Policy Framework and Site Selection Guidelines for Highly Protected Marine Areas

Sustainability Appraisal



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Sustainability Appraisal

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For:



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1 Introduction

1.1 Background

- 1.1.1 The Scottish Government and the Scottish Green Party Parliamentary Group have agreed to work together over the next five years to build a green economic recovery from the COVID-19 pandemic, respond to the climate emergency and create a fairer country¹. As part of this, a Shared Policy Programme referred to as the Bute House Agreement has been agreed², which aims to build a greener, fairer, independent Scotland. The Scottish Government and the Scottish Green Party believe that the marine environment "should be clean, healthy, safe, productive and diverse, and managed to meet the long term needs of nature and people"³. The agreement sets out several commitments to help achieve this vision, including the designation of at least 10% of Scotland's seas as Highly Protected Marine Areas (HPMAs) by 2026. HPMAs will build upon the existing network of Marine Protected Areas (MPAs)⁴ representing a significant increase in the overall level of protection afforded to Scotland's seas.
- 1.1.2 The first phase of a programme of work to deliver on this commitment involves setting a Policy Framework and the development of Site Selection Guidelines. These documents provide a guide to the subsequent process of selecting, assessing and finally designating HPMAs. The draft Policy Framework has been produced by Marine Scotland as a directorate of the Scottish Government. NatureScot and the Joint Nature Conservation Committee (JNCC) have jointly produced the Site Selection Guidelines.
- 1.1.3 The Policy Framework and Site Selection Guidelines for HPMAs are the subject of this Sustainability Appraisal (SA), summarising the results of the Strategic

³ <u>Scottish Government (2021) Scottish Government and Scottish Green Party Shared Policy Programme: Working together to build a greener, fairer, independent Scotland</u> (accessed 04/07/2022)

⁴ NatureScot (2021) The MPA Network (accessed 04/07/2022)

Environmental Assessment⁵ (SEA) and Socio Economic Impact Assessment⁶ (SEIA).

1.1.4 As the location of HPMAs have not yet been identified, it is only possible to undertake an initial SA at this stage involving a preliminary consideration or scoping of the type of impacts that could arise from the future designation of HPMAs and restriction/limitation placed on activities within HPMAs. Once sites have been selected and proposed for designation, it will be possible to undertake an updated SA involving spatial analysis of specific potential sites and a more detailed assessment of the scale of potential environmental, social and economic effects.

1.2 Sustainability Appraisal

- 1.2.1 The SA considers the potential environmental, social and economic effects of the adoption of the Policy Framework and Site Selection Guidelines for HPMAs and alternatives to these proposals drawing on information contained in the SEA⁷ and SEIA⁸. It ensures that decision-making is informed by relevant environmental and socio-economic information. The SA also provides opportunities for the public to consider this information and use it to inform their views.
- 1.2.2 The SEA has been undertaken in fulfilment of The Environmental Assessment (Scotland) Act 2005 ("the 2005 Act") which requires that certain public plans, programmes and strategies be assessed for their potential effects on the environment⁹.
- 1.2.3 The SEIA has been undertaken as a matter of Scottish Government policy. The purpose of the SEIA is to identify and assess the potential economic and social

⁵ Scottish Government (2022) Policy Framework and Site Selection Guidelines for HPMAs: Strategic Environmental Assessment, Environmental Report. October 2022.

⁶ Scottish Government (2022) SEIA of Policy Framework and Site Selection Guidelines for Highly Protected Marine Areas, October 2022.

⁷ Scottish Government, (2022) Policy Framework and Site Selection Guidelines for HPMAs: Strategic Environmental Assessment, Environmental Report. October 2022.

⁸ Scottish Government (2022) SEIA of Policy Framework and Site Selection Guidelines for Highly Protected Marine Areas, October 2022.

⁹ Environmental Assessment (Scotland) Act 2005 (accessed 05/09/2022)

effects of a proposed development or policy on the lives and circumstances of people, their families and their communities. It considers the potential economic benefits and costs, and their distribution among different groups, to inform the assessment of potential impacts on individuals, communities and society. The SEIA has undertaken an initial scoping of potential impacts, and sets out the methodology for assessing the social and economic effects once locations have been identified.

- 1.2.4 The findings from both the SEA and the SEIA have been combined to provide an overall SA of the Policy Framework and Site Selection Guidelines for HPMAs, to accompany the consultation document. The inputs from the SEA¹⁰ constitute the 'Environment' sections of the SA. The inputs from the SEIA¹¹ inform the 'Economy and Other Marine Users' and 'People, Population and Health' sections of the SA.
- 1.2.5 The views of the public, the Consultation Authorities and the Consultation Bodies on the proposed Policy Framework and Site Selection Guidelines for HPMAs and the findings of this SA Report are now being sought.
- 1.2.6 The remainder of this report is structured as follows:
- Section 2 provides information on the wider MPA network, the proposed designation of the HPMAs and its policy context;
- Section 3 presents the approach to the SA and the methods used;
- Section 4 sets out the results of the SA; and
- Section 5 considers the next steps.

¹⁰ Scottish Government, (2022) Policy Framework and Site Selection Guidelines for HPMAs: Strategic Environmental Assessment, Environmental Report. October 2022.

¹¹ Scottish Government (2022) SEIA of Policy Framework and Site Selection Guidelines for Highly Protected Marine Areas, October 2022.

2 Proposals for Highly Protected Marine Areas

2.1 Background to Highly Protected Marine Areas

- 2.1.1 The Scottish Government and the Scottish Green Party have a shared vision that the marine environment "should be clean, healthy, safe, productive and diverse, and managed to meet the long term needs of nature and people" 12. This includes managing Scottish seas sustainably to protect their rich biological diversity and to ensure that marine ecosystems continue to provide economic, social and wider benefits for people, industry and society. As part of this vision, the Scottish Government and the Scottish Green Party are determined to "make a step change in marine protection and to deliver on their shared commitment to achieve and maintain good environmental status for all of Scotland's seas, offshore and inshore" 13.
- 2.1.2 The Bute House Agreement sets out several commitments to help achieve this vision for the Scottish marine environment and its protection. This includes adding "to the existing MPA network by designating a world-leading suite of HPMAs covering at least 10% of our seas that:
 - Includes designations in both offshore and inshore waters;
 - Exceeds the commitment to 'strict protection' by 2030 made in the
 European Union (EU) Biodiversity Strategy by achieving this by
 2026 for inshore waters (in respect of which Scottish Ministers
 have devolved powers) and, subject to the cooperation of the
 United Kingdom (UK) Government, by the same year for offshore
 waters (where the Scottish Parliament does not have legislative
 competence);
 - Will provide additional environmental protection over and above the existing MPA network (including when all management measures are applied in MPAs), by establishing sites which will provide protection from all extractive, destructive or depositional activities

