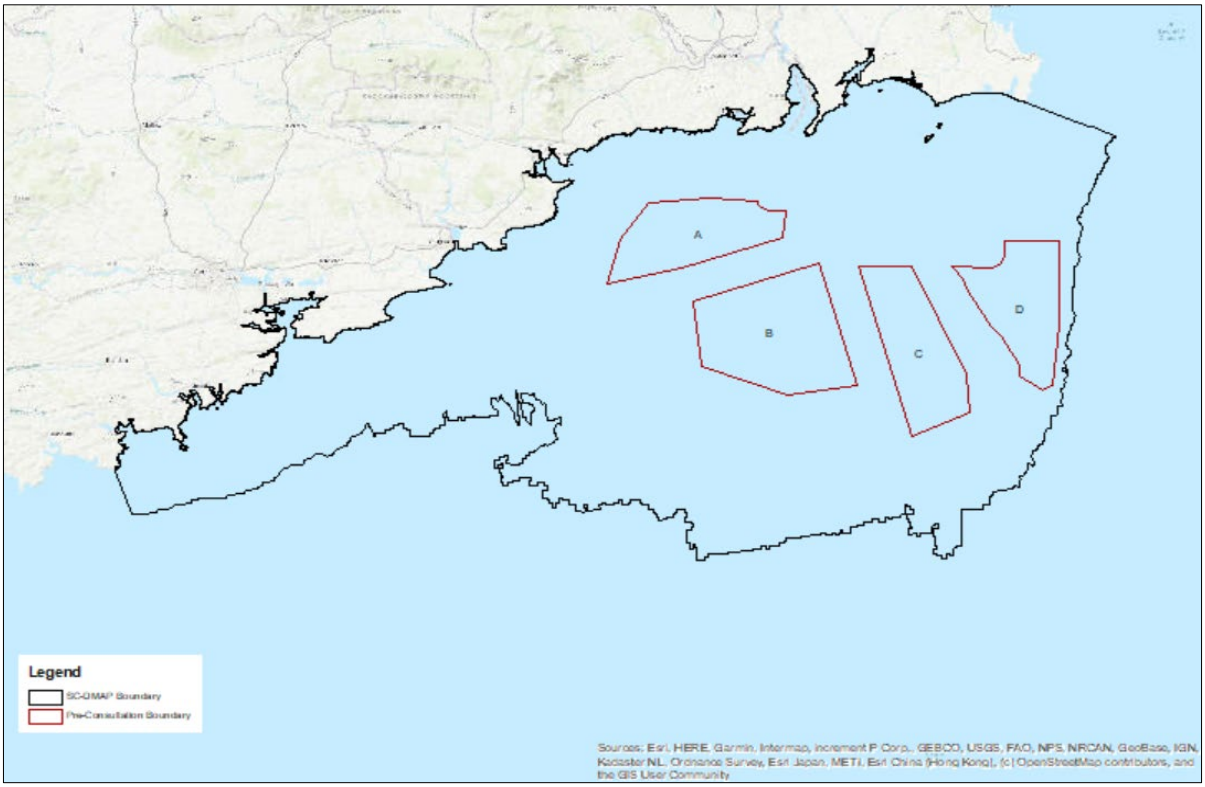
The purpose of the draft SC-DMAP is to outline the spatial framework and principles to plan for future offshore wind developments off the south coast. It informs the parameters that will be essential to the preparation of project level designs and assessment in due course. By its nature the SC-DMAP is a strategic document which is one of a series of building block for a tiered planning system from the National Marine Planning Framework, to the DMAP and, from this point, there will be further integration with County Development planning tiers before reaching project level. The SC-DMAP does not, in and of its own right, confer planning permission for any specific development but rather guides the subsequent tiers of planning in their more detailed decision making.

As described in section ~~7~~6.4.6 of this report, a robust constraints analysis of technical and environmental data was undertaken for the identification of broad Maritime Areas within the draft SC-DMAP proposal area. The identification of spatial areas was carried out by BVG Associates (BVGA) and Gavin & Doherty Geosolutions (GDG) and supported by RPS, on behalf of DECC. For a detailed description of the process the reader is directed to section ~~7~~6.4.6. Supporting reports are also available on the consultation webpage https://www.gov.ie/southcoastdmap/.

Figure 8-1 (a) shows the four broad areas, known as Maritime Area A-D that were identified as those marine areas considered most suitable for future deployments of fixed offshore wind within the wider geographical area of the SC-DMAP. **Figure 8-1** (b) shows the amendments made to Maritime Areas B and D based on the consultation feedback.

~~The four broad areas, known as Maritime Area A-D, in Figure in **Figure 8.1** have been identified as those marine areas considered most suitable for future deployments of fixed offshore wind within the wider geographical area of the SC-DMAP.~~

The ~~assessment is~~ desk based spatial assessment ~~and has been~~ that was carried out with reference to best available data sets and publicly available information has been now updated based on the amendments made to the Maritime Areas post-consultation.



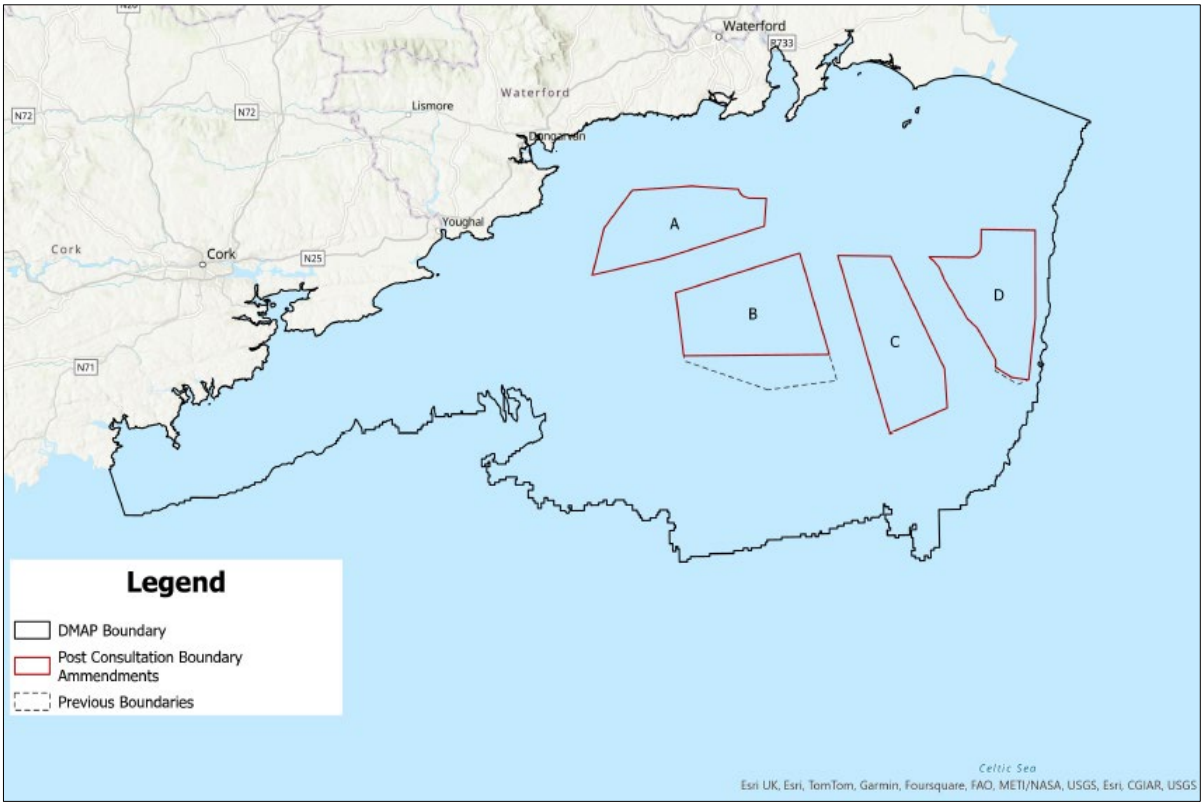


Figure 8-1: Maritime Areas Identified as Part of SC-DMAP (a) Pre-consultation (b) Post-Consultation

Section 8.3.1: Description of Maritime Areas

An overview of the four Maritime Areas is provide below based on the information provided in the final draft SC-DMAP.

Maritime Area A: Maritime Area A is situated off the coast of County Waterford and encompasses a total marine area of ~~312.6~~ 306 kilometres (km)². The distance to shore varies from between approximately 12.2~~4~~ km along the western boundary to 12.5~~4~~ km along the northern boundary. Maritime Area A has a mean water depth of 57 metres (m), with a minimum water depth of 48 m and a maximum water depth of 69 m, giving an overall range of 21 m. The average wind speed in the area at 150 m height is estimated to be 10.4 m per second (s). With a typical density of 4.5 MW/km², a 900 MW development would use 65% of the total marine space within Maritime Area A.

Maritime Area B: Maritime Area B is situated off the coast of County Waterford and has a total area of ~~485.8~~ 368 km², with distances to shore varying approximately between 29~~4.1~~ km along the western boundary and ~~30.2~~ 24 km along the northern boundary. Maritime Area B has a mean water depth of 70~~1~~ m with a minimum water depth of 6~~5~~6 m and a maximum water depth of 76 m~~, giving an overall range of 10 m~~. The average wind speed in the area at 150 m height is estimated to be 10.4 m/s. An initial estimate is that this Maritime Area could potentially facilitate a fixed offshore wind project with a realistic installed capacity of between 1.14 to 1.5~~2.0~~ GW. With a typical density of 4.5 MW/km², such a project would use 66~~4~~% to 91% of the Area.

Maritime Area C: Maritime Area C is situated off the south coast of County Wexford and has a total area of 341~~.4~~ km². The distance to shore ~~varies~~ is approximately ~~between~~ 25~~6.6~~ km along the ~~western boundary and 27.2 km along the~~ northern boundary. Maritime Area C has a mean water depth of 69 m with a minimum water depth of 64 m and a maximum water depth of 72 m~~, giving an overall range of 8 m~~. The average wind speed in the area at 150 m height is estimated to be 10.4 m/s. An initial estimate is that this Maritime Area could potentially facilitate a fixed offshore project with an installed capacity of 1 to 1.4 GW. This is based on a typical density of 4.5 MW/km², and utilisation of 65% to 91 % of the total Area.

Maritime Area D: Maritime Area D is situated off the south coast of County Wexford and has a total area of ~~304.3~~ 300 km². The distance to shore ~~varies~~ is approximately ~~between~~ 3~~1~~26 km along the ~~western boundary and 25.8 km along the~~ northern boundary. Maritime Area D has a mean water depth of 67 m with a minimum water depth of ~~55~~48 m and a maximum water depth of ~~78~~94 m~~, giving an overall range of 23 m~~. The average wind speed in the area at 150 m height is 10.4 m/s. An initial estimate is that this Maritime Area could potentially facilitate a fixed offshore project with an installed capacity of 0.9 to 1.3 GW. With a typical density of 4.5 MW/km², such a project would use 6~~5~~7 to 9~~5~~6 % of the Area.

Section 8.3.2: Assessment of Maritime Areas

Constraints analysis of the wider SC-DMAP has to a large extent avoided known environmental sensitivities and coastal waters entirely. In addition, the following assessment is undertaken in the context of the wider draft policy base which includes further environmental protections which limit the range of significant effects possible in relation to the draft defined Maritime Areas A-D.

Ref.	PHH	BFF	LS	W	AQ	CF	MA	CH	LandSeaS
Maritime Area A	+/-	0/-	0/-	0/-	+/-	+	+/-	0/-	0/-
Maritime Area B	+/-	0/-	0/-	0/-	+/-	+	+/-	0/-	0/-
Maritime Area C	+/-	0/-	0/-	0/-	+/-	+	+/-	0/-	0/-
Maritime Area D	+/-	0/-	0/-	0/-	+/-	+	+/-	0/-	0/-

***Key**: **PHH:** Population & Human Health; **BFF:** Biodiversity, Flora & Fauna; **LS:** Land & Soils/Sediments; **W:** Water; **AQ:** Air Quality; **CF:** Climatic Factors; **MA:** Material Assets; **CH:** Cultural Heritage; **LandSeaS:** Land/Seascape.*

Assessment and Discussion:

Population and Human Health (PHH)

Assessment and Discussion:

The increased development and rollout of offshore renewable energy will have cumulative positive benefits over the longer term in terms of direct effects such as offsetting need for fossil fuel in electricity generation/heating, and indirect positive impacts over the longer term for AQ and HH which can be expected from decreasing demand from solid fuel burning and particulate/nitrogen dioxide emissions. There are also indirect positive impacts to economic aspects, for example positive effects in the medium and longer term during the survey, construction and operation/maintenance phases of wind farm via the increased use of the area for provisioning, worker accommodation, and increased potential for training and employment opportunities.

The potential for negative impacts for PHH arising from offshore wind farm development across any of the Maritime Areas is likely to be limited as the four areas are located beyond the normal tourism and recreational areas, which typically occur within 5 km / 2.6 NM of the shore. There is potential for short term temporary indirect disturbance effects during the construction and installation phase of associated infrastructure components, such as the export cable at landfall locations.

In terms of tourism and recreational aspects, the primary interaction with any of the Maritime Areas relates to recreational sailing routes from nearby ports and harbours in and around the south coast area, which comprise popular routes where recreational craft can be seen at most times during summer daylight hours, with a medium level of intensity. The routes intersect with Maritime Area A. The majority of these routes are coastal however and due to the typical sailing season are restricted to the spring to autumn period (generally April to October, weather dependant). The impacts to such routes from development in any of the Maritime Areas is likely to be limited and localised, providing that there are clear communications implemented during all stages of project development e.g. notifications related to project activities and necessary clearances.

There is potential for some long term permanent negative impacts in relation to effects on views and visual amenity from the presence of operational wind farm infrastructure (see also Landscape and Seascape below).

Biodiversity, Flora and Fauna (BFF)

Constraints analysis of the wider SC-DMAP has to a large extent avoided known ecologically important features as far as possible in defining the Maritime Areas shown. However, notwithstanding that, there remains risks to BFF from development of OW in these areas both from the array and from the supporting infrastructure such as cables which will be required to support and connect arrays in both the offshore and onshore space.

None of the Maritime Areas overlap with designated (including European) sites, and there are currently no other areas designated as Marine Protected Areas (MPAs) in Irish waters. However, under Article 12 of the Habitats Directive, Annex IV species are protected wherever they occur; mobile species such as ~~basking sharks,~~ turtles and other megafauna are known/ have been previously sighted transiting through ~~the area of~~all four Maritime Areas, with a large range of foraging movements and hearing bandwidths. The most common fauna recorded across all Maritime Areas include: ~~common~~ harbour porpoise, fin whale, minke whale, grey seal, harbour seal, leatherback turtle. Humpback whales likely transit throughout the DMAP area, particularly Maritime Area A and B. Bottlenose dolphin and Risso's dolphin are most commonly recorded off Cork, Waterford Harbour and off Wexford coast and have been previously sighted transiting Maritime Areas A and D. Pilot whales have been recorded within the northern section of Maritime Area A. Basking shark has been recorded all around the coast and in Maritime Area A; while not an Annex IV species, it has been afforded greater level of protections. Demonstrating complaince with Article 12 in the context of Annex IV species will be necessary for any OW devleopment (see policy objective MI 2).

As previously mentioned, none of the Maritime Areas within the SC-DMAP overlap with any European sites, however there are many notable SPAs designated for seabirds within the vicinity of the final draft SC-DMAP boundary. These seabirds are therefore likely to use the wider area at various stages of their respective life cycles e.g. breeding sites along the coast, for offshore foraging, migration routes, resting areas, and may interact with activities arising from the SC-DMAP ~~The SC-DMAP area supports these seabirds at various stages of their life cycle, such as breeding, foraging and migrating~~. In addition to these seabirds, the SC-DMAP has the potential to support other species of migrating SCI birds which, when passing through the area on their migration routes, may interact with activities arising from the SC-DMAP.

