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UK Marine Policy Statement: Habitats Regulations Assessment

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Appendices

Abbreviations

The following abbreviations have been used in this report:

Abbreviation	Description
AoS	Appraisal of Sustainability
ASSI	Areas of Special Scientific Interest
BERR	Department for Business, Enterprise and Regulatory Reform
CCS	Carbon Capture and Storage
CCW	Countryside Council for Wales
DECC	Department of Energy and Climate Change
DTI	Department of Trade and Industry
EIA	Environmental Impact Assessment
EU	European Union
FEPA	Food and Environment Protection Act 1985
FCS	Favourable Conservation Status
GES	Good Environmental Status
HLO	High Level Marine Objectives
HRA	Habitats Regulations Assessment
IROPI	Imperative Reasons of Overriding Public Interest
JNCC	Joint Nature Conservation Committee
MCZ	Marine Conservation Zone
MMO	Marine Management Organisation
MPA	Marine Protected Area
MPS	Marine Policy Statement
MSFD	Marine Strategy Framework Directive
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Projects
OES	Offshore Energy SEA
SAC	Special Area of Conservation
cSAC	candidate Special Area of Conservation
dSAC	draft Special Area of Conservation
pSAC	possible Special Area of Conservation
SCI	Site of Community Importance
SEA	Strategic Environmental Assessment
SPA	Special Protection Area
pSPA	potential Special Protection Area
SSSI	Site of Special Scientific Interest
UK	United Kingdom
WFD	Water Framework Directive

1 Introduction

The Marine and Coastal Access Act[1], provides for a new system of marine planning which is expected to support the UK vision for clean, healthy, safe, productive and biologically diverse oceans and seas. This will firstly entail the preparation of a Marine Policy Statement (MPS), which will set out in one document UK Administrations policies for the sustainable development of the United Kingdom (UK) marine area. When the MPS is adopted the Marine and Coastal Act 2009 will place a duty on marine plan authorities to prepare Marine Plans for the English inshore and offshore regions, the Scottish offshore region, Welsh inshore and offshore regions and the Northern Ireland offshore region[2]. The Scottish inshore and Northern Ireland inshore regions will be covered by respective Scottish and Northern Ireland legislation[3]. Marine Plans and the MPS will guide and direct decisions in the marine environment.

The MPS is expected to lead to more strategic and efficient management of our marine environment and marine resources. The Marine (Scotland) Act also introduces a similar system for Scotland which allows for the creation of a Scottish national plan, as well as regional planning in the Scottish inshore region. The MPS is to be UK-wide and is the first step in this new system. It seeks to set out policies in the UK marine area to contribute to the achievement of sustainable development and provide a consistent policy steer for decision-makers and users in the marine area. It aims to take into consideration the priorities of all the different UK Administrations and to be forward looking (over 20 years and longer where possible). It aims to address European Union (EU) and international obligations and commitments and to explain how UK administrations are addressing these and taking them forward through domestic policies.

In tandem with this process it is necessary to undertake a Habitats Regulations Assessment (HRA) in accordance with the requirements of the Habitats Directive[4] to determine whether the MPS could have significant effects on sites of European nature conservation significance.

The HRA process is running alongside, but is separate from, the Appraisal of Sustainability (AoS) process for the MPS.

The HRA considers the potential effects, on European Sites[5], of implementing the MPS. However, the MPS is not a *spatial* plan that specifies where future marine activities are likely to take place. The MPS will provide a framework for development of Marine Plans, and guidance for decision makers in assessing

[1] The Marine and Coastal Access Act 2009.

[2] Marine and Coastal Access Act 2009; S51(2)

[3] Marine (Scotland) Act 2010 and the Northern Ireland Marine Bill.

[4] Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive)

[5] Sites listed within the Natura 2000 network, see section 1.2.

applications for consents. As a result, there are limitations and uncertainties in predicting the likely effects on European Sites and consequently only high level impacts can be identified, together with the extent to which the MPS seeks to avoid or offset these impacts.

HRA has therefore been applied to the MPS in a manner which is consistent with the non-spatial, strategic nature of the document. Separate HRAs are likely to be needed through the consideration of the subsequent Marine Plans and any individual projects that are proposed under these plans.

UK Administrations have, therefore, in this report, conducted HRA to the extent possible on the basis of the precision of the MPS.

1.1 Background to the Marine Policy Statement

The Marine and Coastal Access Act[1] provides for the introduction of a new marine planning system. The MPS, which will be UK-wide, is the first step in this new system. It will provide the high level policy context within which Marine Plans will be developed, and set the direction for marine licensing and other relevant authorisation systems. It aims to set out policies in the UK marine area to contribute to the achievement of sustainable development, and provide a consistent policy steer for decision makers and users in the marine area.