¹² Scottish Government (2021) Scottish Government and Scottish Green Party Shared Policy Programme: Working together to build a greener, fairer, independent Scotland (accessed 04/07/2022)

- including all fisheries, aquaculture and other infrastructure developments, while allowing other activities, such as tourism or recreational water activities, at non-damaging levels (making them equivalent to 'marine parks'); and
- In cases where these sites overlap with current MPAs, provide extra environmental protection additional to that afforded by existing MPAs. Our clear common purpose is to deliver a significant total increase in the level of environmental protection applicable to Scotland's seas, in support of achieving and maintaining good environmental status for our waters."¹⁴
- 2.1.3 The Bute House Agreement further states that the suite of HPMAs will be delivered "though a policy and selection framework that provides for:
 - Balanced representation of the ecology of Scotland's seas and their geographical spread from the coast to the deep sea, encompassing both inshore and offshore environments;
 - The recovery of priority marine features, which mostly lie within inshore waters, as a core purpose of the designation criteria;
 - Ecosystem recovery and biodiversity enhancement, including protection of blue carbon and critical fish habitats;
 - Account to be taken of socio-economic factors affecting the resilience and viability of marine industries and the coastal communities which depend on them; and
 - Public engagement and consultation at all key stages of policy development, site selection and assessment, and designation."
- 2.1.4 To ensure the high levels of protection required for HPMAs, the Scottish Government will seek new powers to designate HPMAs in Scottish inshore or territorial waters (within 12 nautical miles of the coast). The Scottish Government will seek agreement from the UK Government to provide for equivalent powers for Scottish Ministers to designate HPMAs in Scottish

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¹⁴ ibid

- offshore waters (beyond 12 nautical miles from the coast out to Scotland's Continental Shelf and Exclusive Economic Zone, EEZ).
- 2.1.5 Where HPMA designations require the relocation of existing human activity, the Bute House Agreement recognises that there may in some instances be a need for a transitional 'phasing out' period following the point of designation, to ensure a fair and just transition to a state of high protection. Any such period would be time-limited with a clear end point.

Definition of HPMAs

2.1.6 HPMAs are proposed to be designated areas of the sea that are strictly protected to allow the marine ecosystems within to recover and thrive. These areas safeguard all of their marine life for the benefit of the planet and current and future generations; providing opportunities for carefully managed enjoyment and appreciation.

Aims of HPMAs

2.1.7 HPMAs are one of the measures available to protect Scotland's seas and to help deliver the Scottish Government's vision for the marine environment. The commitment to introduce HPMAs will also make a significant contribution to the achievement of broader UK, regional and global conservation ambitions (Section 4). In particular, it aligns with the EU Biodiversity Strategy for 2030, which proposes that 10% of EU's seas should be under strict protection by 2030¹⁵. Within the International Union for Conservation of Nature (IUCN) Guidelines for Applying Protected Area Management Categories to MPAs, such 'strict' or 'highly protected' areas are often associated with the definitions of categories Ia, Ib and II that seek to 'leave natural processes essentially undisturbed to respect an area's ecological requirements'¹⁶.

¹⁵: European Commission (2020) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. EU Biodiversity Strategy for 2030 (accessed 06/07/2022)

¹⁶ IUCN (2008) Guidelines for Applying the IUCN Protected Area Management Categories to Marine Protected Areas (accessed 06/07/2022)

- 2.1.8 As part of the existing 'three-pillar' approach to marine nature conservation in Scotland (species conservation, site protection, and wider seas policies and measures)¹⁷, HPMAs aim to:
 - Facilitate ecosystem recovery and enhancement;
 - Enhance the benefits that coastal communities and others derive from our seas:
 - Contribute to the mitigation of climate change impacts; and
 - Support ecosystem adaptation and improve resilience.
- 2.1.9 The designation and management of HPMAs will protect all elements of the marine ecosystem within their boundaries, including the seabed, water column habitats and everything that lives in the protected area. This will protect not only the species and habitats within them, but also the complex web of interactions and processes that form a marine ecosystem.

2.2 Relationship with the existing MPA network

- 2.2.1 The Scottish MPA network consists of 247 sites, 233 of these are for nature conservation purposes and are designated under various legislative frameworks and include:
 - Nature Conservation MPAs (NCMPAs);
 - Special Areas of Conservation (SACs);
 - Special Protection Areas (SPAs);
 - Sites of Special Scientific Interest (SSSIs); and
 - Ramsar sites.
- 2.2.2 In addition, there is one demonstration and research MPA, eight historic MPAs (HMPAs), and five Other Area Based Measures (OABMs) recognised as part of the Scottish MPA network¹⁸. OABMs contribute to the protection of biodiversity but were not set up specifically for this purpose (e.g. fisheries restrictions).

¹⁷ Scottish Government (2012) A Strategy for Marine Nature Conservation in Scotland's Seas (accessed 06/07/2022)

¹⁸ NatureScot (2021) The MPA Network (accessed 05/07/2022)

- 2.2.3 Scotland's existing MPA network has been developed to conserve a representative range of species and habitats in Scotland's waters. Conservation objectives are set for each MPA in order to conserve or recover listed features. There is a presumption for sustainable use of MPAs, meaning that activities can continue, providing they do not hinder achievement of the conservation objectives for a site.
- 2.2.4 NatureScot is responsible for providing advice on MPAs in Scottish inshore waters¹⁹, while JNCC advise on possible designations in offshore waters²⁰.
- 2.2.5 Given the twin biodiversity and climate crises, implementing HPMAs as an added component within the Scottish MPA network will help to support the recovery and resilience of Scotland's seas.
- 2.2.6 HPMAs will be selected in a way that complements and adds value to the existing MPA network.
- 2.2.7 HPMAs may overlap either fully or partially with some existing MPAs in order to maximise the conservation benefits associated with stricter management approaches in a particular geographic location. HPMAs may also be located outside the current MPA network.