All of the Maritime Areas overlap to some degree with the spawning and/or nursery grounds for a variety of commercially valuable fish species (with the exception of nephrops, black and white bellied anglerfish, blue whitting, and the hearing-sensitive herring). ~~The Marine Institute (MI) have undertaken a preliminary analysis~~

Assessment and Discussion:

~~of the fishing and shellfish grounds and commercial fishing activities for the proposed SC-DMAP Maritime Areas and noted that the potential impacts to these areas is unlikely to be severe to the stocks as a whole.~~ The Marine Institute (MI) provided DECC with a briefing note highlighting the spatial overlaps of the draft SC-DMAP four Maritime Areas with fish nursery and spawning grounds and with commercial fishing activities, based on publicly available data sets, which informed this spatial assessment.

In terms of the benthic substrate, circalittoral rock and biogenic reef is present all around the coast of Ireland and is characterised by animal dominated communities. However, the character of the fauna off the south coast varies enormously and is influenced mainly by wave action, tidal stream strength, salinity, turbidity, the degree of scouring, and rock topography. Where highly sensitive habitats occur outside the boundary of a designated site (such as reefs) these should be avoided in the first instance, as installation of offshore infrastructure over reef habitat will lead to permanent habitat loss, and there is potential for such habitats to be designated in the future as Marine Protected Areas (MPAs).

The Marine Evidence based Sensitivity Assessment (MarESA) approach was considered when generating the constraints and heat mapping that informed the delineation of the proposed Maritime Areas, to determine the degree of sensitivity/resilience of each of the dominant habitats present to disturbance and degree of recoverability. The eastern and southern section of Maritime Area A and the northern section of Maritime Area C overlaps with patches of benthos that have been designated as offshore circalittoral rock and/or biogenic reef; this is a habitat type with a high degree of sensitivity to disturbance and low resilience/recoverability rates. This means that siting of turbines and or cables over these sites would result in permanent habitat loss. It is recommended that the larger and more cohesive section to the north-east of Maritime Areas A is avoided where possible, and micro-siting conducted for other areas within the site. Sections of Maritime Area A also overlap with a scallop bed. Micro-siting will be important for projects in this location.

The predominant habitats that are found in Maritime Areas B and C comprise offshore circalittoral coarse sediment, and offshore circalittoral sand which have a low degree of sensitivity with a high degree of resilience to disturbance and rapid recoverability rates. The southern section and south-western section of Maritime Areas B and C respectively overlap with the northern areas for a commercially important scallop bed. Micro-siting will be important for projects in this location.

Maritime Area D is located on offshore circalittoral sand with patches of offshore circalittoral coarse sediment due to its location off the south coast, however as this area is subject to strong and variable tidal streams as well as storm influences means that the deposition and erosion of the sands is in constant flux/movement, and it would be considered a disturbed habitat. The presence of turbines in this area may therefore have an impact on scouring and deposition rates.

In summary, for any offshore development, there is potential for short, medium and long term, direct and indirect, temporary and permanent, and cumulative impacts on BFF. There are various pathways for impact and can include for instance: permanent loss of benthic/seafloor habitat; sediment plumes generated during intrusive surveys, construction and decommissioning activities, with potential effects arising on water quality or from smothering effects; displacement to fauna such as mobile species (e.g. whales and diving birds) and from exclusion from breeding, spawning/nursery, feeding or foraging grounds; and disturbance effects such as noise and vibration generated from surveys and infrastructure installation such as foundation piling, as well as from the physical presence of infrastructure and vessel movements during all stages of a project's development. The presence of additional vessels and the physical presence of wind turbines can give rise to potential vectors or stepping-stones for the introduction of non-indigenous or invasive species.

The installation of fixed wind turbines will result in a permanent change to the seabed morphology, hydrographical conditions, habitat loss/alteration to marine biodiversity and could in the absence of appropriate mitigation exclude certain fishing activities within the windfarm array area itself. The presence of a wind farm may however over time give rise to indirect and secondary positive impacts for BFF in terms of new infrastructure providing shelter/refuge/pseudo-nursery for species via the 'artificial reef effect', where fish and shellfish species may proliferate, which would have a knock-on positive effect for marine biodiversity, food webs and seabed integrity. The physical presence of offshore wind farms may also however have an impact on migratory and foraging patterns of marine mammals, fish, birds.

Due to the use of the general south coast area by marine mammals, megafauna, pelagic species, and commercial fisheries, interactions with these receptors will be unavoidable.

Assessment and Discussion:

Land & Soil / Sediment (LS)

In terms of LS, the key pathways for negative impacts in the marine environment arising from wind farm development in any of the Maritime Areas would relate to changes to marine processes arising from, for instance: altered tidal flow/ wave regimes on the sediment erosion/deposition regimes in coastal areas; increased suspended sediment concentrations and associated deposition (which can arise during the construction and operational stages); from the presence of infrastructure during the operational stage which may lead to changes to wave climate, tidal and littoral currents, and associated changes in sediment transport, as well as increased suspended sediment concentrations and associated deposition. However, these impacts are likely to be localised and mitigation at project level for marine processes generally relates to ensuring appropriate scour protection for turbine foundations. The installation of fixed-bottom wind turbines will result in a permanent change to the seabed morphology, hydrographical conditions, and this may also include impacts on BFF and MA also via benthic habitat loss/alteration to marine biodiversity and exclusion of certain fishing activities within the windfarm array area (refer also to the discussions under Biodiversity, Flora and Fauna, Water and Material Assets).

Water

The objectives of the WFD relate to water bodies out to a distance of 1 nautical mile (NM) and as such there is no direct overlap with any of the Maritime Areas.

Under the MSFD, there are 12 descriptors for achieving or contributing to environmental objectives. Short term temporary negative impacts are likely to arise during the site-specific survey stages, and during wind farm construction, with limited potential for impacts arising from the operation and maintenance phases.

With the undertaking of data-gathering and pre-construction surveys, the key pathways for effect arise from temporary disturbance/impacts from underwater noise, increased vessel movements and disruption to commercial fish and shellfish activities (e.g., commercial fishing activities may be excluded from certain areas during survey activities). During the construction phases, sediment plumes may be generated from the installation of turbines and their foundations, the duration of which will be dependent on the site-specific sediment regimes for a given area (where coarser particles settle quickly, with finer grades remaining in suspension for longer). There is also potential for contaminants to be released via disturbance to seabed sediments during intrusive surveys or during infrastructure installation. Other pathways include the potential for accidental spills to occur from vessels traversing the Maritime Areas during any stage of project development, though the effects of such impacts are likely to short term and temporary, given the dilutive capacity of the offshore environment. However, the application of best practice in the management of fuels, oils etc. on vessels and the appropriate disposal routes of same should avoid these impacts.

There is potential for the generation of electromagnetic field (EMF) effects from e.g., inter-array cabling and other infrastructure. There is potential for indirect negative impacts on BFF to arise as EMF can disturb some sensitive marine species as sharks. However, the magnitude and significance of such effects would require project-level considerations.

Air Quality

In terms of AQ (and also PHH), there are medium to longer term indirect positive impacts from the development of offshore wind energy; as increased renewable energy is connected to the grid and offsets the burning of fossil fuels, there is a subsequent reduction in pollutants to the air, or which the key emissions are particulate matter and nitrogen dioxide, and the main sources of which are from vehicle tailpipes and burning of solid fuels for heating.

At the project level, there are short term temporary negative impacts to air quality arising from the construction and decommissioning stages of a wind farm project. There are also impacts to air quality during the operational stage where maintenance vessels may need to traverse to and from a development area at specified intervals; these emissions to air will likely be localised to the Maritime Areas and to the ports used during operation. The nature and scale of such air quality impacts, however, are not likely to lead to significant effects. Over the longer term, there is likely to be cumulative positive impacts arising from development of offshore wind for AQ and also PHH, due to the progressive offsetting of fossil fuel demand as more offshore renewable energy is built out.

Climatic Factors

Assessment and Discussion:

Ireland's national climate objective is to reach a 51% reduction in emissions by 2030, and to reach climate neutrality by no later than 2050. Related to this is the Climate Action Plan 2023 and draft CAP24 target of up to 80% renewable electricity by 2030. These targets require a build out of renewable energy projects if they are to be achieved. The overall ambition of developing offshore wind within the Maritime Areas is to contribute to these targets, which will also give rise cumulatively to direct, long term positive impacts for CF. Globally, marine environments also play a critical role in carbon sequestration. In the Irish context, the NPWS has conducted a review of benthic habitats and seabed substrates and determined that some have greater potential to sequester carbon e.g. areas with circalittoral mud are more likely to store higher levels of carbon, whereas coarse sediments to sand are less likely to store carbon. Rocky areas or seabed only have negligible potential and are unable to act as a carbon sink. Across the south coast, Maritime Area D overlaps an area classed as having higher sequestration potential, Areas A and C overlap with areas classed mostly as having moderate sequestration potential, and Area B overlaps with areas of both moderate and lower sequestration potential. There is potential therefore for fixed wind farms to variably remove or disturb the ability of sediment, which would have long term indirect permanent negative effects for CF. It should be noted however that this NPWS carbon model is based off broad scale data and that more detailed consideration of this aspect at project level will be required.

At a more macro scale, the transition to green energy underpinning the SC-DMAP proposals must also acknowledge the total life cycle impacts which go beyond the typical pre-construction/ construction/ operation/ decommissioning stages of a wind farm in a local area. The global drive for renewable energy is compelling greater material demands, in particular, for various critical materials including but not limited to rare earth elements (REE), many of which are only in any abundance in other countries where the potential for medium to long term negative implications on environmental and social receptors is already recognised and groups such as the World Bank have begun developing tools to address these challenges e.g., Climate-Smart Mining Initiative. Therefore, while the green energy transition is itself overwhelmingly positive and urgently needed, the transition in general raises issues around supply and demand of the critical materials needed to facilitate the transition now and into the future. Beyond the major elements that comprise a wind farm in terms of, for instance, cement, steel and fibreglass/resins for turbines, other elements are needed e.g. neodymium, praseodymium, dysprosium and terbium, to make the permanent magnets used in turbine nacelles (as well as the traction motors in electric vehicles). The International Energy Agency (IEA) reports that as of 2019, Congo and China produced 70% of the world's cobalt and 60% of the world's REEs respectively, with China responsible for almost 90% of the world's refining capacity for RREs.[8] The International Renewable Energy Agency (IRENA) produced a 2023 report into the Critical Materials for the Energy Transition: Rare Earth Elements, looking at supply and demand as well as ways to de-risk the supply chain including investment in research and development of new technologies and designs that might reduce dependency as well as policy responses that support collaborative working and fair long terms pricing for countries that hold the supplies of these materials.

The EC for its part has proposed a Critical Raw Materials Act, and in 2022 and has established a European Raw Materials Alliance (ERMA). The Irish the Government published the *Policy Statement on Mineral Exploration and Mining - Critical Raw Materials for the Circular Economy Transition* (which was subject to SEA and AA). The latter recognises the importance of minerals and mining and how Ireland can contribute to mineral exploration and mining. Greater consideration however must be given to wider factors such as supply chain issues and dependencies/security of supply from third countries, as well as social responsibilities from offsetting the environmental effects of the energy transition to other countries. Clearly research into alternatives is urgently needed along with a policy commitment to ensure sustainable procurement is at the forefront of Irelands transition.

A circular economy plan will be required to accompany applications for OW Development as part of the SC-DMAP to establish the manner in which essential materials can be reused and / or recycled at end of life.

Material Assets

[8] IEA (March 2022) The Role of Critical Minerals in Clean Energy Transitions. World Energy Outlook Special Report. Available at: https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/mineral-requirements-for-clean-energy-transitions

Assessment and Discussion:

Material assets in the offshore environment relate to receptors such as commercial fisheries, military activity, aviation and other infrastructure such as shipping and navigation routes. There are numerous pathways for impacts to arise from the development of offshore wind farms.

For aviation, impacts can include: cable installation activities at landfall points that may restrict hang gliding and paragliding activities; and the presence of wind turbines may interfere with television signals. For other infrastructure and users of the sea, impacts can include: displacement of recreational sailing, fishing (boat angling), motor cruising, and other recreational activities (e.g. diving vessels), resulting in a loss of recreational resource; displacement of recreational fishing (shore angling) and recreational activities (kayaking, kite surfing, surfing and windsurfing, sea swimming and beach users) along the nearshore and intertidal section during cable-laying activities, resulting in a temporary loss of recreational resource; and potential for increased suspended sediment concentrations and associated deposition affecting other recreational activities (swimming, diving and angling).

Offshore wind farms themselves represent a material asset to the state; their development more generally will contribute to greater renewable electricity generation which will have long term direct cumulative positive impacts for contributing to Ireland's renewable electricity targets, and subsequent contribution to the overall national climate objective. As noted under BFF, the physical presence of offshore infrastructure once installed could potentially lead of indirect positive effects in terms of the artificial reef effects, where infrastructure can provide a refuge/ pseudo-nursery for fish and shellfish.

For commercial fisheries, the pathways for impact can include, during all stages of a project's development: full or partial displacement of fishing activity; potential required changes to fishing activity due to presence of infrastructure; potential for snagging of fishing gear; permanent reduction in available seabed and fishing grounds due to the physical presence of infrastructure; temporary displacement from fishing grounds during e.g. survey activities and from project-related vessel movements.

For shipping and navigation, impacts may include: the presence of project-related vessels transiting to and from their marshalling harbour and operation and maintenance base, and displacement of others vessels from the offshore wind farm array area – this can lead to increased risk of vessel-to-vessel collision; the physical presence of wind farm infrastructure or survey devices may lead to vessel-to-structure contact/collision; and the presence of underwater project-related devices and cables may lead to snagging and damage to anchors and/or fishing gear.

Maritime Area A will avoid interaction with the majority of marine material assets. There is partial overlap with shipping and navigation routes, spawning and nursery areas, tourism, and recreation routes (in the form of recreational sailing). The southern boundary of the site overlaps with the west-east shipping corridor, which could result in disruption/displacement of vessels to the south in the absence of appropriate mitigation.

Maritime Area B, in the south-eastern portion of the site there are one plugged and abandoned (P&A) with/without shows or untested pay exploration well head and one P&A oil well head~~, one of which was capped due to lack of output~~; these features would require an exclusion buffer to avoid interaction at a project level.

~~The site~~Maritime Area C also overlaps with a single P&A with/without shows or untested pay exploration well head in the northern section and would require an exclusion buffer to avoid interaction at a project level. There is a primary shipping and navigation route running between the Marine Sites B and C.

Maritime Area D, there is overlap with two P&A with/without shows or untested pay exploration well heads in the north-western corner of the site, one of which was capped due to lack of output; these would require an exclusion buffer to avoid interaction at a project level. There is primary navigation route running to the east of the boundary of this site; the majority of the vessel traffic appears to be fishing vessels to reach fishing grounds.

From the constraints and heat mapping exercise undertaken, it should be noted that for the following receptors:

- Administrative: This includes anchorage areas, restricted zones, pilot boarding areas and traffic separation boundary's safe movement of vessels at sea. No overlap with any of the four sites.

- Military: There is a single military exercise zone on the south coast located to the west of Cork which is outside of the SC-DMAP boundary area. No overlap with any of the four sites.