The UK Administrations (UK Government, Scottish Government, Welsh Assembly Government and the Northern Ireland Executive) are working towards joint adoption of the Marine Policy Statement, which will apply to all UK waters.

The Marine and Coastal Access Act defines the UK marine area as follows:

(1) For the purposes of this Act, the "UK marine area" consists of the following—

(a) the area of sea within the seaward limits of the territorial sea adjacent to the United Kingdom,

(b) any area of sea within the limits of the exclusive economic zone[6],

(c) the area of sea within the limits of the UK sector of the continental shelf (so far as not falling within the area mentioned in paragraph (b), and see also subsection (2)),

and includes the bed and subsoil of the sea within those areas.

(2) The area of sea mentioned in subsection (1)(c) is to be treated as part of the UK marine area for any purpose only to the extent that such treatment for that purpose does not contravene any international obligation binding on the United Kingdom or Her Majesty's government.

(3) In this section "sea" includes—

[6] The exclusive economic zone is described in section 41 of The Marine and Coastal Access Act

(a) any area submerged at mean high water spring tide, and

(b) the waters of every estuary, river or channel, so far as the tide flows at mean high water spring tide.

(4) The area of sea referred to in subsection (3)(a) includes waters in any area—

(a) which is closed, whether permanently or intermittently, by a lock or other artificial means against the regular action of the tide, but

(b) into which seawater is caused or permitted to flow, whether continuously or from time to time, and

(c) from which seawater is caused or permitted to flow, whether continuously or from time to time.

(5) Until the coming into force of the first Order in Council made under section 41 (the exclusive economic zone), the reference in subsection (1)(b) to the exclusive

(Section 42 of the Marine and Coastal Access Act 2009)

The MPS is the framework for preparing Marine Plans and taking decisions affecting the marine area. Marine Plans must 'conform to the marine policy statement, unless relevant considerations otherwise indicate'[7]. The MPS will facilitate and support the formulation of Marine Plans to help ensure that marine resources are used in a sustainable way.

The MPS will be used by, and referred to by, a wide range of public bodies and decision-makers including, for example, the Marine Management Organisation (MMO) in England and also local authorities.

Authorisation and enforcement decisions of public authorities[8] for activities which affect or might affect the UK marine area, will all need to be made in accordance with the MPS and any relevant Marine Plan, unless relevant considerations otherwise indicate[9]. Other decisions by public authorities which affect or might affect the UK marine area must be made having regard to the MPS and any relevant Marine Plan.

UK High Level Marine Objectives (HLOs)[10] have been published which will underpin the development of the MPS, and will also support implementation of the requirements of the Marine Strategy Framework Directive on Good

[7] Section 51(6) of the Marine and Coastal Access Act 2009.

[8] Except decisions granting development consent under the Planning Act 2008.

[9] Section 58(1) of the Marine and Coastal Access Act 2009.

[10] http://www.defra.gov.uk/environment/marine/documents/ourseas-2009update.pdf

Environmental Status[11] (GES). Member States must determine GES for their seas using criteria to be determined by the EU during 2010. Targets must be set by 2012 with cost effective programmes of measures in place by 2016. Marine planning will be a key tool for ensuring that the targets and measures to be determined by the UK can be implemented.

UK Administrations are also committed to delivering an ecologically coherent network of Marine Protected Areas (MPA) by 2012. The MPA network will comprise existing MPAs as well as new sites. It will be made up of both national (Marine Conservation Zones (MCZ), Sites of Special Scientific Interest (SSSI), Areas of Special Scientific Interest (ASSI)) and international (European and Ramsar) sites. This network of MPAs will contribute to other measures to protect marine biodiversity and good environmental status including the MPS.

The MPS sits alongside existing planning regimes across the UK. In England and Wales this includes the suite of National Policy Statements (NPSs) currently being prepared by UK Government departments. NPSs are being produced for nationally significant infrastructure projects (NSIPs) in key sectors under the Planning Act 2008 (including energy, ports, transport, water, wastewater and waste). Decisions on NSIPs must have regard to the MPS. In Scotland the second National Planning Framework under the Planning (Scotland) Act 2006 sets out a number of national development priorities to support the Scottish Government's central purpose of sustainable economic growth. In Northern Ireland the Regional Development Strategy and Planning Policy Statements are the key planning documents which set the policy framework for terrestrial planning decisions.