2.3 Development of Policy Framework and Site Selection Guidelines

- 2.3.1 Marine Scotland has developed a Policy Framework to guide the selection, assessment and designation of HPMAs. This sets out the aim of HPMAs and how sites are selected, how socio-economic impacts will be considered and mitigated, and how stakeholders will be involved.
- 2.3.2 NatureScot and the JNCC have jointly developed the Site Selection Guidelines for HPMAs. The application of the Site Selection Guidelines will aim to explore the potential contribution an area could make towards achieving the aims of HPMAs. The process is driven by the presence of specific functions and

¹⁹ NatureScot (2022) Marine Protected Areas (MPAs) (accessed 05/07/2022)

²⁰ JNCC (2022) Marine Protected Area Advice (accessed 05/07/2022)

- resources of significance to Scotland's seas and looks to optimise ecological, social and cultural benefits whilst minimising significant impacts where possible.
- 2.3.3 HPMAs will have strict limits on human activities in place to allow the protection and recovery of marine ecosystems. There will be activities which will not be allowed within HPMAs and activities which will be allowed within HPMAs at non-damaging levels.
- 2.3.4 The policy framework and accompanying site selection guidelines as a whole are intended to apply to both Scottish inshore waters (0-12 nautical miles from the coast) and Scottish offshore waters (beyond 12 nautical miles). The selection and designation of HPMAs in offshore waters is subject to the prior transfer of relevant powers by the UK Government to Scottish Ministers. Some of the marine activities, which take place in Scottish inshore and offshore waters, relate to matters which are currently reserved to the UK Government, i.e. are not in the competence of the Scottish Parliament. The prohibition or management of these reserved activities will be subject to agreement with the UK Government. The Scottish Government will work closely with the UK Government to realise their vision for HPMAs in relation to offshore waters and reserved matters.
- 2.3.5 There are some damaging activities associated with essential/lifeline services which will need to go ahead within HPMAs, and the legal powers that are being sought to designate and protect HPMAs will need to provide for these activities to go ahead where absolutely necessary. There will be a need to be able to distinguish between unplanned activities (such as anchoring in an emergency or oil spill response) and planned activities (such as construction of critical infrastructure). Consideration of what the designation of HPMAs will mean for different activities and sectors are set out in the Policy Framework document that has been published for consultation.
- 2.3.6 There will be some areas where HPMAs will not be selected because it will not be feasible to remove or relocate existing activities or infrastructure which are not compatible with HPMA status. These include areas earmarked for renewable developments (such as ScotWind option agreement areas and Offshore Wind for Innovation and Targeted Oil and Gas Decarbonisation

- (INTOG) areas) and associated cable routes where they are known, existing active renewables and oil and gas infrastructure, existing ports and harbours, and some areas where defence activities are carried out.
- 2.3.7 HPMAs will be developed using best available evidence and involving stakeholders. Socio-economic factors alongside ecological data will also be considered as part of the site selection process.

2.4 Finalisation and adoption of Policy Framework and Site Selection Guidelines

- 2.4.1 The draft Policy Framework and Site Selection Guidelines has been developed with input from stakeholders and is now subject to a formal consultation period together with this SA. Following this, the documents will be finalised and published.
- 2.4.2 NatureScot, JNCC and Marine Scotland will then work with stakeholders to apply the Policy Framework and Site Selection Guidelines to identify a suite of HPMA proposals for consideration by Scottish Ministers. Stakeholders will also be given the opportunity to propose areas for consideration as HPMAs through third party site proposals. A final public consultation on the proposed locations for HPMAs will be then be held, expected to be in 2025.

2.5 Policy context overview of proposals for HPMAs

- 2.5.1 The 2005 Act requires Responsible Authorities to define the plan's broader policy context, particularly any relevant environmental protection objectives that will influence the plan's development and implementation.
- 2.5.2 The immediate policy context for the development of the Policy Framework and Site Selection Guidelines for HPMAs is described in Sections 2.1 to 2.4. This policy context is illustrated in
- 2.5.3 Figure 1. Appendix A of the SEA Environmental Report (ER)²¹ includes a detailed review of the overarching marine policy objectives and the environmental protection objectives covering the SEA topics that have been

²¹ Scottish Government (2022) Policy Framework and Site Selection Guidelines for HPMAs: Strategic Environmental Assessment, Environmental Report. October 2022.

scoped into the assessment: Biodiversity, Flora and Fauna; Soil (assessed under Biodiversity, Flora and Fauna); Water (assessed under Biodiversity, Flora and Fauna); and Climatic Factors (assessed under Biodiversity, Flora and Fauna) (Section 3.2).

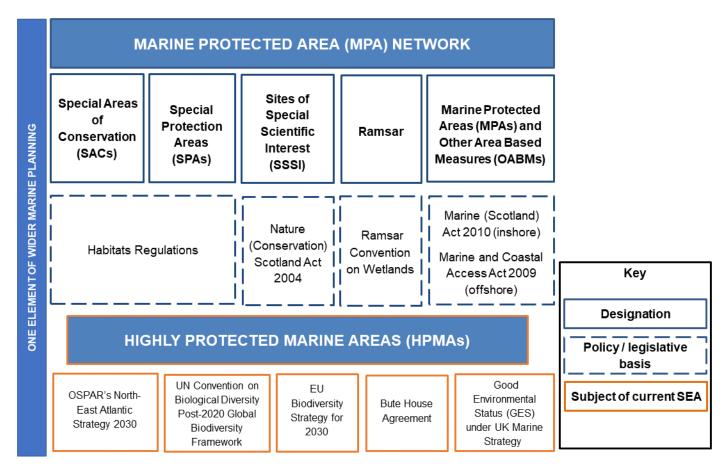


Figure 1 Key policy context of proposals for HPMAs

3 Approach to the Sustainability Appraisal

3.1 Introduction

3.1.1 The following sections set out a brief overview of the processes used in the SEA and SEIA. Full details are provided in the SEA ER²² and SEIA²³.

3.2 SEA approach

- 3.2.1 The SEA has built on the following previous and ongoing SEAs of relevant Scottish Government marine conservation work:
- The designation of Nature Conservation MPAs (assessed in 2013)²⁴;
- Phase one (assessed in 2014)^{25,26} and proposals for phase two (due to be assessed) of the implementation of management measures for inshore MPAs;
- The designation of an additional suite of marine SPAs (assessed in 2018) ²⁷;
- The designation of four additional MPAs (assessed in 2019)²⁸;
- The designation of a deep sea marine reserve as an offshore MPA (assessed in 2019)²⁹;
- Proposals for management measures applying to Priority Marine Features (PMFs)
 (due to be assessed)³⁰; and
- Proposals for management measures in offshore MPAs (currently under assessment).

²² Scottish Government (2022) Policy Framework and Site Selection Guidelines for HPMAs: Strategic Environmental Assessment, Environmental Report. October 2022.