Assessment and Discussion:

- Aviation: The approach corridor to Waterford Airport overlaps with Maritime Areas A and B; while the approach height means there would be no interaction with this zone, consultation with Waterford Airport is recommended.
- Fish and shellfish and commercial fisheries: ~~The Marine Institute (MI) undertook the analysis of the fishing and shellfish grounds and commercial fishing activities. A summary of their findings was as follows:~~ The Marine Institute (MI) was requested by DECC to advise regarding commercial fisheries activity. The MI undertook preliminary analysis of the overlap between the proposed Maritime Areas and commercial fishing activities and a summary of their findings was as follows:
    - √ The northern part of the main scallop grounds in the Celtic Sea overlaps to a significant extent with some of the proposed Maritime Areas. These include overlaps with the eastern portion and slightly with the western portion of Maritime Area A, north-western and southern portions of Maritime Area~~s~~ B and south-western portions of Maritime Area C.
    - √ The scallop fishery is likely to be the fishery most impacted (either temporarily or permanently) if excluded from these areas or sections of these areas.
    - √ All four Maritime Areas overlap to some extent with the spawning and/or nursery grounds of some species of commercial interest including but not limited to cod, haddock, hake.
    - √ A detailed assessment of essential fish habitat and a risk assessment in relation to ORE developments is recommended.

~~The northern part of the main scallop grounds in the Celtic Sea overlaps majorly with the eastern portion and slightly with the western portion of Maritime Area A and southern portions of Maritime Areas B and C– this is likely to be the fishery most impacted excluded (either temporarily or permanently) from sections of these areas. All four Marine Sites overlap with the spawning and/or nursery grounds of some species (with the exception of herring). The summary finding from the MI was that the potential impact to these areas from the development of ORE is unlikely to be severe to the stocks as a whole.~~ Separate to the MI briefing note, the Maritime Areas will not directly interact with any designated shellfish waters, as the sites are located more than 12km from the coast. Project specific modelling will be required for potential sediment plumes based off number of turbines, type, placement, and installation methods. Impacts are likely to be temporary in nature, at worst minimal to negligible in the inshore coastal waterbodies. The routing and installation methods of the export cable route is currently unknown. Therefore~~ough~~ it is recommended to avoid existing aquaculture sites and designated shellfish waters.

Cultural Heritage

Underwater archaeology and cultural heritage features can have historic importance at a national, regional or local level due to its association with an historical event, due to perceived level of importance associated with the loss of life associated with the sinking of a ship/submarine, or features associated with particular maritime periods that are considered important, or by its rarity as a representation within the maritime archaeological record. Wrecks are also considered to be a 'non-renewable' and 'finite' resource and are generally considered to be highly vulnerable and of low recoverability. Other underwater features of heritage importance can include underwater 'landscapes', the form of which may be important form the perspective of contributing to the understanding human history and culture. For instance, there are a number of wrecks that occur within each Maritime Areas as follows:

- Maritime Area A: 30 recorded wrecks (26 unnamed) intersecting the area; named wrecks include: Castlehill SS [W03294], Feltria SS [W0494], Lavander HMS [W05021] and Lough Fisher SS [W05032].
- Maritime Area B: ~~42~~ 32 recorded wrecks (~~33~~ 24 unnamed) intersecting the area; named wrecks include: Karina SS [W03818], Lady of the Lake SV [W03843], Mediterranean SV [W03989], T. Crowley [W04376], Manchester Engineer SS [W0503], ~~Bedale SS [W04774]~~, U-1276 W10120], Unknown 'Middle Wreck' [W11628] and Vervain HMS [W05340].
- Maritime Area C: 23 recorded wrecks (21 unnamed); named wrecks include: Falaba SS [W03511], Unknown 'outside Lead Wreck' (probably UKHO 11784) [W11631] and Cairo SS [W04795].

Assessment and Discussion:

- Maritime Area D: 3 recorded wrecks (2 unnamed); named wreck includes the Brika SS [W03256].

There is potential for a number of negative impacts to occur via various pathways during the construction, operation and/or decommissioning stages of a wind farm project. This can include, for instance, the removal/disturbance of seabed sediments leading to negative effects on prehistoric land surfaces, wreck sites and artefacts; the removal or disturbance of deeply buried sediments leading to effects on prehistoric land surfaces; disturbance of sediment causing sediment deposition on the seabed resulting in potential effects on archaeological receptors; and alteration of sediment transport regimes. These impacts may have direct and indirect, temporary and permanent, short and medium term negative impacts on heritage features/ underwater landscapes. Given the scattered and widespread distribution of wrecks all across the south coast and marine space, cumulatively there is potential for negative long term impacts on CH due to loss and/or disturbance to heritage features as a result of development activities.

The presence of heritage features does not preclude a development but there are a number of licences that may need to be applied for (through the NMS) before any form of survey can be carried out at the Marine Sites.

In terms of incorporating opportunities to enhance cultural/historic knowledge and understanding, as the four Maritime Areas are strategic proposals, it is unclear what if any opportunities would be available to enhance cultural/historic knowledge. However, through the undertaking of detailed surveys at project level, there is opportunity to further investigate and characterise the nature of the heritage features within a given Maritime Area and therefore add to the knowledge base of specific heritage features. Detailed project-level surveys and works to install wind farm infrastructure may also yield new discoveries or previously unknown features. This would have longer term direct positive impacts for CH in terms of contributing to the Irish maritime knowledge base.

LandSeaS

~~For the draft OREDP II the impacts of the presence of infrastructure on seascape and landscape character was sectioned into four bands:~~ SEAI commissioned a Strategic Environmental Assessment (SEA), completed in 2010, to inform policy-making in the Offshore Renewable Energy Development Plan (OREDP) that included the following category values of seascape effects around the Irish coast. These are called Seascape Effects by Wind Turbines and are publicly available from SEAI[9].

- 0-5 km: Substantial level of impact
- 5-15 km: Substantial level of impact
- 15-24 km: Substantial decreasing to moderate level impact
- 24-35 km: Moderate level decreasing

Maritime Area A partially lies within the second band, approx. 12 km from the coastline; very small areas of the northern sections of Maritime Areas B, C and D are located within the band 3 and major~~ity~~ sections of these Maritime Areas lie within band 4. For all Maritime Areas, there is potential for long term permanent negative impacts in relation to effects on visual amenity as well as landscape and seascape character from the presence of wind farm infrastructure. The closer infrastructure is located to the coastline, the greater the potential for negative impacts. The magnitude and the significance of effects will depend on a number of factors such as distance from viewing points, the sensitivity of the coastline/landscape/seascape character at that point, and the parameters of the wind farm components such as turbine height, rotor diameter and arrangement of the turbines in the array area.

Mitigations:

[9] https://data.gov.ie/dataset/seascape-effects-wind-turbine-5km

Assessment and Discussion:
See Chapter 9 of the SEA ER and this SEA Statement for overarching mitigation, policy level mitigation and project level mitigations which would apply to all OW developments which may arise within Maritime Areas A-D.

Section 8.4 Cumulative Effects

Amendment: Section 8.4- Cumulative Effects of the SEA ER has been updated as follows:

~~Two types of cumulative effects are relevant in the context of the SC-DMAP - regional scale and project scale. At regional scale, the purpose of Cumulative Effects Assessment (CEA) is to understand the total impact of anticipated development – in this case, a build out of offshore wind in Maritime Areas A-D. **Table 8-1** identifies the broad cumulative effects identified at this stage in the process. At project level, each project will assess cumulative effects on a case-by-case basis, reflective of the project design proposed and the current receiving environment at the time of preparing the development permission application.~~

Cumulative effects are defined in the EPA (2020) Good Practice Guide on Cumulative Effects Assessment in SEA as those that "result from a combination of two or more individual effects on a receptor. Such effects can occur as a result of plans, programmes, projects and other actions (this guidance uses the term 'actions' to describe all of these) in the past, present and the reasonably foreseeable future. They can result from impacts that may be individually insignificant, but collectively significant."

Cumulative impacts are assessed in accordance with the SEA Directive. The SEA Directive (Annex I) requires the SEA environmental report to include information on likely significant effects which should *"include secondary, **cumulative**, synergistic, short, medium and long-term permanent and temporary, positive and negative effects."*

The SEA has considered cumulative effects in two areas. The first is within plan to address the deployment of fixed offshore wind in Maritime Areas A-D and the second to address other offshore renewable energy plans and projects in Irish waters and in adjacent jurisdictions.

SC-DMAP Maritime Areas

An assessment of the impacts of the four Maritime Areas is included in the preceding sections in Chapter 8 of this SEA Environmental Report. A summary of the cumulative pathways associated with the deployment of all four areas within the SC-DMAP is presented in **Table 8-1**. **Table 8-2** also considers pathways in the context of the SEO objectives. It is noted that all four areas would not be deployed at once. . In reality, the roll-out of projects would be gradual, commencing with Area A. Estimates of capacity figures noted above for each Maritime Area relate to capacities which could be accommodated. Actual capacities will be defined based on the detailed regional and project level surveys and assessments that will be required to support development permission applications and will represent environmentally sustainable capacities.

Outside SC-DMAP Area

In addition to potential cumulative effects within the SC-DMAP resulting from deployment in the four identified Maritime Areas, there is also potential for cumulative effects pathways to occur with related plans and projects outside the SC-DMAP area. Chapter 4 of the SEA Environmental Report considers a wide range of plans and programmes and their environmental protection objectives relevant to the SC-DMAP. This section summarises cumulative effects with key plans and projects relating to ORE and grid transmission infrastructure specifically as follows:

- Consideration of key relevant national plans as well as the proposed offshore wind projects being bought forward as Phase 1 offshore wind projects along the east coast of Ireland (Table 8-3); and
- Consideration of UK offshore renewable energy plans in proximity to the SC-DMAP area, notably the UK Crown Estate Round 4 and 5 leasing (Table 8-4).

Table 8-1: Summary of Cumulative Effects Pathways Within SC-DMAP

Receptor	Cumulative Effect Pathways	Assessment	Discussion and Mitigations
Fish and Shellfish / Commercial fisheries	• Injury and disturbance as a result of underwater noise from piling during construction. • Displacement of fishing activity.	Noise: the zone of impact from the noise sources i.e. piling locations is expected to be local in nature, short-term duration, intermittent and reversible. Some overlap of lifecycle phases of separate ORE developments is possible. Displacement: the four Maritime Areas overlap with offshore fishing grounds. The spatial extent of the impact is relatively small in the context of the available commercial fishing areas in the wider southern Irish and Celtic seas. However, there is potential for some partial permanent / temporary displacement of some fisheries i.e. scallop. As stated in the SEA ER the northern part of the main scallop grounds in the Celtic Sea overlaps with the eastern portion and slightly with the western portion of Maritime Area A and southern portions of Maritime Areas B and C. This is likely to be the fishery with the potential to be most impacted (both temporarily and permanently). All four Maritime Areas overlap with the spawning and/or nursery grounds of some species, however, according to available data sets, there are no spatial overlaps between the four Maritime Areas and the spawning/nursery grounds for Herring and Nephrops, which may be considered particularly sensitive to marine development due to their location in specific seabed types. Overlaps with Cod spawning grounds are largely restricted to Maritime Area A, according to available data sets. The Maritime Areas will not directly interact with any designated shellfish waters, as the sites are located more than 12km from the coast. Project specific modelling will be required for potential sediment plumes based on number of turbines, type, placement, and	Significant engagement has taken place with fishers and fishing representatives as part of the drafting of the SC-DMAP and, following consultation, changes have been made to both the Maritime Areas and the policy base to address fishing concerns. Mitigations which have been integrated into the SC-DMAP to avoid significant adverse cumulative effects include: SF 5 which requires developers of proposed ORE projects in the Maritime Areas to maintain a Fisheries Liaison Officer (FLO) to facilitate consultation and engagement with fishers and the wider seafood sector on an ongoing basis throughout its lifecycle. Further there is additional requirements to engage with fishers under the relevant policy base at SF1-6. SF 1 also confirms the principle already identified in the NMPF that ORE developers shall, in order of preference, avoid, minimise or mitigate likely significant adverse effects with existing fishing and seafood activity. UN 2 which requires that developers of proposed ORE projects in the Maritime Areas shall minimise the risk of disturbance on biodiversity and the cumulative effects of underwater noise. Other key policies within the SC-DMAP to avoid significant adverse cumulative effects on this receptor include: As provided for under policy objective IGM 4 it is proposed to establish a dedicated offshore wind-maritime research programme in partnership with, and managed by, the Marine Institute.

Receptor	Cumulative Effect Pathways	Assessment	Discussion and Mitigations
		installation methods. Impacts are likely to be temporary in nature, at worst minimal to negligible in the inshore coastal waterbodies. The routing and installation methods of the export cable route is unknown. It is recommended to avoid existing aquaculture sites and designated shellfish waters. Such development will be authorised at project level in accordance with relevant legislation including all required project level environmental assessments. There is also potential for localised temporary partial displacement of commercial fisheries, particularly around project installation activities. Some temporary restrictions may be necessary around the individual survey vessels and maintenance vessels also. Safety zones and advisory clearance distances will likely be in place for the duration of the offshore construction period of the wind farms, although these will be transient as each structure or section of inter-array/offshore cable completes the installation process. Fishing activity may be displaced into other traditional fishing grounds.	Policy objective MS1 also requires that applications brought forward in the SC-DMAP must consider up to date understanding of baseline conditions. This is complemented by policy objective MI 1, which requires the use of data made available through the GIS Data Repository to support project level environmental assessments. In addition to Regional Level Surveys, other relevant data sets, such as those relating to Fish and Shellfish / Commercial fisheries, including inshore fisheries, where relevant, may be added to the repository to inform a better understanding of baseline conditions. OEP 1 and 3 add further to the available protections through a requirement to have regard to appropriate guidance, the need to prepare pre-consent management plans and the need to integrate constraints analysis, route and site selection, and project level assessment to inform the preparation of requisite project-level applications for ORE and electricity transmission infrastructure.
Benthic Habitats	• Temporary subtidal habitat loss/disturbance as a result of disturbance to the seabed for infrastructure installation and site preparation. • Increase in suspended sediment concentration (SSC) and associated deposition as a result of disturbance to the seabed. • Seabed disturbance leading to the potential release of sediment contaminants.	Likely to be of local spatial extent, short to long-term duration, and reversible following construction or decommissioning phase.	Mitigations which have been integrated into the SC-DMAP to avoid significant adverse cumulative effects include: MS1 which requires that applications brought forward for Maritime Areas B, C and D must incorporate relevant data from the Regional Level Surveys (RLS). This up-to-date baseline shall inform the requisite statutory environmental assessments at project level (which may include EIA and/or AA) including cumulative and in-combination assessment. Other key policies within the SC-DMAP to avoid significant adverse cumulative effects on this receptor include OEP 1 which requires applications for ORE

Receptor	Cumulative Effect Pathways	Assessment	Discussion and Mitigations
	• Long-term subtidal habitat loss as a result of placement of infrastructure such as wind turbine foundations. Also alteration of seabed habitats arising from effects of physical processes. • Increased risk of introduction and spread of invasive and non-indigenous species		developments to include, where relevant, the management plans listed in Appendix C, specifically an Invasive Non-native Species Management Plan for the management of marine invasive non-native species during construction of the offshore infrastructure;
Marine Processes	• Increased suspended sediment concentrations and associated deposition due to infrastructure installation and decommissioning activities. • Overlap of pollution risk during all stages of project life cycle caused by accidental spills/contaminants	Likely to be of local spatial extent, short to long-term duration and reversible following construction or decommissioning phase. Will depend on nature of sediment and levels of contamination which will be determined by project level modelling.	Mitigations which have been integrated into the SC-DMAP to avoid significant adverse cumulative effects include: OEP 1, OEP 3 and ML 1 and Appendix B and C the surveys and plans which will underpin assessments of these sites e.g. Emergency Response Co-operation Plan to remediate any pollution event.
Marine Mammals and Megafauna	• Cumulative spatial or temporal effects leading to injury and/or disturbance to marine mammals and megafauna from underwater noise during pile-driving. • Injury and/or disturbance to marine mammals and megafauna from elevated underwater noise during routine geophysical surveys. • Localised increase in vessel activity leading to injury and/or disturbance / and or behavioural changes to marine mammals and megafauna from vessel activities.	The species likely to be affected include harbour porpoise, bottlenose dolphin, common dolphin, fin whale, minke whale, humpback whale, killer whale, pilot whale, grey seal, harbour seal, basking shark and leatherback turtle. Most species will range widely including within the SC-DMAP area and therefore will readily move between areas to exploit prey resources. Marine mammal and megafauna are likely to avoid disturbance from vessel traffic and activities generating noise and return to previous behavioural states/activities once the impact has ceased. Auditory injury in marine mammals can have negative effects on the ability of animals to use natural sounds, including communication, navigation, and prey location etc., however, the most likely response of a marine mammal exposed to unusual noise levels is to leave the elevated noise area. Some overlap of lifecycle phases of separate ORE developments is possible, e.g.,., construction phase of	Mitigations which have been integrated into the SC-DMAP to avoid significant adverse cumulative effects include: UN1 to UN 3 which require developers of proposed ORE projects in the Maritime Areas to minimise the risk of disturbance on biodiversity and the cumulative effects of underwater noise; to demonstrate that they have had regard to guidance relating to underwater noise including DAHG Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters and updates thereof; and to implement the most effective techniques available to industry for noise abatement such as adjusting the parameters of pile stroke, soft-start piling activities, avoiding piling in periods of ecological importance, delaying piling if mammals are spotted, or using acoustic deterrent devices or sound barriers where appropriate to, in order of preference, avoid, minimise or mitigate likely significant adverse effects on marine fauna.