Defra's Marine Programme has developed the MPS in collaboration with devolved administrations, working closely with other government departments and a range of other stakeholders.

1.2 Background to Habitats Regulations Assessment

Under Article 6 of the Habitats Directive, an assessment is required where a plan or project is likely to have a significant effect upon a Natura 2000 site (also known as 'European Sites'). Natura 2000 is a network of areas designated to conserve natural habitats that are in danger of disappearance in their natural range, have a small natural range or present outstanding examples of typical characteristics of the biogeographic region and species that are rare, endangered, vulnerable or endemic within the European Community. This includes Special Areas of Conservation (SAC) designated under the Habitats Directive for their habitats and/or species of European importance and Special Protection Areas (SPA) classified under Directive 2009/147/EC on the Conservation of Wild Birds[12] for rare, vulnerable and regularly occurring migratory bird species and internationally important wetlands.

[11] Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)

[12] Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version)

In addition, it is a matter of law that candidate SACs (cSACs) and Sites of Community Importance (SCI) are considered in this process; furthermore, it is UK Administration policy that sites designated under the 1971 Ramsar Convention for their internationally important wetlands (Ramsar sites) and potential SPAs (pSPAs) are considered in this process.

The requirements of the Habitats Directive are transposed into UK law out to territorial water limits (12 nautical miles) by means of several pieces of legislation. This includes:

- the Conservation of Habitats and Species Regulations 2010 [13] (Habitats Regulations 2010),

-the Conservation (Natural Habitats, etc) Regulations (Northern Ireland) 1995 (as amended)[14] ('Northern Ireland Regulations' - for Northern Ireland only), and

-the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (for Scotland only) (Habitats Regulations 1994)[15].

The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007[16] (as amended) transpose the Habitats Directive in the UK offshore marine area (beyond 12 nautical miles).

Paragraph 3, Article 6 of the Habitats Directive states 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 conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to paragraph 4 (see below), the competent national authority shall agree to the plan or project only 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'.

Paragraph 4, Article 6 of the Habitats Directive states that:

'If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

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[13] SI 2010/490

[14] SR 1995/380

[15] SI 1994/2716

[16] SI 2007/1842

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest'.

These requirements are implemented in the UK through, among others, Regulations 25 and 26 of the Offshore Marine Regulations, Regulations 59-67 of the Habitats Regulations 2010, Regulations 48-53 of the Habitats Regulations 1994 and Regulations 43-48 of the Northern Ireland Regulations.

Regulation 9(3) of the Conservation of Habitats and Species Regulations 2010 includes a general duty whereby:

'A competent authority must, in relation to marine areas, exercise any of those functions which are relevant to marine conservation so as to secure compliance with the requirements of the Habitats Directive'.

1.3 Stages of Habitats Regulations Assessment

It is recommended[17] that the requirements of the Habitats Directive are met through the following four distinct stages:

Stage 1: Screening is the process which initially identifies the likely impacts upon a European Site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts may be significant. It is important to note that the burden of evidence is to show, on the basis of objective information, that there will be no significant effect; if the effect may be significant, or is not known, that would trigger the need for an Appropriate Assessment. There is European Court of Justice case law[18] to the effect that unless the likelihood of a significant effect can be ruled out on the basis of objective information, then an Appropriate Assessment must be made.

Stage 2: Appropriate Assessment is the detailed consideration of the impact on the integrity of the European Site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's conservation objectives and its structure and function. This is to determine whether there is objective evidence that adverse effects on the integrity of the site can be excluded. This stage also includes the development of mitigation measures to avoid or reduce any possible impacts.

Stage 3: Assessment of alternative solutions is the process which examines alternative ways of achieving the objectives of the project or plan that would avoid adverse impacts on the integrity of the European Site, should avoidance or mitigation measures be unable to cancel out adverse effects.

Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain. At Stage 4 an assessment is made with regard to

[17] (European Commission, 2001) Assessment of plans and projects significantly affecting Natura 2000 sites

[18] C-127/02 *("Waddenzee Judgement")*

whether or not the development is necessary for imperative reasons of overriding public interest (IROPI) and, if so, of the compensatory measures needed to maintain the overall coherence of the Natura 2000 network.

It is important to note that where priority habitats or species are present, the imperative reasons need to be " *reasons relating to human health, public safety or beneficial consequences of primary importance to the environment, or other reasons which in the opinion of the European Commission are imperative reasons of overriding public interest*", whereas for non-priority habitats and species, imperative reasons of a social or economic nature may be acceptable, as long as they are considered to be sufficient to override the harm to the site.