²³ Scottish Government (2022) SEIA of Policy Framework and Site Selection Guidelines for Highly Protected Marine Areas, October 2022.

²⁴ <u>Scottish Government (2013) Planning Scotland's Seas: 2013 – Possible Nature Conservation Marine Protected Areas Consultation Overview – Strategic Environmental Assessment Report (accessed 20/01/2022)</u>

²⁵ <u>Scottish Government (2014) 2014 Consultation on the Management of Inshore Special Areas of Conservation and Marine Protected Areas Overview (accessed 20/01/2022)</u>

²⁶ Scottish Government (2014) MPA/SAC Consultation Environmental Assessment (accessed 20/01/2022)

²⁷ <u>Scottish Government (2018) SEA of Marine Proposed Special Protection Areas Strategic Environmental Assessment Environmental Report (accessed 20/01/2022)</u>

²⁸ <u>Marine Scotland (2019) Sustainability Appraisal of proposed Marine Protected Areas Sustainability Appraisal</u> (accessed 20/01/2022)

²⁹ Marine Scotland (2019) Proposed Deep Sea Marine Reserve Strategic Environmental Assessment Environmental Report (accessed 20/01/2022)

³⁰ Marine Scotland (2018) SEA of Proposed Inshore PMF Management Measures Strategic Environmental Assessment Screening and Scoping Report (accessed 20/01/2022)

- 3.2.2 The SEA presents a high-level and qualitative account of the potential environmental effects that might be expected to arise from the proposed Policy Framework and Site Selection Guidelines and reasonable alternatives.
- 3.2.3 The location of HPMAs have not yet been identified and, therefore, it is only possible to undertake an initial SEA at this stage involving a preliminary consideration of the type of impacts that could arise from the future designation of HPMAs and restriction/limitation placed on activities within HPMAs. Once sites have been selected and are proposed to be taken forward for designation, it will be possible to undertake an updated SEA involving a more detailed site specific assessment of the potential environmental effects.
- 3.2.4 The SEA objectives that were developed to reflect the proposed scope of the SEA and the environmental protection objectives are set out in Box 1.

Box 1 SEA Objectives

Biodiversity, Flora and Fauna; Soil; Water; and Climatic Factors

- To protect and recover marine ecosystems, including species, habitats, and their interactions³¹
- To maintain and protect the character and integrity of the seabed
- To avoid the pollution of seabed strata and/or bottom sediments
- To avoid pollution of the marine water environment
- To maintain or work towards achieving 'Good Environmental Status' of the marine environment
- To preserve and enhance existing marine carbon stocks and carbon sequestration potential.
- 3.2.5 Information about the existing marine environment was used to inform the assessment and define the SEA objectives. The assessment identified the individual and collective effects of the proposals on a number of topics scoped into the SEA, specifically Biodiversity, Flora and Fauna, Soil (geodiversity), Water (the ecological status of WFD water bodies and environmental status of

³¹ The SEA objective used in previous and ongoing SEAs that have been undertaken by the Scottish Government (Section 6) "*To safeguard and enhance marine ecosystems…*" has been amended to reflect more closely the terminology that has been used in the draft Policy Framework.

marine region) and Climatic Factors (carbon cycling, storage and sequestration). In order to recognise the interlinkages of these SEA topics, these were collectively given consideration under the overarching Biodiversity, Flora and Fauna topic.

3.2.6 The SEA identified beneficial and adverse effects, including 'cumulative' effects. The scope of any potentially significant environmental effects was largely limited to beneficial effects to the marine environment within the HPMAs, spillover benefits beyond the boundaries of HPMAs, and potential adverse effects as a result of the displacement of any activities that are excluded or restricted, as well as from the extension of any new cable or pipeline routes that need to avoid transecting HPMAs.

Reasonable alternatives

- 3.2.7 In accordance with the 2005 Act, there is a requirement to consider reasonable alternatives that fulfil the objective of the plan as part of the SEA. The reasonable alternatives that have been identified as part of the development of the Policy Framework and Site Selection Guidelines for HPMAs have been assessed.
- 3.2.8 In advance of identifying any potential HPMAs, reasonable alternatives are considered to be high-level considerations of alternative management options that meet the aims of HPMAs, for example options for different activities that are not considered compatible with HPMAs and activities that are allowed at non-damaging levels. As part of the process for selecting HPMAs, the options considered for where sites are located could be considered reasonable alternatives. It is expected that the suitability of alternative management scenarios and alternative decisions on where sites are located will be explored and informed by the SEA as the assessment progresses.

3.3 SEIA approach

3.3.1 The proposed methodology to be applied once the locations of the HPMAs have been selected will build on previous marine socio-economic assessments

for MPAs, particularly the assessment of Scottish Nature Conservation MPAs³², the draft assessment of phase 2 fisheries management measures in Nature Conservation MPAs³³, the assessment of four new Nature Conservation MPAs³⁴, the assessment of a proposed deep sea marine reserve³⁵ and the assessment of fisheries management measures in offshore MPAs³⁶. It will be consistent with Better Regulation Executive guidance on impact assessment, the Green Book methodology³⁷ for economic assessment and Scottish Government guidance on Business and Regulatory Impact Assessment (BRIA)³⁸. It will also seek to incorporate forthcoming guidance on SEIA for inshore MPAs proportionately.

- 3.3.2 The SEIA will seek to estimate the effects of the designation and management of the HPMAs both at site level and for the suite of HPMAs as a whole in terms of:
 - Potential economic impacts to marine activities;
 - Potential social impacts;
 - Potential impacts on the public sector; and
 - Potential environmental impacts (costs and benefits, including social benefits through ecosystem services).
- 3.3.3 Lower, intermediate and upper estimates will be developed to assess the potential range of impacts, reflecting a range of assumptions and possible management options that may be applied.
- 3.3.4 The estimates are used to assess the potential range in impacts associated with designation of the proposed sites. The assessment period for considering the impacts of designation is 60 years, in line with HM Treasury Green Book

³² Marine Scotland, 2013. Planning Scotland's Seas: 2013 - The Scottish Marine Protected Area Project – Developing the Evidence Base tor Impact Assessments and the Sustainability Appraisal Final Report.

³³ Marine Scotland, 2018. Proposed Inshore MPA/SAC Fisheries Management Measures – Phase 2. Socio-Economic Impact Assessment. October 2018. Report prepared by ABPmer & effec for the Scottish Government.

³⁴ Marine Scotland, 2019. SEIA of Proposed Marine Protected Areas. Socio-Economic Impact Assessment. January 2019. Prepared by ABPmer & eftec for Marine Scotland.