Receptor	Cumulative Effect Pathways	Assessment	Discussion and Mitigations
		one concurrently running with operational phase of another.	Other key policies within the SC-DMAP to avoid significant adverse cumulative effects on this receptor include OEP 1 which requires applications for ORE developments to include, where relevant, the management plans listed in Appendix C, specifically a Marine Mammal and Megafauna Mitigation Plan and a Marine Megafauna: Vessel Code of Conduct will be developed during the construction of the offshore infrastructure. MS 1 requires that applications brought forward in the SC-DMAP must consider up to date understanding of baseline conditions. It further requires that applications brought forward for Maritime Areas B, C and D must incorporate relevant data from the Regional Level Surveys (RLS). This up-to-date baseline shall inform the requisite statutory environmental assessments at project level (which may include EIA and/or AA) including cumulative and in-combination assessment. MI 1 requires that proposed projects should use data made available through the GIS Data Repository to support project level environmental assessments. This will include data provided by Regional Level Surveys, as well as other relevant data sets added to the repository to inform a better understanding of baseline conditions.
Offshore Ornithology	• Disturbance and displacement • Collision risk	The species likely to be affected are the Special Conservation Interests (SCI) of the relevant EU sites identified within the Zone of Influence (ZoI) in the NIS and SEA Chapter 8. These include Irish wintering, breeding and residential SCI Birds, European migrating SCI Birds and Foraging SCI Pelagic seabirds.	Mitigations which have been integrated into the SC-DMAP to avoid significant adverse cumulative effects include: MS1 requires that applications brought forward in the SC-DMAP must consider up to date understanding of baseline conditions. It further requires that applications brought forward for Maritime Areas B, C and D must incorporate relevant data from the Regional Level Surveys (RLS). This up-to-date baseline shall inform the requisite statutory environmental assessments at

Receptor	Cumulative Effect Pathways	Assessment	Discussion and Mitigations
			project level (which may include EIA and/or AA) including cumulative and in-combination assessment. MI 1 requires that proposed projects should use data made available through the GIS Data Repository to support project level environmental assessments. This will include data provided by Regional Level Surveys, as well as other relevant data sets added to the repository to inform a better understanding of baseline conditions. Appendix B lists the Pre-consent Surveys which will typically be required to support an ORE application, specifically surveys to determine temporal and spatial abundance, distribution and density (where data allows) of bird species within the offshore infrastructure study area. This data would inform baseline characterisation for the various projects and would be used to inform EIA chapters and the AA Screening and Natura Impact Statement undertaken as part of the AA process. At the project level, a cumulative offshore ornithology study area will be defined based on the project parameters and the key species. A Marine Ornithology Monitoring Strategy would also be developed to monitor the species post-construction as required through Policy Objective OEP 1 and as one of the management plans for ORE project planning applications referenced under SC-DMAP Appendix C.
Shipping and Navigation	• Presence of Project devices and cables underwater may lead to snagging and damage to anchors and/or fishing gear. • Presence of project-related vessels transiting to and from their marshalling harbour and operational base, and displacement of vessels from the offshore wind farm area, may increase collision risk.	A cumulative increase in vessel traffic (at the port and between the base location and array area is anticipated which may increase the risk of collision. However, this increase is considered to be minimal and will have no discernible cumulative impact on navigational safety. The cumulative impact associated with vessel traffic and underwater cables will be assessed in detail through a navigational risk assessment prior to	Mitigations which have been integrated into the SC-DMAP to avoid significant adverse cumulative effects include: S1 to S3 which include a requirement for project Navigation Risk Assessments (NRA) to inform the design and location of projects and in compliance with national and international best standard guidance on safe distance between shipping and ORE infrastructure. To support project applications to prepare robust NRAs, an implementation action of the Plan under S 3 is to conduct a GIS shipping density mapping analysis,

Receptor	Cumulative Effect Pathways	Assessment	Discussion and Mitigations
		construction which will consider current and future baseline conditions.	based on at least 12 months data, prepared and made accessible via the data repository. Further, S 1 requires consultation with local/regional port and harbour authorities and the Marine Survey Office prior to submitting planning or licence applications. Other key policies within the SC-DMAP to avoid significant adverse cumulative effects on this receptor include Appendix B which lists the Pre-consent Surveys which will typically be required to support an ORE application, specifically a Vessel Traffic Survey to provide evidence base to determine commercial, fishing, recreational and all other vessel activity within the array area and export cable corridor.
Aviation	• Encroachment on approach corridors	The approach corridor to Waterford Airport overlaps with Maritime Areas A and B; while the approach height means there would be no interaction with this zone.	An Aviation and Radar Assessment (ARA) will be undertaken for any proposed ORE developments in the four Maritime Areas. This will include consultation with airport operators to determine any design parameters and embedded mitigations to ensure compliance with IAA requirements e.g. lighting, obstacle identification and marking etc.
Marine archaeology	• Removal or disturbance of near surface seabed sediments leading to effects on prehistoric land surfaces, wreck sites and artefacts • Removal or disturbance of deeply buried sediments leading to effects on prehistoric land surfaces • Disturbance of sediment causing sediment deposition on the seabed resulting in potential effects on archaeological receptors • Alteration of sediment transport regimes	The cumulative impact on marine archaeology will be assessed at the project level based upon data confidence, effect-receptor pathways and the spatial/temporal scales of the other projects involved.	Mitigations which have been integrated into the SC-DMAP to avoid significant adverse cumulative effects include: AH 1 which requires that developers comply with the National Monuments Act as amended, the Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 and have regard to guidance of the National Monuments Service including Frameworks and Principles for the Protection of the Archaeological Heritage for assessment(s) to avoid or mitigate impacts on marine archaeological and cultural heritage features. It also requires early consultation with the Underwater Archaeology Unit of the National Monuments Service; engagement of qualified archaeologist(s) to prepare assessments; and compliance with all relevant licencing

Receptor	Cumulative Effect Pathways	Assessment	Discussion and Mitigations
			procedures including geophysical survey licences, dive survey licences and detection device consents. Other key policies within the SC-DMAP to avoid significant adverse cumulative effects on this receptor include Appendix B which lists the Pre-consent Surveys which will typically be required to support an ORE application, specifically geophysical and geotechnical surveys to provide archaeological data to support marine archaeology and cultural heritage EIA chapters.
Recreation	• Displacement of recreational sailing and motor cruising, recreational fishing (boat angling) and other recreational activities (diving vessels), resulting in a loss of recreational resource • Displacement of recreational fishing (shore angling) and other recreational activities (kayaking, kite surfing, surfing and windsurfing, sea swimming and beach users) along the nearshore and intertidal section of the offshore cable corridor resulting in a loss of recreational resource	Array areas are located out-with the normal tourism and recreational areas which typically occur within 5km (2.6NM) from shore. There is potential for temporary disturbance during the installation phase of export cables at selected/discrete points along the coastline. However, this impact is likely to be of local spatial extent, short to medium term duration, intermittent and highly reversible.	Implementation of the SC-DMAP will include cross sectoral collaboration through the Implementation Body and different technical working groups for effective plan implementation and monitoring which will include the Local Authorities and relevant state agencies. This will include the effective implementation of Policy Objective T 1 which states the Plan supports and facilitates coexistence between ORE development and the tourism sector. Furthermore, public consultation will be carried out by prospective developers of ORE, transmission system infrastructure projects and MAC holders within the SC-DMAP area, as part of the process to determine the proposed location and specification of ORE and transmission infrastructure within each of the Maritime Areas and the SC-DMAP area as part of the project stage planning processes. In addition to SC-DMAP support for community engagement, the establishment of mandatory community benefit fund scheme(s) by ORE developers will provide opportunities for local coastal communities playing their part in Ireland's renewable energy transition. Mitigations which have been integrated into the SC-DMAP to avoid significant adverse cumulative effects include:

Receptor	Cumulative Effect Pathways	Assessment	Discussion and Mitigations
			CE 1 which requires ORE developers' continued engagement with South Coast stakeholders, including local coastal communities and fishers, holders of a MAC in the SC-DMAP Maritime Areas shall prepare and publish a Public Engagement Plan

Table 8-2: Cumulative Assessment in Relation to SEO

SEA Environmental Objective(s)	Assessment
Population and Human Health (PHH)	
To ensure bathing waters are not prevented from achieving excellent status as a result of the SC-DMAP	WFD applies out to 1NM. All 4 Maritime Areas are beyond this distance. Project specific modelling will be required for potential sediment plumes based off number of turbines, type, placement, and installation methods as projects progress. Impacts are likely to be temporary in nature, at worst minimal to negligible in the inshore coastal waterbodies. The 4 sites will not be built out in parallel so potential for temporal overlap is reduced. Neutral for cumulative effects.
To ensure the quality standards for water quality in shellfish water are not compromised as a result of the SC-DMAP	All 4 Maritime Areas are beyond a minimum of 12 km from shore at their closest point. Any potential windfarm will not directly interact with any designated shellfish waters. Project specific modelling will be required for potential sediment plumes based off number of turbines, type, placement, and installation methods. Impacts are likely to be temporary in nature, at worst minimal to negligible in the inshore coastal waterbodies. The routing and installation methods of the export cables is currently unknown however, existing aquaculture sites and areas that have been designated for shellfish waters can be avoided through careful routing. Neutral to Unknown for cumulative effects.
To maintain access to the coastal and marine resource for tourism and recreation.	Array areas are located out with the normal tourism and recreational areas which typically occur within 5km/ 2.6NM from shore). There is potential for temporary disturbance during the installation phase of the export cable at selected/discrete points along the coastline Neutral for cumulative effects.
To avoid significant disruption, disturbance or nuisance to local communities	The increased development and rollout of offshore renewable energy will have cumulative direct and indirect positive impacts for communities and employment, via enhanced requirement for local services e.g. lodging, food etc. and the requirement for local skill labour. Some cumulative indirect negative effects are possible as a result of the change to the local seascape and landscape resulting from the supporting transmission infrastructure both offshore and onshore which will be required to connect the offshore windfarms. Positive with some Negative for cumulative effects without mitigation.
Biodiversity, Flora and Fauna (BFF)	
Preserve, protect, maintain and where appropriate restore marine biodiversity (and terrestrial aspects on which the marine biodiversity is reliant), particularly EU designated sites and protected species.	None of the four Maritime Areas overlap directly with any European site following the constraints analysis undertaken to inform the identification of the sites. This has contributed significantly to reducing the risk for cumulative effects. Notwithstanding, avoidance of direct effects, there does remain the potential for indirect impacts through disturbance from noise and vibration during the site investigation surveys, construction phase and maintenance which will also include the physical presence of more vessels. Phasing of development in the four Maritime Areas will reduce the potential for temporal overlap which could result in cumulative effects negative

SEA Environmental Objective(s)	Assessment
	on BFF. ORE developments on all four areas may cumulatively impact on migratory and foraging patterns of marine mammals, fish, birds. This would have to be modelled on a project specific level. Negative for cumulative effects without mitigation
Avoid, minimise or mitigate disturbance impacts on mobile species, within or reliant on the marine area, resulting from SC-DMAP	Mobile species such as marine mammals, basking shark, turtles and other megafauna are known/ have been previously sighted transiting through the wider area including all four Maritime Areas identified. The areas are also within a known nursery/spawning ground for a variety of commercially valuable fish species (but not the hearing sensitive herring). Negative for cumulative effects without mitigation.
Safeguard space for the natural marine environment to enable continued provision of ecosystem goods and services within the SC-DMAP area	Constraints analysis undertaken to inform the identification of the sites has included consideration of ecosystem goods and services including fisheries, designated sites, water quality, recreation and heritage. Features have been avoided to the extent possible at the plan scale however some impacts are possible which will require further consideration at project scale through micro-siting. Due to the density of marine wrecks, use of the area by marine mammals, megafauna, pelagic species, and commercial fisheries interaction with these features will be unavoidable. Negative for cumulative effects without mitigation.
Contribute to achieving the environmental objectives under the MSFD and the WFD	WFD extends out 1NM from the shore - no overlap with any of the four Maritime Areas directly. Under the MSFD, there are 11 descriptors for achieving or contributing to environmental objectives. Short term temporary negative impacts are likely to arise during the site-specific survey stages, and during wind farm construction, with limited potential for impacts arising from the operation and maintenance phases. The installation of fixed wind turbines will result in a cumulative permanent change to the seabed morphology, hydrographical conditions, and also to cumulative habitat loss/alteration to marine biodiversity. The presence of windfarms may (with time and protections) for fish and shellfish species providing a pseudo nursery area where they can proliferate which would have a knock-on positive effect for marine biodiversity, food webs and seabed integrity. There would also be a cumulative positive impact towards climate change.
Maintain and protect marine protected areas and ensure integrity of the network is not impacted as a result of the SC-DMAP	None of the four sites overlap with any designated sites. Cumulative indirect effects on mobile species are still a potential. There are currently no designated MPAs in Irish waters. Neutral to negative without mitigation.
Land & Soils/ Sediment (LS)	
Maintain the integrity of marine processes for the protection of coastal habitats and places within and influenced by the SC-DMAP.	Array areas will not interact with the intertidal and or coastal habitats. Export cable installation routes will likely be installed via, burial, HDD and or have armour protection. Exact routes and installation method proposed are unknown. Uncertain for cumulative effects.
Protect the quality and character of the seabed and its sediments and avoid significant effects on seabed morphology and sediment transport processes.	Potential cumulative effects to tidal currents, wave climate and sediment transportation. This will have to be modelled on a project specific basis as it will be influenced by number of turbines, fixed turbine type (e.g., monopile, tripod, gravity base, jacket) and layout of the ORE farms.
Water (W)	
Contribute to achieving the objectives under the MSFD and the WFD i.e. achievement or maintenance of Good Environmental Status (GEnS) and Good Ecological Status (GEcS).	WFD extends out 1NM from the shore- no overlap with any of the four Maritime Areas. Neutral for cumulative effects.

SEA Environmental Objective(s)	Assessment
Protect, maintain, and where possible improve status of classified water bodies within the Plan area in line with requirements of the WFD and MSFD.	WFD extends out 1NM from the shore- no overlap with any of the four Maritime Areas. Neutral for cumulative effects.
Avoid pollution of the coastal and marine environment	It is assumed that all vessels will be fit for purpose, certified and capable of safely undertaking all required survey work. Marine vessels will be governed by the provisions of the Sea Pollution Act 1991, as amended, including the requirements of MARPOL. In addition, all vessels will adhere to published guidelines and best working practices such as: the National Maritime Oil/HNS Spill Contingency Plan (NMOSCP), Marine Pollution Contingency Plan (MPCP), Chemicals Act 2008 (No. 13 of 2008), Chemicals (Amendment) Act 2010 (No. 32 of 2010) and associated regulations. Vessels shall have a Health, Safety and Environmental Managements system which should conform to the requirements of the latest International Maritime Organization (IMO), Safety of Life at Sea (SOLAS) and environmental requirements for their classification and with any national requirement of the territorial or continental / EEZ waters to be operated in.in the event of a spill the appropriate authorities will be notified and the appropriate action to clear the spill up will be undertaken. Neutral for cumulative effects.
Reduce marine litter resulting from terrestrial and marine dumping	Marine little and dumping are governed by legislative and administrative controls. Neutral for cumulative effects.
Minimise generation and propagation of manmade noise within the marine environment.	Marine mammals and megafauna known to traverse all four areas. Disturbance to marine mammals and fish from underwater noise during pile-driving activities associated with installation of the turbine foundations and cables is possible and cumulative effects are possible if there is temporal overlap however phasing of development within the four areas is proposed therefore this overlap is removed. Neutral for cumulative effects. In addition, standard mitigations would apply, i.e. Marine Mammal Mitigation Plan to include proposals for soft start to piling, adoption of Codes of Conduct for vessel operators, and consideration towards the use of bubble curtains during installation/construction to reduce potential for noise disturbance and underwater noise propagation.
Promote energy transmission technologies and configurations which seek to minimise EMF within the marine environment.	Potential for cumulative effects from EMF arising from e.g. inter-array cabling and other infrastructure. Possible indirect cumulative negative impacts on BFF as potential to impact migration routes for example. Negative for cumulative effects without mitigation. Standard mitigation would include Cable Burial Risk Assessment to inform cable installation and reduce the potential for EMF on shark and other sensitive species.
Air Quality (AQ)	
Avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air, including transboundary considerations.	Cumulative positive long-term effects as reducing fossil fuel use and allowing transition to low / no carbon. Positive for cumulative effects.
Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency.	Cumulative positive long-term effects as reducing fossil fuel use and allowing transition to low / no carbon. Positive for cumulative effects.
Avoid adversely impacting on air quality, with particular regard to known existing concentrations of transport and industrial related pollution close to the coast.	Cumulative positive long-term effects as reducing fossil fuel use and allowing transition to low / no carbon. Positive for cumulative effects.
Climatic Factors (C)	

SEA Environmental Objective(s)	Assessment
Minimise existing and avoid new emissions of greenhouse gases across all sectors.	Cumulative positive long-term effects. This will contribute to the wider Government objectives of achieving up to 80% renewable electricity and a 51% reduction in greenhouse gas emissions by the end of this decade, and the longer-term objective of delivering a net zero economy by 2050. Positive for cumulative effects.
Decrease the usage of fossil fuels and increase renewable energy usage.	Cumulative positive long-term effects This will contribute to the wider Government objectives of achieving up to 80% renewable electricity and a 51% reduction in greenhouse gas emissions by the end of this decade, and the longer-term objective of delivering a net zero economy by 2050. Positive for cumulative effects.
Reduce the environmental, social and economic vulnerability to the impacts of climate change and/or improve resilience to climate and coastal change	Cumulative positive long-term effects This will contribute to the wider Government objectives of achieving up to 80% renewable electricity and a 51% reduction in greenhouse gas emissions by the end of this decade, and the longer-term objective of delivering a net zero economy by 2050. Positive for cumulative effects.
Material Assets (MA)	
Contribute to transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050	Cumulative positive long-term effects This will contribute to the wider Government objectives of achieving up to 80% renewable electricity and a 51% reduction in greenhouse gas emissions by the end of this decade, and the longer-term objective of delivering a net zero economy by 2050. Positive for cumulative effects.
Address conflicts with other environmental protection objectives.	To the extent possible, the constraints analysis performed to identify the four areas has avoided known conflicts with environmental protection objectives and the application of SEA and AA to the plan has addressed this further. Efforts will be made at project scale and through EIA and AA of any projects to further reduce conflicts. Neutral for cumulative effects but will require project level mitigation.
Support marine material assets (including fisheries, shellfish, military activity and infrastructure) and resources by maximising opportunities for co-location and co-benefits.	The four areas to a large extent avoid interaction with the majority of marine material assets with the exception of a limited number of oil and gas infrastructure, partial overlap with shipping and navigation routes and interaction with some scallop areas. Cumulatively the impacts are considered to be minor negative and mitigation through use of buffer zones and micro-siting can reduce conflict further at project scale.
Ensure continuity and safety of navigation (marine and air).	Low to moderate cumulative negative effects on shipping as the four areas are developed through displacement and increased collision risk. Ongoing consultation required. Constraints has avoided main shipping as far as possible.
Cultural Heritage (CH)	
Protect places, features, buildings and landscapes of cultural, historical archaeological or architectural heritage.	Cumulative risk to known and unknown wrecks across the 4 Maritime Areas. Total of 98 recorded wrecks identified in desk study. The project level will identify any wrecks of historic importance. Proposed mitigation of 250m buffer around all wrecks at project stage to account for fragmentation of the wreaks. Exact location of wrecks will be confirmed through non-invasive sight investigation techniques e.g., geophysical and magnetometry, with divers used to confirm extent. All information will be shared with the National Monuments Service.
Protect the site and setting of marine and coastal historic environment features.	
Protect known wrecks and historic and cultural features within the DMAP area.	
Incorporate opportunities to enhance cultural/historic knowledge and understanding.	

SEA Environmental Objective(s)	Assessment
Landscape / Seascape (LandSeaS)	
Protect and maintain landscape and seascape character and visual amenity, including geo-heritage	Marine Area A is located within 12nm line (22km) however the remaining three sites are located beyond the 12nm line/ 22km from shore and further. The height number and layout of the windfarms would have to be modelled at a project level to determine significance of effect but cumulative change to seascape would be expected.
Recognise and respect the value of wider (non-designated) landscapes and seascapes.	Cumulative change to wider (non-designated) landscapes and seascapes as a result of the SC-DMAP expected, particularly with regard to indirect effects from supporting grid, port and other non-grid infrastructure in the longer term.

Table 8-3: Summary of Cumulative Effects with other Key Irish Offshore Plans and Projects

Cumulative with.	Cumulative Effect Pathways with SC-DMAP…	Discussion and Mitigations
Offshore Renewable Energy Development Plan I Published in 2014, OREDP I, , sets out key principles, policy actions and enablers for delivery of Ireland's significant potential in this area. The plan provided a non-statutory framework for the sustainable development of Ireland's offshore renewable energy resources. Prior to the adoption by Government of a plan-led approach to post Phase One ORE development in 2023, this plan informed the State's policy approach to achieving 5 GW of ORE by 2030, mostly through fixed-bottom wind turbines in relatively shallow waters off the east and southeast coasts. A draft OREDP II was prepared in 2023 and was intended to provide a high-level framework for the long-term, sustainable and planned development of Ireland's immense wind, wave and tidal renewable energy resources. This sectoral plan was not approved due to prioritization of statutory spatial plans in accordance with the provisions of Part 2 of the Maritime Area Planning Act. Plans prepared in accordance with the MAP Act have a statutory footing and therefore applications for development in the maritime area will be assessed in accordance with the policy and objectives of these plans. It is Government policy that all ORE development shall only be considered in areas that have been identified for this purpose through the establishment of Designated Maritime Area Plans.	It is noted that the OREDP I considered the development potential of areas along the south coast for OWE and as such the SC-DMAP is consistent with this sectoral plan. The OREDP I also address other technologies outside of fixed wind. The plan was subject to SEA and AA. Cumulative pathways for impact between the SC-DMAP and the OREDP are: • Increased development of Irish offshore renewable energy resources and indigenous production of renewable electricity • Reductions in greenhouse gas emissions and achievement of climate targets • Improved security of our energy supply • Decrease in polluting air emissions from use of fossil fuels • Economic benefits from construction / operation jobs in the green economy • Habitat loss or destruction; fragmentation or degradation; • Increased collision risk; species mortality; • Disturbance to habitats/species e.g. from underwater noise; • Alterations to water quality and/or water movement; • Introduction or spread of invasive species;	Mitigations identified in the OREDP I include improved data collection, monitoring, guidance and project level assessment, all consistent with the approach presented in the SC-DMAP. No significant adverse cumulative effects identified.

Cumulative with.	Cumulative Effect Pathways with SC-DMAP…	Discussion and Mitigations
	• Economic losses to other maritime industries e.g. constraints on shipping channels; • Visual intrusion; • Recreational curtailments.	
National Marine Planning Framework (2021) The National Marine Planning Framework (NMPF) brings together all marine-based human activities for the first time, outlining the Government's vision, objectives, and marine planning policies for each marine activity. The NMPF now sits within a fully revised marine planning system which aligns with the terrestrial planning system, including a hierarchy of plan and project level assessments and consents to ensure a cascade of environmental protection.	The NMPF sets the framework under which the SC-DMAP has been developed. The SC-DMAP must be consistent with the NMPF including the overarching environmental protection objectives as well as those focussed on offshore energy (ORE Policies 1-11). The plan was subject to SEA and AA. As the DMAP is a sub-national plan to the NMPF and is governed by it, it does not have cumulative effects in terms of ORE, however the cumulative effects with other sectors identified in the NMPF remain valid for the SC-DMAP, notably: • Economic benefits from construction / operation jobs in the green economy; • Improved potential for co-location of marine activities; • Habitat loss or destruction; fragmentation or degradation; • Increased collision risk; species mortality; • Disturbance to habitats/species e.g. from underwater noise; • Alterations to water quality and/or water movement; • Introduction or spread of invasive species; • Economic losses to other maritime industries e.g. constraints on shipping channels; • Visual intrusion; • Recreational curtailments.	The NMPF was subject to SEA and AA and included a comprehensive mitigation strategy as well as a robust environmental protection policy base. Once the SC-DMAP is approved, it becomes part of the NMPF and as such its policies are directly applicable. Avoidance remains the mitigation strategy of preference and this has been applied through the constraints mapping approach applied to the SC-DMAP. Minimise e and mitigate are then engaged and this has been achieved through the policy objectives covering shipping, fisheries, protected areas etc. in the SC-DMAP. As such, no significant adverse cumulative effects identified.
EirGrid Grid Implementation Plan 2023-2028 EirGrid's Grid Implementation Plan 2023-2028 provides the vision for grid development set out in EirGrid 's Grid Development Strategy the Shaping Our Electricity Future Report and the Transmission Development Plan (TDP)	Cumulative pathways for impact between the SC-DMAP and offshore grid are: • Increased development of Irish offshore renewable energy resources and indigenous production of renewable electricity;	Offshore and onshore transmission system infrastructure, including offshore sub-stations and export cables will be developed by EirGrid. Their Grid Implementation Plan 2023-2028 was subject to SEA and AA. The assessment determined that, in general, there were no anticipated

Cumulative with.	Cumulative Effect Pathways with SC-DMAP…	Discussion and Mitigations
2021- 2030. They in turn seek to outline a blueprint for a secure transition to deliver the renewable ambition for 2030 for the electricity sector articulated at an EU and national policy level. It recognises the Government policy for a plan led approach for Phase 2 projects in order to support the transition to increased levels of renewable energy. This plan led approach will require EirGrid to deliver offshore substation and cabling infrastructure and onshore connection.	• Reductions in greenhouse gas emissions and achievement of climate targets; • Improved security of our energy supply; • Decrease in polluting air emissions from use of fossil fuels; • Economic benefits from construction / operation jobs in the green economy; • Habitat loss or destruction; fragmentation or degradation; • Disturbance to habitats/species e.g. from underwater noise; • Alterations to water quality and/or water movement; • Introduction or spread of invasive species; • Economic losses to other maritime industries e.g. fisheries • Visual intrusion • Recreational curtailments.	significant cumulative or in-combination effects when inherent mitigation is assumed, notably application of statutory requirements including associated assessments such as Environmental Impact Assessment (EIA), EirGrid's in-house processes and procedures such as the project guidelines and the six-step framework for Grid development and application of best practice construction requirements. Offshore and onshore grid related infrastructure projects to support SC-DMAP will be subject to the relevant provisions of the EU EIA Directive and EU Habitats Directive. Any such infrastructure will be subject to a formal planning process. In the case of the Appropriate Assessment the projects can only be consented subject to the provisions of Article 6 and, specifically, 6(3) and if necessary 6(4) being complied with. Robust planning and environmental assessment at the project stage for transmission infrastructure is provided for in the SC-DMAP through Policy Objectives OEP 2 and ETS 1-3. Land and Sea Interactions Policy Objective LS1 supports the sustainable development on on-shore transmission infrastructure that will connect with offshore grid infrastructure. Furthermore it is noted that the SC-DMAP explicitly includes for a Technical Working Group which will include key stakeholders such as MARA, EirGrid, SC-DMAP MAC holders and the Department of Transport (ports). This is to ensure coordination of key elements of the infrastructure delivery and ensure data sharing and exchange which will inform project level cumulative assessments.
National Ports Policy 2013 (draft update in preparation) and draft Policy Statement on the Facilitation of Offshore Renewable Energy by Commercial Ports in Ireland	Cumulative pathways for impact between the SC-DMAP and ports are: • Economic benefits from construction / operation jobs in the economy;	The primary function of Ireland's ports is to facilitate maritime transport but there is potential for a significant role in facilitating the development of the Irish offshore renewable energy sector. This may require upgrades,

Cumulative with.	Cumulative Effect Pathways with SC-DMAP…	Discussion and Mitigations
Ports are an essential facilitator in achieving the ORE targets at EU and national level. Recognising this a Policy Statement on the Facilitation of Offshore Renewable Energy by Commercial Ports in Ireland was published by government in 2021. This bridges the gap between the earlier National Ports Policy 2013 (NPP) and the upcoming review in 2024. The 2013 policy categorised ports in terms of national significance and provided a planning hierarchy including Tier 1, 2 and 3 ports. Within the SC-DMAP area, Port of Cork is identified as a Tier 1 Port, Waterford and Rosslare Ports are both Tier 2 Ports.	• Habitat loss or destruction; fragmentation or degradation in both marine and terrestrial setting; • Increased collision risk; species mortality; • Disturbance to habitats/species e.g. from underwater noise; • Alterations to water quality and/or water movement; • Introduction or spread of invasive species; • Economic losses to other maritime industries e.g. fisheries; • Visual intrusion; • Recreational curtailments.	expansions and / or intensification of activities. It is recognised in the NPP that ports operate in a unique setting at the interface between terrestrial and marine and additionally are often adjacent to or overlapping with designated biodiversity areas. The policy recognises the importance of robust planning systems – something which has now been overhauled and launched through the MAP Act of 2021. This new statutory planning regime better aligns terrestrial and marine stakeholders and considerations and ensures consistency in decision making. The SC-DMAP explicitly includes for a Technical Working Group which will include key stakeholders such as MARA, EirGrid, SC-DMAP MAC holders and the Department of Transport (ports). This is to ensure coordination of key elements of the infrastructure delivery and ensure data sharing and exchange which will inform project level cumulative assessments. Furthermore the SC-DMAP explicitly qualifies its support for sustainable port and harbour infrastructure development as being subject to the carrying out of the requisite statutory environmental assessments at Plan and/or project level (which may include SEA, EIA and/or AA) and the outcome of planning and / or licensing processes as relevant. It also includes the need to implement the guidance document on the implementation of the Birds and Habitats Directive in estuaries and coastal zones with particular attention to port development and dredging published by the European Commission (2011). Land and Sea Interactions Policy Objective LS1 supports the sustainable development of supporting on-shore infrastructure such as ports that will facilitate provision of offshore grid infrastructure.