³⁵ Marine Scotland, 2019. Development of a Deep Sea Marine Reserve, West of Scotland. Socio-Economic Impact Assessment. September 2019. Accessed 21 July 2022.

³⁶ Marine Scotland, in prep. SEIA of Offshore Marine Protected Areas in Scottish Waters.

³⁷ HM Treasury, 2018. The Green Book. Central Government Guidance on Appraisal and Evaluation

³⁸ Scottish Government guidance on Business and Regulatory Impact Assessment

guidance. Within this timeframe, costs to industry are quantified and valued over a period of 20 years.

- 3.3.5 The following activities and communities are considered:
- Aggregate Dredging;
- Aquaculture (finfish);
- Aquaculture (shellfish and seaweed);
- Aviation;
- Carbon Capture and Undersea Storage;
- Coast Protection and Flood Defence;
- Commercial Fisheries (including salmon and sea trout);
- Energy Generation;
- Military and Defence;
- Oil and Gas (including exploration, production, interconnectors, gas storage);
- Ports and Harbours:
- Power Interconnectors and Transmission Lines:
- Recreational Angling;
- · Recreational Boating;
- · Seabed Mining;
- Wild Seaweed Harvesting
- · Shipping;
- Telecom Cables;
- Tourism (including heritage assets);
- Water Sports (including surfing, windsurfing, sea kayaking, small sail boat activities (such as dinghy sailing) and scuba diving); and
- The wider community.
- 3.3.6 A series of appendices to the SEIA provide the outcome of the scoping assessment, proposed methodologies for assessing cost impacts to sectors, and a template of the site assessment tables for reporting results for each individual proposed HPMA.

4 Results of the Sustainability Appraisal

4.1 Environmental effects

- 4.1.1 The designation of HPMAs in Scottish waters are likely to have significant environmental effects on the environment through the exclusion or restriction of certain marine activities. The key potential environmental effects or impact pathways that are likely to arise from the implementation of the Policy Framework and Site Selection Guidelines for HPMAs are as follows:
- Potential benefits to marine biodiversity and the marine ecosystem;
- Potential spillover benefits beyond site boundaries;
- Potential adverse effects resulting from the displacement of activities from site boundaries into new areas and the intensification of activities in areas where these activities already occur; and
- Potential adverse effects as a result of the replacement of existing or installation of new cable routes or pipelines that need to avoid transecting HPMAs.
- 4.1.2 In generic terms, the adoption of the Policy Framework and Site Selection Guidelines and designation of HPMAs will result in overall beneficial effects on the overarching topic Biodiversity, Flora and Fauna and contribute to the achievement of the SEA objectives as the HPMAs will target the removal of damaging marine activities or restriction of marine activities to non-damaging levels. In other words, the HPMAs will remove a number of pressures and/or reduce their magnitude that currently, or might otherwise in the future, occur within site boundaries. This will allow for ecosystem recovery and biodiversity enhancement, including the recovery of PMFs, and the protection of blue carbon and critical fish habitats.
- 4.1.3 In turn, the change in pressures within HPMAs may also result in the potential for spillover benefits beyond the boundaries of the sites. One of the benefits of restricting certain harmful activities in sensitive areas is the potential spill over

of marine species from protected areas into unprotected areas^{39,40}. Spill over occurs when there is a population surplus in the newly protected area and the carrying capacity of that area is surpassed. As the protected area cannot support all of the individuals present, a migration away from the more densely populated area will occur and this movement may be outwith the area of protection. This migration can result in a net increase in the number of marine species outwith the protected area⁴¹. Furthermore the increases in biomass of exploited species can lead to increased production of their eggs and larvae within the protected area⁴². There is, however, variation in the level of effectiveness and scale of benefits that removal of an activity (e.g. fisheries closure) can have and these are site dependent⁴³;⁴⁴;⁴⁵;⁴⁶. The current conditions encountered within a site (e.g. current stock level, species present, nursery and spawning areas for those species, level of fishing activity/pressure prior to exclusion/restrictions being implemented) need to be characterised in order to be able to undertake a detailed assessment of the potential for spill over benefits to occur.

4.1.4 In addition, the adoption of the Policy Framework and Site Selection Guidelines are likely to support the development of more effective Environmental Impact Assessments (EIAs). EIAs are required to be undertaken on regulated activities such as oil and gas activities or marine renewable developments. These assess the likely significant environmental effects of a project, including on current and proposed nature conservation sites. The evidence-based selection of proposed HPMAs and their subsequent designation will provide developers with a better understanding and appreciation of the marine ecosystem that needs to be

³⁹ Buxton, C.D., Hartmann, K., Kearney, R. and Gardner, C., 2014. When is spillover from marine reserves likely to benefit fisheries?. PloS One, 9(9), p.e107032.

⁴⁰ Schratzberger, M., Neville, S., Painting, S., Weston, K. and Paltriguera, L., 2019. Ecological and socio-economic effects of highly protected marine areas (HPMAs) in temperate waters. Frontiers in Marine Science, p.749.

⁴¹ Kerwath, S.E., Winker, H., Götz, A. and Attwood, C.G., 2013. Marine protected area improves yield without disadvantaging fishers. Nature Communications, 4, p.2347.

⁴² Schratzberger, M., Neville, S., Painting, S., Weston, K. and Paltriguera, L., 2019. Ecological and socio-economic effects of highly protected marine areas (HPMAs) in temperate waters. Frontiers in Marine Science, p.749.

⁴³ Starr RM, Wendt DE, Barnes CL, Marks CI and others (2015) Variation in responses of fishes across multiple reserves within a network of marine protected areas in temperate waters. PLoS ONE 10: e0118502

⁴⁴ Hillborn, R. (2017) Are MPAs effective? ICES Journal of Marine Science, Volume 75, Issue 2, P1160-1162

⁴⁵ Lenihan, H.S., Gallagher, J.P., Peters, J.R., Stier, A.C., Hofmeister, J.K. and Reed, D.C., 2021. Evidence that spillover from Marine Protected Areas benefits the spiny lobster (Panulirus interruptus) fishery in southern California. Scientific Reports, 11(1), pp.1-9.

⁴⁶ Pantzar, M., Russi, D., Hooper, T., and Haines, R. (2018). Study on the Economic Benefits of Marine Protected Areas. Report to the European Commission.