Cumulative with.	Cumulative Effect Pathways with SC-DMAP…	Discussion and Mitigations
Phase 1 Project submitted for Planning - Oriel Wind Farm Project located off the coast of County Louth. The project will have a maximum export capacity of 375MW and proposes both onshore and offshore infrastructure including 25no. fixed bottom wind turbines. A planning application for the project is currently being determined by An Bord Pleanála.	Potential for cumulative effects with SC-DMAP plans or projects; in particular with respect to cetaceans, ornithology and freshwater pearl mussel as there is potential overlap in zones of influence with the project for these species.	An EIAR and NIS has been prepared and published to inform the project[10]. The cumulative assessment has considered the SC-DMAP and also the other relevant Phase 1 offshore wind projects subject to MACs including Arklow Bank Wind Park (Phase 2), NISA, Codling Wind Park and Dublin Array. The CEA for the project is stated as being prepared in collaboration with these other projects. No significant adverse cumulative effects were noted in the EIAR in relation to the SC-DMAP. Similarly, the NIS concludes that, subject to the mitigation measures identified, that the project will have no adverse effects on the integrity of European sites either alone or in-combination with other plans or projects. In light of the above and recognising that no consent has yet been granted or refused for this project, it is not considered that adverse cumulative or in-combination effects will occur as a result of this project and SC-DMAP; particularly due to the legal compliance required prior to consenting of the Oriel Wind Farm Project and the provisions of the Policy Objectives set out in the SC-DMAP.
Phase 1 Project submitted for Planning - Arklow Bank Wind Park 2 located off the coast of County Wicklow. The project proposes both onshore and offshore infrastructure including either 56no. or 47no. fixed bottom wind turbines. A planning application for the project is currently being determined by An Bord Pleanála.	Potential for cumulative effects with SC-DMAP plans or projects; in particular with respect to cetaceans, ornithology and freshwater pearl mussel as there is potential overlap in zones of influence with the project for these species.	An EIAR and NIS has been prepared and published to inform the project[11]. The cumulative assessment has considered the SC-DMAP and also the other relevant Phase 1 offshore wind projects subject to MACs. Oriel, NISA, Codling Wind Park and Dublin Array. The CEA for the project is stated as being prepared in collaboration with these other projects. No significant

[10] Oriel Wind Farm Project NIS (orielwindfarm-marineplanning.ie)

[11] Environmental Impact Assessment Report (EIAR) | Arklow Bank Wind Park 2 (arklowbank2offshoreplanning.ie)

Cumulative with.	Cumulative Effect Pathways with SC-DMAP…	Discussion and Mitigations
		adverse cumulative effects were noted in the EIAR in relation to the SC-DMAP. Similarly, the NIS concludes that, subject to the mitigation measures identified, that the project will have no adverse effects on the integrity of European sites either alone or in-combination with other plans or projects. In light of the above and recognising that no consent has yet been granted or refused for this project, it is not considered that adverse cumulative or in-combination effects will occur as a result of this project and SC-DMAP; particularly due to the legal compliance required prior to consenting of the Arklow Bank Wind Part 2 project and the provisions of the Policy Objectives set out in the SC-DMAP.
Phase 1 Project submitted for Planning - North Irish Sea Array (NISA) Offshore Wind Farm located off the coasts of Counties Dublin, Meath and Louth. The project proposes both onshore and offshore infrastructure including either 49no. or 35no. fixed bottom wind turbines. A planning application for the project is currently being determined by An Bord Pleanála.	Potential for cumulative effects with SC-DMAP plans or projects; in particular with respect to cetaceans, ornithology and freshwater pearl mussel as there is potential overlap in zones of influence with the project for these species.	An EIAR and NIS has been prepared and published to inform the project[12]. The cumulative assessment has considered the SC-DMAP and also the other relevant Phase 1 offshore wind projects subject to MAC including Oriel, Arklow Bank Wind Park (Phase 2), Codling Wind Park and Dublin Array. The CEA for the project is stated as being prepared in collaboration with these other projects. No significant adverse cumulative effects were noted in the EIAR in relation to the SC-DMAP. Similarly, the NIS concludes that, subject to the mitigation measures identified, that the project will have no adverse effects on the integrity of European sites either alone or in-combination with other plans or projects.

[12] North Irish Sea Array SID

Cumulative with.	Cumulative Effect Pathways with SC-DMAP…	Discussion and Mitigations
		In light of the above and recognising that no consent has yet been granted or refused for this project, it is not considered that adverse cumulative or in-combination effects will occur as a result of this project and SC-DMAP; particularly due to the legal compliance required prior to consenting of the NISA Offshore Wind Farm project and the provisions of the Policy Objectives set out in the SC-DMAP.
Phase 1 Project submitted for planning - Codling Wind Park located off the coast of County Wicklow. The project will generate up to 1.3MW of electricity through the provision of fixed-bottom turbines. It is understood that the project will propose both onshore and offshore infrastructure. A planning application for the project is currently being determined by An Bord Pleanála.	Potential for cumulative effects with SC-DMAP plans or projects; in particular with respect to cetaceans, ornithology and freshwater pearl mussel mindful of potential zones of influence overlapping with the Project	The cumulative assessment has considered the SC-DMAP and also the other relevant Phase 1 offshore wind projects subject to MAC including Oriel, Arklow Bank Wind Park (Phase 2), NISA, and Dublin Array. The CEA for the project is stated as being prepared in collaboration with these other projects. No significant adverse cumulative effects were noted in the EIAR in relation to the SC-DMAP. Similarly, the NIS concludes that, subject to the mitigation measures identified, that the project will have no adverse effects on the integrity of European sites either alone or in-combination with other plans or projects. In light of the above and recognising that no consent has yet been granted or refused for this project, it is not considered that adverse cumulative or in-combination effects will occur as a result of this project and SC-DMAP; particularly due to the legal compliance required prior to consenting of the Codling Offshore Wind Farm project and the provisions of the Policy Objectives set out in the SC-DMAP.
Phase 1 Projects on the East coast submitted for Planning - not yet submitted for planning. • **Dublin Array** located off the coast of Counties Dublin and Wicklow. The project includes the provision of between 39 and 50 fixed-bottom turbines.	Potential for cumulative effects with SC-DMAP plans or projects; in particular with respect to cetaceans, ornithology and freshwater pearl mussel as there is potential overlap in zones of influence with the projects for these species.	The project will be subject to the provisions of the EU EIA Directive and EU Habitats Directive and will be informed by the preparation of and EIAR and NIS. The project will be subject to a formal planning process. In the case of the Appropriate Assessment the projects can only be consented subject to the provisions of Article 6 and, specifically, 6(3) and if required 6(4) being complied with

Cumulative with.	Cumulative Effect Pathways with SC-DMAP…	Discussion and Mitigations
		Given this compliance, it is not considered that any in-combination effects from this project and SC-DMAP will arise.

Table 8-4: Summary of Cumulative Effects with other UK Offshore Plans / Projects

Cumulative with.	Cumulative Effect Pathways	Discussion and Mitigations
UK South West Inshore and South West Offshore Marine Plan (June 2021)[13] The South West Marine Plan introduced a strategic approach to planning within the English inshore and offshore waters between the Severn Estuary border with Wales and the River Dart in Devon. It helps to deliver at a regional level the high level marine objectives set out in the UK Marine Policy Statement; as detailed above. The South West Marine Plan is stated as providing a clear, evidence-based approach to inform decision making by the marine users and regulators on where, when or how activities might take place within the Marine Plan area. The Plan includes policies in relation to renewable energy, cables, biodiversity and climate change.	Cumulative pathways for impact between the SC-DMAP and the UK South West Inshore and South West Offshore Marine Plan include: • Habitat loss or destruction; • Habitat degradation; • Habitat Rehabilitation / Enhancement; • Habitat/species fragmentation; • Disturbance to key species; • Changes to favourable conservation status of key species; • Changes in key indicators of conservation value (water quality etc); • Climate change. The Marine Plan was subject to a sustainability appraisal which identified significant positive effects of the South West Marine Plan, mainly in relation to economic effects and the support given for certain communities or industries such as tourism. Negative effects identified related to the need for further assessment and clarification at lower tier plans and projects e.g. further assessment through the EIA process. Much of the mitigation proposed by the sustainability appraisal was integrated into the final plan. Habitats Regulations	The UK South West Inshore and South West Offshore Marine Plan addressed significant negative effects as part of the SA and HRA processes applied. It acknowledges the need for lower tier plans and projects to be subject to further assessment, including AA and EIA. There is no potential for cumulative effects with the draft SC-DMAP; recognising that this will need to also be considered by any project-level assessment completed for projects emerging from the draft SC-DMAP.

[13] https://assets.publishing.service.gov.uk/media/60f6f71ce90e0764cfc22a78/FINAL_South_West_Marine_Plan__1_.pdf

Cumulative with.	Cumulative Effect Pathways	Discussion and Mitigations
	Assessment (HRA)[14], was also carried out and concluded that, subject to the mitigation measures identified through the HRA, the Marine Plan would not result in any adverse effects on the integrity of any European site.	
Welsh National Marine Plan (November 2019)[15] The Welsh National Marine Plan for the inshore and offshore Welsh marine plan regions has been prepared in conformity with the UK Marine Policy Statement. It includes sectoral policies with respect to energy, including offshore wind, and subsea cabling.	Cumulative pathways for impact between the SC-DMAP and the Welsh National Marine Plan include: • Habitat loss or destruction; • Habitat degradation; • Habitat Rehabilitation / Enhancement; • Habitat/species fragmentation; • Disturbance to key species; • Changes to favourable conservation status of key species; • Changes in key indicators of conservation value (water quality etc); • Climate change The Marine Plan was subject to a SA and Habitats Regulations Assessment (HRA). The aim of the plan, similar to the Irish NMPF, is the sustainable development of Wales's marine area and the expectation that the policies of the plan will complement, reinforce and support the delivery of the other plans' and programmes' objectives, particularly in terms of environmental conservation and enhancement, climate change mitigation and adaptation and economic growth. Cross cutting environmental protection policies are included to offset potential negative effects.	The Welsh National Marine Plan addressed significant negative effects as part of the SA and HRA processes applied. It acknowledges the need for lower tier plans and projects to be subject to further assessment, which may include AA and EIA. There is no potential for cumulative effects with the draft SC-DMAP; recognising that the SC-DMAP will need to also be considered by any project-level assessment completed for projects emerging from the draft SC-DMAP.
Round 5 Leasing The UK Crown Estate has identified three fixed-boundary Project Development Areas (PDAs) of up to	Cumulative pathways for impact between the SC-DMAP and the Round 5 leasing include:	As plans and projects emerge from the SC-DMAP, they will be subject to the relevant regulatory framework, which may include Environmental Assessment (EIA and AA) and

[14] https://assets.publishing.service.gov.uk/media/60d200fed3bf7f4bd323e2cf/HRA-AA-SW_ACC.pdf

[15] https://www.gov.wales/sites/default/files/publications/2019-11/welsh-national-marine-plan-document_0.pdf

Cumulative with.	Cumulative Effect Pathways	Discussion and Mitigations
1.5GW each, giving an opportunity to deliver up to 4.5GW of floating offshore wind overall in UK marine waters between South Wales and the North Coast of Devon and Cornwall (South West of England). The PDAs are defined areas of seabed with fixed boundaries and geographical locations that define the maximum allowable extent of the floating offshore wind farms.	• Disturbance to cetaceans, pinnipeds and bird species where zones of impact overlap with SC-DMAP and Round 5 projects. The UK Crown Estate completed a Habitat Regulation Assessment (akin to NIS) for Floating Offshore Wind Leasing Round 5; which was published in January 2024. The HRA identified no adverse effect on integrity of the designated sites assessed by the HRA from the plan. The Round 5 leasing will now move into the development and consenting phase where detailed assessment will be undertaken as part of EIA and project level HRA.	will need to complete cumulative and / or in-combination assessments with other plans and projects outside of the SC-DMAP area including those projects which will come forward in the PDAs provided for by the Floating Offshore Wind Leasing Round 5. Given the regulatory and policy protections provided, no cumulative effects are identified.

Section 8.5 Transboundary Effects

Amendment: A new section on transboundary effects has been added to Chapter 8 of the SEA ER that includes the following text:

Transboundary effects may arise when impacts from plans and projects within one jurisdiction affect the environment of another and as such the potential for this is considered and assessed at plan and project level and where relevant consultation is undertaken.

The SC-DMAP covers a range of activities which will take place completely in Irish waters. However, indirect effects are possible with neighbouring jurisdictions, principally the UK and France.

The principle environmental transboundary effects considered include:

- Air Quality and Climate – e.g. atmospheric emissions from shipping, reduction of GHG emissions from provision of ORE;
- Seascape, Landscape and Visual - e.g. visual intrusion impacting on views and seascape character;
- Commercial Fisheries – e.g. displacement or exclusion of fishing activities (permanent or temporary);
- Benthic Ecology – e.g. seabed disturbance, long-term subtidal habitat loss (permanent or temporary);
- Invasive Species – e.g. Introduction and / or spread of invasive species from shipping;
- Marine Mammals and Megafauna – e.g. underwater noise impacting on marine mammals; increased collision risk, displacement and barriers to movement;
- Marine Ornithology – e.g. increased collision risk, displacement from foraging areas and barriers to movement impacting on migrating birds;
- Designated sites – e.g. impact on qualifying interests and conservation interests in protected sites outside Irish waters but which have connectivity with the SC-DMAP area;
- Water Quality – e.g. marine discharges impacting on water quality;
- Shipping – e.g. encroachment on shipping / navigation channels; and
- Other marine users – e.g. displacement or exclusion of other marine users as a result of cables impacting on recreation etc.

The relevant assessment considerations are included below in **Table 8-5**. These consider the potential for impact from delivery of wind turbines and associated cables on transboundary receptors.