- protected. This greater clarity and confidence will help to ensure that developers undertake more effective EIAs for future developments. This in turn may reduce pressures associated with regulated activities that take place near to but outside the boundaries of the HPMAs.
- 4.1.5 Alternatively, developers may look to avoid progressing consented developments that have not been built and re-locating regulated activities some distance from HPMAs as they may require the consideration of appropriate mitigation measures. The avoidance of development near to the HPMAs by potentially harmful activities would, therefore, result in future environmental benefits within and outside of the HPMAs.
- 4.1.6 Although a number of particularly vulnerable habitats and species are already protected as PMFs (e.g. maerl beds, flame shell beds), the designation of HPMAs will provide a greater level of certainty on the specific areas of the marine environment that are considered particularly sensitive and need to be avoided by any potentially damaging activities. This certainty could, therefore, provide some potential marginal environmental benefits in terms of avoiding any future risk of damaging these sensitive habitats and species and also helping to support their recovery.
- 4.1.7 HPMAs may overlap either fully or partially with some existing MPAs in order to maximise the conservation benefits associated with stricter management approaches. HPMAs may also occur fully outwith existing MPAs. The overall environmental benefits may be potentially greater where HPMAs are located in areas outwith existing MPAs and are not subject to any existing conservation management, although this will depend on the biodiversity and ecosystem features being protected and their current value and condition.
- 4.1.8 The increased protection brought about by the HPMAs will also provide potential future benefits to the marine environment as they will restrict new activities that are prohibited or restricted from becoming established in HPMAs.
- 4.1.9 In terms of potential adverse environmental effects, the adoption of the Policy Framework and Site Selection Guidelines and designation of HPMAs will result in the displacement of certain marine activities and their associated pressures outwith the boundaries of the HPMAs. This could result in potential adverse

- environmental effects in other areas, where such activities are not managed. This includes the potential for transboundary effects to occur on EU Member States where activities are displaced outwith Scottish jurisdiction.
- 4.1.10 The designation of HPMAs may also result in future cable or pipeline routes being extended to avoid these protected areas. A longer cable or pipeline route is likely to involve a greater spatiotemporal scale of disturbance during installation, operation and maintenance which could potentially result in significant adverse environmental effects depending on the sensitivity of marine habitats and species outside the HPMAs that would be affected. There are a large number of marine cables that will be required in Scottish Waters in the near future, including areas earmarked for renewables development (such as ScotWind option agreement areas and INTOG areas). Additional pipeline routes may also be required to facilitate future carbon capture utilisation and storage (CCUS).
- 4.1.11 Overall, the environmental benefits of increased protection that will result from the designation of HPMAs are anticipated to be greater or at least balanced by the adverse impacts associated with displacement and longer cable or pipeline routes. The scale or magnitude of this impact will be assessed in detail for each HPMA that is selected and proposed for designation as part of a future updated SEA.
- 4.1.12 The overall impacts of HPMAs on the overarching topic Biodiversity, Flora and Fauna, in terms of their anticipated contribution to the achievement of the SEA objectives, is assessed at a qualitative level in Box 2.

Box 2 Impact of HPMAs on SEA objectives

1. To protect and recover marine ecosystems, including species, habitats, and their interactions (Objective met)

Protection of marine species and habitats within HPMAs could contribute to the achievement of this objective by minimising or avoiding the disturbance and/or damage of marine species and habitats.

2. To maintain and protect the character and integrity of the seabed (Objective met)

Protection of marine species and habitats within HPMAs could contribute to the achievement of this objective by reducing or preventing destruction of the seafloor.

3. To avoid the pollution of the seabed strata and/or bottom sediments (Objective met)

Protection of marine species and habitats within HPMAs could contribute to the achievement of this objective by reducing or preventing the potential disturbance and re-settling of sediment-bound contaminants and reducing contamination from marine activities that are excluded or restricted.

4. To avoid pollution of the marine water environment (objective met)

Protection of marine species and habitats within HPMAs could contribute to the achievement of this objective by reducing disturbance of the seabed and potential for increased suspended sediment levels and sediment-bound contaminants in the water column and reducing contamination from marine activities that are excluded or restricted.

5. To maintain or work towards achieving 'Good Environmental Status' of the marine environment (objective met)

Protection of marine species and habitats within HPMAs could contribute to the achievement of this objective by minimising or avoiding pressures that could result in a change to quality elements used to assess ecological status under the WFD and environmental status under the UK Marine Strategy Regulations.

6. To preserve and enhance existing marine carbon stocks and carbon sequestration potential (objective met)

Protection of areas that include habitats that are blue carbon sinks due to their fixation and sequestration ability could contribute to the achievement of this objective by reducing or preventing damage of these habitats.

Reasonable alternatives

- 4.1.13 Further to the potential benefits afforded by the designation of HPMAs, a high-level preliminary assessment of the potential environmental effects that might arise from a more stringent alternative management option has been undertaken. This is anticipated to result in a maximum level of potential beneficial and adverse environmental effects.
- 4.1.14 The exclusion of a greater number of marine activities from HPMAs, including those that are proposed to be carefully managed at levels considered non-damaging to the marine environment, , such as wildlife watching, may have some additional benefits on marine habitats and species within the HPMA and the wider marine ecosystem although these are likely to be limited particularly for activities that are considered to be occurring at non-damaging levels.

 Excluded activities are likely to be displaced to other areas outwith the HPMA boundary. The overall effect on the marine environment of excluding a greater number of marine activities, including those that are not considered to be at damaging levels in the wider region may be significant and will need to be assessed in more detail once HPMAs have been selected for designation and a site specific assessment can be undertaken.
- 4.1.15 In addition, there is potential for future benefits under a more stringent alternative management scenario from the prevention of the establishment of a larger number of marine activities in HPMAs.

Cumulative effects

4.1.16 There is the potential for cumulative effects to arise from the implementation of the Policy Framework and Site Selection Guidelines for HPMAs as a whole and also alongside other plans and programmes likely to be undertaken in Scottish seas.

Cumulative effects of the HPMAs as a whole

4.1.17 In terms of the combined effects associated with the designation of all HPMAs, the benefits would be additive, as a larger spatial area of marine habitat and associated species would be protected. The designation of a larger spatial area also provides for potential inclusion of a wider range of species and habitats

within the wider MPA network. The scale of the displacement of existing activities to other areas, where such activities are not managed, as a result of the HPMAs will also depend on the spatial area of the HPMAs and their overlap with existing or future potential marine activities that would be excluded or restricted. These assumptions will need to be confirmed once the proposed HPMAs have been selected and their geographic location is known so that the potential environmental effects can be assessed as part of a future updated SEA.