Table 8-5: Transboundary Considerations

Environmental Factor and Pathway	Transboundary Considerations
Air Quality and Climate	The main air pollutants associated with ORE developments would be related to vessel emissions and include Nitrogen Oxides (NO_x); Particulate Matter (PM); and Sulphur Dioxide (SO_2). Potential effects from these emissions include a deterioration in air quality leading to negative effects on human and ecological receptors. Taking into account the dispersive nature of the offshore environment, the distance of the four Maritime Areas in the SC-DMAP to transboundary sensitive receptors and the relatively small potential contribution to emissions when compared with the total vessel movements in the eastern Irish Sea and Celtic Sea, it is not considered that such pollutants will give rise to significant transboundary effects. All development processes which emit Greenhouse Gases (GHGs) have the potential to impact the atmospheric mass of GHGs, and so may have an impact on climate change which would have a transboundary effect. Development processes which will give rise to GHG emissions include construction materials and shipping transport during construction. Shipping transport is also likely to result in GHG emissions over the lifetime operation and maintenance of any ORE development in the SC-DMAP area. However, over the lifetime of the SC-DMAP, potential transboundary climate impacts are expected to be beneficial overall as fossil fuel use is displaced by the increased availability of renewable energy. ORE developments in the SC-DMAP Area will contribute to Irelands

Environmental Factor and Pathway	Transboundary Considerations
	GHG emissions reduction targets and renewable electricity generation targets under the national Climate Action Plan.
Seascape, Landscape and Visual – visual intrusion	There is the potential pathway for transboundary effects as a result of the theoretical visibility of an ORE development in the SC-DMAP area. The minimum distance to transboundary receptors is with Area D which is approx. 60km from Wales in the UK. It is noted that the distance from transboundary receptors and visibility conditions influence the magnitude of any change experienced on seascape, landscape and visual receptors in other jurisdictions. Furthermore the SC-DMAP limits the development of offshore wind to the four specific Maritime Areas A, B, C and D and provides for separation distances between each area. This visual effects will be considered further as part of project level dedicated Seascape, Landscape and Visibility Assessment (SLVIA) when project parameters are known and can be assessed as part of a SLVIA process. See also MI 4 of the SC-DMAP which requires project level SLVIA and the outline of SLVIA typical for ORE developments in Chapter 8 Addendum of the SEA Statement.
Commercial Fisheries and Fish and Shellfish	Migratory fish species or species that are of commercial importance for fishing fleets of other EU Member States and the UK, may be affected directly or indirectly from ORE developments in the SC-DMAP area. Transboundary effects on commercial fisheries / shellfish from a proposed Maritime Area under development would potentially include displacement of fishing activity/effort affecting non-Irish (as well as Irish) registered vessels operating in Irish waters. It is understood from publicly available data that the nationality of vessels >15m fishing in the Irish EEZ (all gears combined) in the SC-DMAP area are predominantly vessels from Ireland, Belgium, France and the UK. Commercial fisheries data incorporated in the environmental constraints work carried out as part of the SC-DMAP development included data relating to international as well as Irish fishing vessels. Objectives have been included in the SC-DMAP to specifically address consultation in relation to commercial fisheries. Already, as part of the development of the SC-DMAP, DECC has engaged with Government officials from Belgium, France and the UK, and the North Western Waters Advisory Council (NWWAC) which includes representatives from the majority of jurisdictions with significant fishing fleets operational in the SC-DMAP. I Other potential pathways include underwater noise disturbance from pilling and changes in water quality. See entries below.
Benthic subtidal and intertidal ecology	The extent of any predicted impacts is likely to be limited to the footprint of proposed ORE developments within the SC-DMAP area. Transboundary impacts are therefore not anticipated.
Invasive species	There is potential for transboundary impacts associated with shipping and transport for ORE developments within the SC-DMAP area. Measures are available to minimise the risk of significant effects e.g. preparation and implementation of a Marine Invasive Non-Indigenous Species (MINNS) Management Plan that outlines procedures for marine works and vessel operations to ensure the risk of possible spread or introduction of MINNS into water bodies as a result of any ORE development projects within the SC-DMAP is reduced. This has been included under OEP 1 and Appendix C in the SC-DMAP.
Marine Mammals	There is potential for transboundary impacts on marine mammals due to the mobile nature of marine mammal species. Marine mammals and megafauna are highly mobile and may range over large distances transversing Irish waters and those of neighbouring countries.

Environmental Factor and Pathway	Transboundary Considerations
	The marine mammal species likely to be present are noted in Chapter 5 Baseline and also in the NIS. Species include harbour porpoise, bottlenose dolphin, short-beaked common dolphin, harbour seal and grey seal among others. Transboundary effects such as increased collision risk, disturbance from underwater noise or disturbance from increased vessel activity may occur. Direct impacts may occur due to underwater sound generated during construction and decommissioning, including sound associated with piling and vessel activity. Pile driving during the installation of foundations and pre-construction clearance of Unexploded Ordnance (UXO) are activities linked to elevated underwater sound. Auditory injury in marine mammals can have negative effects on the ability of animals to use natural sounds, including communication, navigation, and prey location etc., however, the most likely response of a marine mammal exposed to unusual noise levels is to leave the elevated noise area. Therefore, behavioural effects including strong avoidance behaviour, and changes in swimming or schooling behaviour may occur in response to any noise-generating activities. Indirect impacts to marine mammal receptors from changes in prey availability could also occur as a result of habitat loss, underwater sound, increased suspended sediment and associated sediment deposition. At plan level, measures are available to minimise the risk of significant effects e.g. preparation and implementation of an approved Marine Mammal and Megafauna Mitigation Plan and Marine Mega Fauna Vessel Code of Practice as required under OEP 1 and in Appendix C of the SC-DMAP, and application of best practice regarding underwater noise as required under policy objectives UN 1 and UN 3.
Marine Ornithology	The marine ornithology interests likely to be present are noted in Chapter 5 Baseline and also in the NIS. Defining a zone of impact with respect to pelagic seabirds in particular is difficult due to the complexities of seasonal migrations and behaviours, which for some species extend well beyond Irish marine waters (Power *et al.,* 2021)[16]. As noted in the NIS, migrating birds will often gather in large flocks on a 'staging ground' before flying. These grounds can be north or south of their final destination, e.g., common terns breeding on Rockabill Island can fly north to Dundalk Bay, staging there, before flying south as a flock to western and southern Africa. Migrating birds are known to make stop offs along routes. There is no buffer or grouping that can be applied with any degree of certainty, and as such, all migratory birds, in both and Irish and wider European context are considered relevant. Transboundary effects may include disturbance and displacement, indirect displacement, increased collision risk and barrier effect resulting from the development of ORE infrastructure. At plan level, measures are available to minimise the risk of significant transboundary effects on marine ornithology. Of note for the SC-DMAP is the inclusion of policy objective MI 1 for regional level surveys, the scope of which will be decided by the Implementation Body informed by advice from a Marine Ecosystems and Ornithology Working Group. At that stage consideration will be given to integrated regional surveys which consider the use of the Celtic sea and surrounding waters in term of bird usage and migration patterns. It also requires creation of a data repository which will be held by or on behalf of DECC and will be made available for use by all Government Departments, State bodies, project applicants, environmental NGOs and the public generally. This can include data which may be relevant from other jurisdictions e.g. collision risk modelling and bird usage data already collected by the UK Crown Estate and others to inform their own marine planning, and which may be added to the evidence base and to project level assessments in due course.

[16] Power, A., McDonnell, P., Tierney, D. (2021). Estimated foraging ranges of the breeding seabirds of Ireland's marine Special Protected Area network.

Environmental Factor and Pathway	Transboundary Considerations
	Developers will also be required to share data that has been obtained pursuant to a licence or authorisation granted by the State. Policy objective MI 2 also requires applicants to demonstrate compliance with Article 5 (Birds Directive) on wild or migratory bird species and Article 4.4 (Birds Directive) to strive to avoid pollution or deterioration of habitats outside of protected areas; and OEP 1 and Appendix C of the SC-DMAP require preparation and implementation of a Marine Ornithology Monitoring Strategy post construction to continue to monitor effects. With these measures in place, transboundary effects are not considered significant at this plan stage. These will be further assessed and mitigated where necessary at the project level through measures such as specific ornithological surveys as outlined in Appendix B of the SC-DMAP.
Designated Sites	Following on from the potential transboundary effects identified for marine mammals and ornithology above, it is noted that this could also give rise to transboundary effects for protected sites which have been designated for these interests. The NIS prepared for the SC-DMAP notes potential for connectivity with 23 French sites based on their qualifying interest of cetaceans. A further 87 UK sites previously forming part of the EU Natura 2000 have also been identified as having potential connectivity with the SC-DMAP based on their qualifying interests. These sites are listed in Appendix 5.1 of the SEA. Ecological interests for which connectivity has been noted include anadromous fish with onward connectivity to Freshwater Pearl Mussel populations, seabirds, dolphins, porpoise and pinnipeds. The measures outlined under Marine Ornithology and Marine Mammals above are relevant to these designated sites and their ecological interests. With these measures in place, transboundary effects are not considered significant at this plan stage. These will be further assessed and mitigated where necessary at the project level through measures such as specific ornithological and marine surveys as outlined in Appendix B of the SC-DMAP.
Marine discharges impacting water quality	Transboundary effects on water quality would potentially include loss of fuels, chemicals or other substances from vessels and structures during the construction, operational and decommissioning phases. Measures are available to minimise the risk of significant effects including implementation of an Environmental Management Plan (EMP) which will include project mitigation/monitoring measures and a Marine Pollution Contingency Plan. This has been included in policy objective OEP 1 and Appendix C of the SC-DMAP. Furthermore, policy objective WQ 2 requires developers to take account of requirements of the Water Framework Directive (relating to aspects such as supporting cabling/infrastructure impacts near shore and on-land) and the Marine Strategy Framework Directive along with the national requirements implementing these directives. With these measures in place, transboundary effects are not considered significant at this plan stage. These will be further assessed and mitigated where necessary at the project level.
Shipping and navigation	There is potential for transboundary impacts on shipping routes which transit to/from other EU Member States and the UK. It is a policy of the NMPF to provide for shipping activity and freedom of navigation. Decisions on the location of projects and activity in the marine area must consider existing and planned routes used by shipping to access ports and harbours and navigational safety. Maritime Areas identified for ORE deployment in the SC-DMAP have sought to avoid the areas of highest density shipping traffic. Furthermore, policy objectives will require applicants for ORE development in the SC-DMAP area to consult with port and harbour authorities, and the Marine Survey Office, and comply with all relevant legislation and marine notices to minimise disruption to shipping. Navigation Risk Assessments will be undertaken for project development permission applications.

Environmental Factor and Pathway	Transboundary Considerations
	Specific objectives have been included in the SC-DMAP to protect shipping and navigation, notably policy objective S2 which requires Navigation Risk Assessments and also policy objective S3 which requires a GIS shipping density mapping analysis to be prepared by DECC to inform Navigation Risk Assessments in respect of ORE project planning applications and assessments. This data will be made accessible on a data repository. With these measures in place, transboundary effects are not considered significant at this plan stage. These will be further assessed and mitigated where necessary at the project level.
Other sea users	The extent of any potential impacts on recreational activities or existing cables is likely to be localised and short term, and the latter will be subject to standard cable crossing agreements. Transboundary impacts on this receptor group are not anticipated.

A robust mitigation strategy has been included as part of the SC-DMAP to address potential transboundary effects within plan and ex-situ effects. This includes a strong governance framework, regional scale surveys to inform cumulative assessments at project level, and a suite of surveys and environmental management plans to support and inform any application for development permission.

While some or all of the aspects above may be detectable physically or chemically in the waters of neighbouring jurisdictions, the scale and consequences of the environmental effects in neighbouring jurisdictions due to activities resulting from adoption of the SC-DMAP will be less than those in Irish waters and are considered unlikely to be significant given the mitigation strategy included.

Furthermore, individual developments that come forward will need to comply with cross jurisdiction environmental legislation which extends into the marine environment. Projects must comply with relevant statutory environmental assessment requirements and legislation, which may include EIA and AA within the respective jurisdiction and must take into account transboundary effects alone or in combination with other local developments when project detail is known.

8.1.7 Chapter 9: Mitigation and Monitoring

Section 9.1.4 Project Level Mitigation

Amendment: Additional detail on project level ‘Seascape and Landscape Visual Impact Assessment (SLVIA) Methodologies’ has been included:

The assessment of effects of offshore wind farms on seascape, landscape and visual amenity follows a process guided by published good practice guidance including the following:

- Landscape Institute and IEMA (2013). Guidelines for Landscape and Visual Impact Assessment: Third Edition.GLVIA3
- Technical Guidance Note 06/19: Visual Representation of Development Proposals (Landscape Institute, 2019)
- NatureScot (2017). Visual Representation of Wind Farms, Guidance, Version 2.2
- Guidance on the Assessment of the Impact of Offshore Wind Farms: Seascape and Visual Impact Report (UK Department of Trade and Industry, 2005).
- Hill M., Briggs J., Minto P., Bagnall D., Foley K., Williams A., (2001), INTERREG Report No. 5: Guide to Best Practice in Seascape Assessment

Study Area

A study area is established comprising the area of sea to be temporarily and permanently occupied during construction, operations and maintenance, and decommissioning of the candidate offshore wind project. The study area is often based on an approximate 50 kilometre (km) distance from the array area boundary in order to capture significant effects on landscape (coastal landscape), seascape and visual amenity. The study area is defined on a case by case basis having regard for the turbine tip height and likely extent of the effects.

Consultation

The scope and methodology of the SLVIA is the subject of engagement and consultations with the relevant planning authorities, statutory bodies, other parties, and the public

Methodology

Assessment of effects on landscape (coastal landscape) and visual amenity are undertaken separately as part of the SLVIA notwithstanding that they are related topics. Potential seascape, landscape and visual effects (the impact of the candidate offshore wind project) are assessed by considering the amount or 'magnitude' of change/impact, compared with the baseline conditions, likely to be experienced by seascape and landscape character areas and visual receptors (people) as a result of implementing the candidate offshore wind project. Magnitude is then weighed against the sensitivity (to the candidate offshore wind project) of the seascape, landscape or visual receptor in question to arrive at a level of significance of effect. The sensitivity of a given receptor is assessed by considering both its inherent value and its susceptibility to the type of development proposed. Finally, an assessment is made on whether the predicted seascape, landscape or visual effect is likely to be significant or not significant.

The purpose of carrying out the SLVIA is to identify and assess the significant effects likely to arise from implementing the proposed development in question. Chapter 1: Introduction of GLVIA3 best practice guidance states:

"Identifying significant effects stresses the need for an approach that is in proportion to the scale of the project that is being assessed and the nature of its likely effects. Judgement needs to be exercised at all stages in terms of the scale of investigation that is appropriate and proportional. This does not mean that effects should be ignored, or their importance minimised but that the assessment should be tailored to the particular circumstances in each case" (paragraph 1.17).

This SLVIA and its findings and conclusions are steered by the proportionality principle expressed in the paragraph quoted above.

The assessment is undertaken with reference to Ordnance Survey (OS) mapping of the candidate offshore wind project and surrounding area, and on field survey and analysis of views from publicly accessible viewpoints in the surrounding landscape and ferry routes along with a ZTV (zone of theoretical visibility) and visualisations – refer to sections on ZTVs and Baseline Photography for Visualisations below.

Every effort is made to include viewpoints in sensitive locations and locations from which the candidate Offshore Wind Project would be most visible. The selection of viewpoints would be chosen to reflect different distances and directions to an offshore wind farm within any of the maritime areas and would be agreed in advance with planning authorities, statutory bodies and other parties.

GLVIA3 (page 120) defines cumulative landscape and visual effects as those that *"result from additional changes to the landscape and visual amenity caused by the proposal in conjunction with other developments (associated with or separate to it), or actions that occurred in the past, present or are likely to occur in the foreseeable future."* The cumulative effects assessment considers existing offshore and onshore wind farms along with those in planning or at scoping stage.

Iterative assessment and design

The SLVIA is part of an ongoing iterative design process which aims to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment. This iterative approach involves a feedback loop whereby if the initial assessment of a potential seascape/landscape and/or visual effect is deemed likely to result in a significant adverse effect in EIA terms, changes to the candidate offshore wind project Maximum Design Scenario (MDS) are made (where reasonably practical) to avoid, reduce or offset this. The assessment is then repeated, and the process continues until the effect has been reduced to a level that is considered to be not significant in EIA terms or, having regard to other constraints, no further changes may be made to the candidate offshore wind project MDS in order to reduce the magnitude of impact (and hence its potential seascape, landscape and visual significance of effect). In such cases an overall effect that is still significant may be presented in the SLVIA section of the Environmental Impact Assessment Report.

Input to the design process takes place as early as possible in order to mitigate and avoid adverse effects on seascape, landscape and visual amenity.

ZTVs

ZTVs and visualisations (wirelines or wirelines and photomontages) are graphical images produced to assist and illustrate the SLVIA and the cumulative assessment

Plans mapping the ZTV for the turbine array and offshore substations are used to establish the extent of theoretical visibility of the candidate offshore wind project throughout the SLVIA study area and to assist with representative viewpoint selection. The ZTVs are calculated using GIS software to generate a ZTV of the candidate offshore wind project to demonstrate the theoretical extent of visibility from any point in the study area. Two ZTVs are calculated based on the hub height and the tip height of the wind turbines. The ZTV process also applies to onshore infrastructure where this is of a scale which merits this type of visibility analysis.

While the ZTV is useful to inform the assessment, providing an indication of where the candidate offshore wind project will be theoretically visible, it will tend to present a worst-case or over-estimate the actual visibility. The information drawn from the ZTV is checked by field survey observation and interpreted using professional judgement.