Cumulative effects of the HPMA with other plans

- 4.1.18 The designation of HPMAs will, together with the wider MPA network and existing protection measures, further benefit the overarching topic of Biodiversity, Flora and Fauna in Scottish waters and contribute to the achievement of SEA objectives.
- 4.1.19 The boundaries of the HPMAs that are selected could overlap with current MPAs, some of which could already have existing fisheries management measures (Phase 1 measures in inshore MPAs) or measures that are being proposed and considered for adoption (e.g. Phase 2 proposed measures in inshore MPAs, proposed measures for PMFs and proposed measures in offshore MPAs). These measures have been or are in the process of being assessed separately and have the potential for cumulative effects with the proposed HPMAs. The HPMAs will extend the exclusion of fishing activities to a number of other marine activities. The overall environment benefits are, therefore, likely to be greater than those associated with the proposed fisheries management measures for MPAs, with larger areas of habitat highly protected within Scottish Seas as a result of the HPMAs.
- 4.1.20 There may also be cumulative adverse effects on the environment from the displacement of activities resulting from other plans in-combination with the designation of HPMAs. These include the existing fisheries management measures and proposed measures which are currently under assessment and yet to be fully consulted upon. In addition, other plans which could potentially interact with the proposed measures for offshore MPAs include wider marine spatial planning including the Crown Estate Scotland's first round of Offshore

Wind Leasing in Scottish Waters (ScotWind), the Scottish Government's Sectoral Marine Plan for INTOG, National Grid Electricity System Operator's (ESO) Holistic Network Design (HND) under the Offshore Transmission Network Review (OTNR) and development and deployment of CCUS in Scotland. All these other plans are currently under assessment and will be considered in the updated SEA that will be undertaken once the proposed HPMAs have been identified.

4.2 Economy and other marine users

- 4.2.1 To consider potential economic costs, an initial scoping has been undertaken, identifying individual impact pathways for each sector. A high-level summary of the outcome of initial scoping is provided in Table, and details of the scoping of individual impact pathways for each sector is provided in Appendix A of the SEIA.
- 4.2.2 Aggregate dredging, aviation and wild seaweed harvesting were scoped out of the assessment. There is currently no existing or planned marine aggregate extraction in Scottish waters, aviation is not considered to require management measures, and wild seaweed harvesting predominantly takes place above mean low water springs (MLWS) and therefore would be outside of the boundaries of HPMAs.
- 4.2.3 In addition to whether each sector has been scoped in or out, Table also provides high-level commentary on:
 - Type(s) of impact, and whether a priori impacts are anticipated to be low, medium or high (although this can only be quantified once the assessment of proposed sites has been undertaken);
 - Risk of upstream and downstream effects (i.e. cost impact only, or GVA impact);
 and
 - Potential for displacement of activity to other areas.
- 4.2.4 Detailed assessment methods and assumptions for each sector and impact pathway are set out in Appendix B of the SEIA. Input from stakeholders and consultees will support further development and finalisation of the methods and assumptions. All the methods generally entail making estimates of the cost of

implementing restrictions and/or the impact of implementing the restrictions on operating revenues. Where possible, all impacts are quantified in monetary terms, with these values converted to current prices using the relevant Gross Domestic Product (GDP) deflators. Where impacts on economic activities have the potential to give rise to a change in the level of output, direct and indirect impacts on Gross Value Added (GVA) and employment are estimated using appropriate multipliers.

- 4.2.5 There may also be potential economic benefits for some marine sectors, and these are considered and identified where appropriate. However, quantification of economic benefits is uncertain as it is harder to predict if or where new businesses may establish, or existing businesses may expand.
- 4.2.6 Scoping and assessment methods are provisional at this stage and will be reviewed and refined in light of specific HPMA proposals.

Table 1 Outcome of Initial Scoping

Sector	Scoped in?	Comment	Types of impact	Anticipated scale of impact	Risk of upstream and downstream effects	Potential for displacement of activity to other areas
Aquaculture (finfish)	Yes	Potential overlap with existing or proposed aquaculture sites	 Removal/ relocation of sites Additional licensing costs Opportunity costs 	High	Yes	Yes
Aquaculture (shellfish and seaweed)	Yes	Potential overlap with existing or proposed aquaculture sites	 Removal/ relocation of sites Additional licensing costs Opportunity costs 	High	Yes	Yes
Aviation	No	No management would be required for this sector				
Carbon Capture Utilisation and Storage	Yes	Potential overlap with potential CCUS locations	 Additional licensing costs Deviation of new pipelines Opportunity costs 	Low	No	Yes
Coast Protection and Flood Defence	Yes	Potential overlap with coastal protection and flood defence measures if HPMAs are in inshore area	Additional licensing costs	Low	No	No
Commercial Fisheries	Yes	Potential overlap with commercial fishing activity	 Loss of fishing grounds Minimal speed requirement Restriction on fixed engines and 	High	Yes	Yes

Sector	Scoped in?	Comment	Types of impact	Anticipated scale of impact	Risk of upstream and downstream effects	Potential for displacement of activity to other areas
			net and coble			
			fisheries			
Energy Generation	Yes		 Additional licensing costs Deviation of new cable routes Additional 	Medium	No	Yes (cables)
			mitigation costs Opportunity Costs			
Marine Aggregate Extraction	No	No current marine aggregate licences or licence applications in Scottish waters				
Military and Defence	Yes	Potential overlap of danger areas and practice and exercise areas	Revision of MESACompliance with MESAT revisions	Low	No	No
Oil and Gas	Yes		 Additional licensing costs Deviation of new pipelines Additional costs for repairs and maintenance and decommissioning Opportunity costs 	Medium	No	Yes (pipelines)
Ports and Harbours	Yes		Additional assessment costs	Low- Medium	No	Yes

Sector	Scoped in?	Comment	Types of impact	Anticipated scale of impact	Risk of upstream and downstream effects	Potential for displacement of activity to other areas
Power Interconnect ors	Yes	Potential overlap with future interconnectors	Additional assessment costsDeviation of new cable routes	Low- Medium	No	Yes
Recreational Fishing	Yes	Potential overlap with recreational fishing activities	Loss of sea and shore fishing sites	Low	No	Yes
Recreational Boating	Yes	Potential overlap with marinas and anchorages	 Vessel speed restrictions Restrictions on anchoring Vessel number restrictions Additional licensing costs for marinas 	Low	No	Yes
Seabed mining	Yes	No seabed mining activity currently, but potential management may preclude future activity of the sector in Scottish waters.	 Additional costs for marine license determinations Opportunity cost 	Low	No	Yes
Wild Seaweed harvesting	No	Seaweed harvesting takes place above MLWS therefore no potential overlap.				
Shipping	Yes		Restrictions on discharge of	Low	No	No

Sector	Scoped in?	Comment	Types of impact	Anticipated scale of impact	Risk of upstream and downstream effects	Potential for displacement of activity to other areas
			waste material and ballast water			
Telecom Cables	Yes	Potential overlap with future telecom cable routes	 Additional licensing costs (new cables in relation to lifeline services) Deviation of new cable routes 	Low	No	Yes
Tourism (including heritage assets)	Yes	Potential overlap with wildlife watching areas	 Vessel speed restrictions Restrictions on numbers Comply with codes of practice 	Low	No	Yes (if restrictions on numbers)
Water sports	Yes	Potential overlap with water sports areas	Vessel speed restrictionsRestrictions on numbers	Low	No	Yes (if restrictions on numbers)

4.3 People, population and health

- 4.3.1 The social impacts generated by the designation and management of HPMAs will be strongly connected to the nature, scale and distribution of the economic impacts (on both income and employment). Any significant change in employment, for example generated as a result of restrictions on fishing activity, can have significant social impacts (e.g. on health, crime). Based on consideration of the distribution of economic impacts and potential benefits in desk-based analysis (as described in Section 4.2), the assessment of social impact will then consider if any further socio-economic variables as per Box 1 of the SEIA guidance should be included in the analysis. The distribution of impacts on employment will focus on the likely location on land where those employment impacts are likely to be felt. For the fishing sector, the registered Home Port Districts of the vessels affected can be considered as a proxy for likely location of employment; this can be explored further for sites where impacts likely to be greater than others. The distribution of impacts on the fish processing industry will focus on the ports of landing of the affected vessels' catches, as a proxy for the linkage between the catches made from an HPMA at sea, and where those catches are landed and processed. This can also be explored further for sites and ports where impacts are likely to be greater than others.
- 4.3.2 Public sector costs are estimated at national level using agreed assumptions for all sites combined and based on discussions with Marine Scotland, NatureScot and JNCC. Costs in the following broad areas are considered:
 - Site monitoring;
 - Compliance and enforcement;
 - Loss of revenue from seabed leases;
 - Promotion of public understanding; and
 - Regulatory and advisory costs associated with licensing decisions.
- 4.3.3 The ecosystem features of an HPMA contribute to the delivery of a range of ecosystem services. Management of the HPMA may improve the quantity and quality of the beneficial services provided, which may increase the value

(contribution to economic welfare) of them. Impacts on the value of natural capital and ecosystem services may occur as a result of the management and/or improvement in condition of the ecosystem. However, both of these impacts can be uncertain for several reasons, including because the baseline conditions are not always known.

4.3.4 The ecosystem services analysis provides a qualitative description of the potential changes in ecosystem service provision associated with the implementation of HPMAs and associated management measures.

Combined and cumulative impacts

- 4.3.5 The cumulative impact of designating the proposed HPMAs will take an additive approach (i.e. it assumes that the cumulative impact is equivalent to the sum of the individual impacts within each site). In areas where there are several sites affecting a particular activity, further consideration will be given to the potential cumulative impact to describe qualitatively whether the overall impact might be larger or smaller than the sum of the individual impacts.
- 4.3.6 An in-combination assessment will also give consideration to how the significance of these impacts might vary when taking account of the total impact as a result of all proposed HPMAs combined with other current or planned developments to date, such as renewable energy generation development and the designation and management of other MPAs (e.g. NCMPAs and SACs), particularly where there is overlap between or proximity of these and proposed HPMAs.

5 Next Steps

- 5.1.1 The consultation on the Policy Framework and Site Selection Guidelines for HPMAs and the accompanying partial Business and Regulatory Impact Assessment (BRIA), partial Island Communities Impact Assessment (ICIA) screening, SEA Environmental Report, SEIA and SA is now open and will close on 20 March2023. Views and opinions on this SA, and the draft Policy Framework and Site Selection Guidelines, partial Business and Regulatory Impact Assessment (BRIA) and partial Island Communities Impact Assessment (ICIA) screening are now invited.
- 5.1.2 As the location of HPMAs have not yet been identified, it is only possible to undertake an initial SA at this stage involving a preliminary consideration or scoping of the type of impacts that could arise from the future designation of HPMAs and restriction/limitation placed on activities within HPMAs. Once sites have been selected and proposed for designation, it will be possible to undertake an updated SA involving spatial analysis of specific potential sites and a more detailed assessment of the scale of potential environmental, social and economic effects.
- 5.1.3 Please provide any comments on this SA in your responses to the consultation questionnaire, including any comments on general issues or cumulative effects.
- 5.1.4 Following the consultation period, the responses received will be analysed, and the findings from this analysis will be taken into account in the finalisation of the Policy Framework and Site Selection Guidelines.
- 5.1.5 A Post-Adoption SEA Statement will be prepared after an updated SEA is undertaken, reflecting the findings of the assessment and the views expressed in the consultation, and outlining how the issues raised have been considered.
- 5.1.6 Copies of the consultation documents and the Environmental Report are available for viewing during office hours at the Scottish Government library at Saughton House, Edinburgh (K Spur, Saughton House, Broomhouse Drive, Edinburgh, EH11 3XD).
- 5.1.7 Please send your response, with the completed Respondent Information Form, to:

By email to: HPMA@gov.scot or

By post to: HPMA Consultation

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Appendix A Abbreviations

Acronym	Definition	
BRIA	Business and Regulatory Impact Assessment	
CCUS	Carbon Capture, Utilisation and Storage	
ER	Environmental Report	
ESO Electricity System Operator		
EU	European Union	
GDP	Gross Domestic Product	
GVA	Gross Value Added	
НМ	Her Majesty's	
НМРА	Historic Protected Marine Area	
HND	Holistic Network Design	
НРМА	Highly Protected Marine Area	
INTOG	Innovation and Targeted Oil and Gas Decarbonisation	
IUCN International Union for Conservation of Nature		
JNCC Joint Nature Conservation Council		
MPA	Marine Protected Area	
NCMPA	Nature Conservation Marine Protected Area	
OABM	Other Area Based Measure	
OTNR	Offshore Transmission Network Review	
PMF	Priority Marine Feature	
SA	Sustainability Appraisal	
SAC	Special Area of Conservation	
SEA	Strategic Environmental Assessment	
SEIA	Socio-economic Impact Assessment	
SPA	Special Protection Area	
SSSI	Site of Special Scientific Interest	
UK	United Kingdom	
WFD	Water Framework Directive	



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