Baseline Photography for Visualisations

Once a view has been selected, the location is visited, confirmed, and assessed with the aid of a wireline or similar visualisation in the field. A photographic record is taken to record the view and the details of the viewpoint location and associated data are recorded to assist in the production of visualisations and to validate their accuracy. The photography is taken with a digital SLR camera with full frame sensor and fixed 50mm lens. A panoramic head is used to capture a sequence of pictures in portrait format at the chosen viewpoint to cover the full 360 degree view.

The following photographic information is recorded:

- Date, time, weather conditions and visual range
- GPS recorded 12 figure grid reference accurate to ~5-10 m
- GPS recorded AOD height data
- Use of a fixed 50 millimetre (mm) focal length lens is confirmed
- Horizontal field of view (in degrees)
- Bearing to candidate offshore wind project.

Wirelines of the candidate offshore wind project array are produced in accordance with NatureScot Visual Representation of Windfarms Guidance (NatureScot, 2017) and Landscape Institute (2019) Technical Guidance Note (TGN) 06/19 Visual Representation of Development Proposals (Landscape Institute, September 2019).

Fully rendered photomontages are produced for the agreed viewpoints using Resoft WindFarm software or similar, to provide a photorealistic image of the appearance of the candidate offshore wind project.

8.1.8 Appendix 5.1

Table: QI species/habitats Considered in the Assessment (UK sites)

Amendment: In Appendix 5.1 of the SEA ER, the table presenting QI and SCI species/habitats considered in the assessment (transboundary) has been further updated as follows:

QI species/habitats considered in the assessment (French and UK sites)

Site Code	Site Name	Distance (km) to ~~draft~~ SC-DMAP	Distance (km) to Study Area	Site Direction	Within ~~draft~~ SC-DMAP Study Area	From Study Area 5km inland	From Study Area 50km marine buffer	Otter	Anadromous fish and pearl mussel	Cetacean	Pinniped
European Sites in France											
FR5300018	Ouessant-Molène	338.08	314.15	S	No	No	No	No	No	Yes	No
FR5300017	Abers - Côte des légendes	337.44	315.75	SE	No	No	No	No	No	Yes	No
FR5300009	Côte de Granit rose-Sept-Iles	333.46	317.52	SE	No	No	No	No	No	Yes	No
FR5302016	Récifs du talus du golfe de Gascogne	358.57	321.02	S	No	No	No	No	No	Yes	No
FR5300015	Baie de Morlaix	345.20	326.62	SE	No	No	No	No	No	Yes	No
FR5300010	Tregor Goëlo	350.42	336.35	SE	No	No	No	No	No	Yes	No
FR5302006	Côtes de Crozon	375.89	353.24	S	No	No	No	No	No	Yes	No
FR5302007	Chaussée de Sein	384.69	359.62	S	No	No	No	No	No	Yes	No
FR2500084	Récifs et landes de la Hague	368.93	359.86	SE	No	No	No	No	No	Yes	No
FR2502019	Anse de Vauville	374.63	365.64	SE	No	No	No	No	No	Yes	No
FR2502018	Banc et récifs de Surtainville	387.00	378.84	SE	No	No	No	No	No	Yes	No
FR2500085	Récifs et marais arrière-littoraux du Cap Lévi à la Pointe de Saire	398.94	388.93	SE	No	No	No	No	No	Yes	No
FR5300011	Cap d'Erquy-Cap Fréhel	409.63	398.45	SE	No	No	No	No	No	Yes	No
FR5300066	Baie de Saint-Brieuc - Est	418.60	405.11	SE	No	No	No	No	No	Yes	No
FR2502020	Baie de Seine occidentale	423.40	413.36	SE	No	No	No	No	No	Yes	No
FR2500079	Chausey	426.13	418.15	SE	No	No	No	No	No	Yes	No

Site Code	Site Name	Distance (km) to ~~draft~~ SC-DMAP	Distance (km) to Study Area	Site Direction	Within ~~draft~~ SC-DMAP Study Area	From Study Area 5km inland	From Study Area 50km marine buffer	Otter	Anadromous fish and pearl mussel	Cetacean	Pinniped
FR5300012	Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard	437.03	424.77	SE	No	No	No	No	No	Yes	No
FR5300061	Estuaire de la Rance	451.25	439.62	SE	No	No	No	No	No	Yes	No
FR2500077	Baie du Mont Saint Michel	455.53	445.19	SE	No	No	No	No	No	Yes	No
FR2502021	Baie de Seine orientale	488.91	477.76	SE	No	No	No	No	No	Yes	No
FR2300139	Littoral Cauchois	506.50	494.66	SE	No	No	No	No	No	Yes	No
FR3100478	Falaises du Cran aux Oeufs et du Cap Gris-Nez, Dunes du Chatelet, Marais de Tardinghen et Dunes de Wissant	553.85	531.42	E	No	No	No	No	No	Yes	No
FR2200346	Estuaires et littoral picards (baies de Somme et d'Authie)	567.60	546.24	E	No	No	No	No	No	Yes	No
Former European Sites within UK											
UK0030075	Afon Eden – Cors Goch Trawsfynydd	167.66	152.97	NE	No	No	No	No	No	No	No
UK0030046	Afon Gwyrfai a Llyn Cwellyn	165.41	155.95	NE	No	No	No	No	No	No	No
UK0012670	Afon Teifi/ River Teifi	98.16	78.02	E	No	No	No	No	No	No	No
UK0013010	Afon Tywi/ River Tywi	127.94	105.64	E	No	No	No	No	No	No	No
UK0013091	Ardgour Pinewoods	510.30	510.72	N	No	No	No	No	No	No	No
UK0030079	Ardnamurchan Burns	495.84	495.30	N	No	No	No	No	No	No	No
UK0030084	Bann Estuary	320.78	319.50	N	No	No	No	No	No	No	No

Site Code	Site Name	Distance (km) to ~~draft~~ SC-DMAP	Distance (km) to Study Area	Site Direction	Within ~~draft~~ SC-DMAP Study Area	From Study Area 5km inland	From Study Area 50km marine buffer	Otter	Anadromous fish and pearl mussel	Cetacean	Pinniped
UK0012956	Ben Nevis	513.11	513.82	N	No	No	No	No	No	No	No
UK0030396	Bristol Channel Approaches / Dynesfeydd môr Hafren	82.28	72.61	SE	No	No	No	No	No	Yes	No
UK0030104	Cadair Idris	158.37	143.16	NE	No	No	No	No	No	No	No
UK0012712	Cardigan Bay/ Bae Ceredigion	78.13	59.76	E	No	No	No	No	No	Yes	Yes
UK0020020	Carmarthen Bay and Estuaries/ Bae Caerfyrddin ac Aberoedd	107.69	84.55	E	No	No	No	No	No	No	No
UK0030116	Cladagh (Swanlinbar) River	223.40	218.52	N	No	No	No	No	No	No	No
UK0030118	Coedydd Aber	188.16	178.07	NE	No	No	No	No	No	No	No
UK0014789	Coedydd Derw a Safleoedd Ystlumod Meirion/ Meirionnydd Oakwoods and Bat Sites	156.64	142.12	NE	No	No	No	No	No	No	No
UK0030141	Coedydd Nedd a Mellte	176.74	154.56	E	No	No	No	No	No	No	No
UK0030121	Corsydd Eifionydd	156.81	146.32	NE	No	No	No	No	No	No	No
UK0030381	Croker Carbonate Slabs	154.20	152.97	N	No	No	No	No	No	Yes	No
UK0030128	Cwm Doethie - Mynydd Mallaen	151.38	131.11	E	No	No	No	No	No	No	No
UK0030131	Dee Estuary/ Aber Dyfrdwy	229.68	218.31	NE	No	No	No	No	No	No	No
UK0012735	Downton Gorge	226.26	207.28	E	No	No	No	No	No	No	No
UK0012946	Eryri/ Snowdonia	171.80	160.43	NE	No	No	No	No	No	No	No

Site Code	Site Name	Distance (km) to		Site Direction	Within ~~draft~~ SC-DMAP Study Area	From Study Area		Otter	Anadromous fish and pearl mussel	Cetacean	Pinniped
		~~draft~~ SC-DMAP	Study Area			5km inland	50km marine buffer				
UK0030148	Exmoor and Quantock Oakwoods	170.10	157.21	SE	No	No	No	No	No	No	No
UK0013112	Fal and Helford	168.23	154.34	SE	No	No	No	No	No	Yes	No
UK0030311	Firth of Tay and Eden Estuary	505.91	505.30	NE	No	No	No	No	No	Yes	No
UK0030154	Glen Beasdale	518.19	518.43	N	No	No	No	No	No	No	No
UK0030160	Grogwynion	153.06	134.45	E	No	No	No	No	No	No	No
UK0030369	Haisborough, Hammond and Winterton	529.95	510.77	E	No	No	No	No	No	Yes	No
UK0013694	Isles of Scilly Complex	157.85	130.58	S	No	No	No	No	No	Yes	No
UK0030255	Langavat	637.06	635.26	N	No	No	No	No	No	No	No
UK0019815	Lewis Peatlands	650.02	648.41	N	No	No	No	No	No	No	No
UK0014787	Limestone Coast of Southwest Wales/ Arfordir Calchfaen de Orllewin Cymru	82.74	64.39	SE	No	No	No	No	No	No	Yes
UK0017070	Loch nam Madadh	592.59	590.35	N	No	No	No	No	No	No	No
UK0030047	Lough Melvin	252.34	246.95	N	No	No	No	No	No	No	No
UK0013114	Lundy	121.02	109.35	SE	No	No	No	No	No	Yes	No
UK0030206	Mingarry Burn	483.99	483.50	N	No	No	No	No	No	No	No
UK0019816	Mointeach Scadabhaigh	591.49	589.04	N	No	No	No	No	No	No	No
UK0013027	Morecambe Bay	288.03	279.15	NE	No	No	No	No	No	No	No

Site Code	Site Name	Distance (km) to		Site Direction	Within ~~draft~~ SC-DMAP Study Area	From Study Area		Otter	Anadromous fish and pearl mussel	Cetacean	Pinniped
		~~draft~~ SC-DMAP	Study Area			5km inland	50km marine buffer				
UK0016612	Murlough	214.21	214.93	N	No	No	No	No	No	No	No
UK0030398	North Anglesey Marine / Gogledd Mon Forol	149.09	147.78	N	No	No	No	No	No	Yes	No
UK0030399	North Channel	229.60	230.37	NE	No	No	No	No	No	Yes	No
UK0012935	North Harris	630.41	628.56	N	No	No	No	No	No	No	No
UK0030227	North Pembrokeshire Woodlands/ Coedydd Gogledd Sir Benfro	84.12	62.53	E	No	No	No	No	No	No	No
UK0019804	North Uist Machair	583.40	580.88	N	No	No	No	No	No	No	No
UK0030233	Owenkillew River	270.35	268.25	N	No	No	No	No	No	No	No
UK0013116	Pembrokeshire Marine/ Sir Benfro Forol	34.33	17.56	E	No	No	Yes	No	No	Yes	Yes
UK0013117	Pen Llyn a`r Sarnau/ Lleyn Peninsula and the Sarnau	108.88	97.87	NE	No	No	No	No	No	Yes	No
UK0030379	Pisces Reef Complex	222.98	222.87	N	No	No	No	No	No	Yes	No
UK0013111	Plymouth Sound and Estuaries	190.88	182.90	SE	No	No	No	No	No	Yes	No
UK0012598	Preseli	87.41	65.24	E	No	No	No	No	No	No	No
UK0030249	River Bladnoch	317.85	317.38	N	No	No	No	No	No	No	No
UK0030250	River Clun	223.02	204.16	E	No	No	No	No	No	No	No
UK0030252	River Dee and Bala Lake/ Afon Dyfrdwy a Llyn Tegid	187.71	173.35	NE	No	No	No	No	No	No	No
UK0030032	River Derwent and Bassenthwaite Lake	326.62	322.09	NE	No	No	No	No	No	No	No

Site Code	Site Name	Distance (km) to ~~draft~~ SC-DMAP	Distance (km) to Study Area	Site Direction	Within ~~draft~~ SC-DMAP Study Area	From Study Area 5km inland	From Study Area 50km marine buffer	Otter	Anadromous fish and pearl mussel	Cetacean	Pinniped
UK0012643	River Eden	341.80	335.35	NE	No	No	No	No	No	No	No
UK0030057	River Ehen	317.39	312.87	NE	No	No	No	No	No	No	No
UK0030361	River Faughan and Tributaries	287.90	285.59	N	No	No	No	No	No	No	No
UK0030320	River Foyle and Tributaries	272.21	267.35	N	No	No	No	No	No	No	No
UK0030256	River Kent	329.60	321.63	NE	No	No	No	No	No	No	No
UK0012994	River Moidart	506.67	506.89	N	No	No	No	No	No	No	No
UK0030360	River Roe and Tributaries	289.29	287.22	N	No	No	No	No	No	No	No
UK0013007	River Usk/ Afon Wysg	167.99	146.92	E	No	No	No	No	No	No	No
UK0012642	River Wye/ Afon Gwy	167.71	147.82	E	No	No	No	No	No	No	No
UK0012594	Rum	520.19	519.41	N	No	No	No	No	No	No	No
UK0019798	Sligachan Peatlands	553.38	552.77	N	No	No	No	No	No	No	No
UK0013025	Solway Firth	342.37	339.72	NE	No	No	No	No	No	No	No
UK0012713	South Uist Machair	545.51	542.88	N	No	No	No	No	No	No	No
UK0012785	Strath	549.57	549.18	N	No	No	No	No	No	No	No
UK0019803	Sunart	488.23	488.40	N	No	No	No	No	No	No	No
UK0012863	Trotternish Ridge	581.38	580.59	N	No	No	No	No	No	No	No

Site Code	Site Name	Distance (km) to		Site Direction	Within ~~draft~~ SC-DMAP Study Area	From Study Area		Otter	Anadromous fish and pearl mussel	Cetacean	Pinniped
		~~draft~~ SC-DMAP	Study Area			5km inland	50km marine buffer				
UK0030296	Upper Ballinderry River	263.28	261.92	N	No	No	No	No	No	No	No
UK0016614	Upper Lough Erne	210.11	206.20	N	No	No	No	No	No	No	No
UK0030397	West Wales Marine / Gorllewin Cymru Forol	41.93	19.79	SE	No	No	Yes	No	No	Yes	No
UK0030380	Wight-Barfleur Reef	338.35	326.33	SE	No	No	No	No	No	Yes	No
UK0030202	Y Fenai a Bae Conwy/ Menai Strait and Conwy Bay	164.55	154.98	NE	No	No	No	No	No	No	No

SCI species/habitats considered in the assessment (UK sites)

Site Code	Site Name	Distance (km) to ~~Draft~~ SC-DMAP	Study Area	Site direction	Within ~~draft~~ SC-DMAP Study Area	Distance from Study Area 5km inland	50km marine buffer	Irish SPA designated for breeding, wintering or permeant SCI species
Former European Sites within the UK								
UK9003091	Ailsa Craig	345.93	346.65	N	No	No	No	No
UK9001021	Flannan Isles	668.05	665.60	N	No	No	No	No
UK9013121	Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island	104.56	94.70	NE	No	No	No	No
UK9014041	Grassholm	51.36	34.94	SE	No	No	No	No
UK9002011	Hermaness, Saxa Vord and Valla Field	1006.54	1006.68	NE	No	No	No	No
UK9020328	Irish Sea Front	180.37	178.94	N	No	No	No	No
UK9020288	Isles of Scilly	160.29	133.82	S	No	No	No	No
UK9001121	Mingulay and Berneray	502.62	499.75	N	No	No	No	No
UK9020316	Outer Firth of Forth and St Andrews Bay Complex	468.98	467.53	NE	No	No	No	No
UK9001341	Rum	515.64	514.51	N	No	No	No	No
UK9014051	Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Penfro	25.56	17.68	SE	No	No	Yes	No
UK9001031	St Kilda	620.10	616.27	N	No	No	No	No