2 Identification of European Sites

2.1 European Sites that could be affected by the MPS

A European Marine Site as defined by the Conservation of Habitats and Species Regulations 2010 is a *'European Site which consists of, or so far as it consists of, marine areas'*. These Regulations define a 'marine area' as '*any land covered (continuously or intermittently) by tidal waters or any part of the sea in or adjacent to Great Britain up to the seaward limit of territorial waters'*.

On the land and out to 12 nautical miles at sea, the identification of SACs is the responsibility of the nature conservation agencies for England, Scotland, Wales and Northern Ireland. The introduction of the Offshore Marine Conservation (Natural Habitats &c.) Regulations 2007 gave the UK the legal mechanism to select SACs in the UK offshore marine area. This includes waters beyond 12 nautical miles, within British Fishery Limits and the seabed within the UK Continental Shelf Designated Area. The Joint Nature Conservation Committee (JNCC) is responsible for identifying offshore SACs.

There are currently 81 SACs and cSACs with marine components, covering 2% of the UK sea area (http://www.jncc.gov.uk/page-1445). Of these, 76 are in inshore waters and 5 SACs are in offshore waters (see Figure 1).

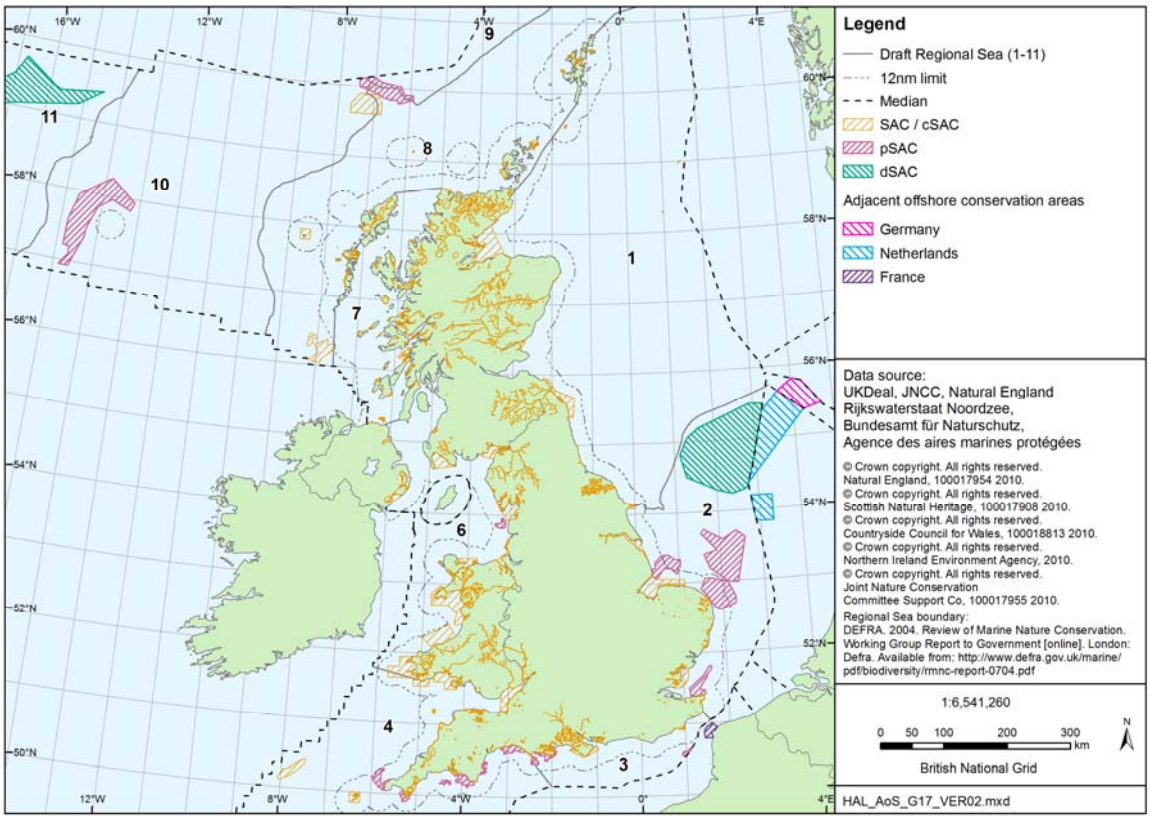

Figure 1 Map illustrating SACs in UK waters
NB This map also illustrates possible (pSACs) and draft (dSACs) which are not covered under this assessment.

Between November 2009 and February 2010, Natural England and the JNCC carried out consultation on ten proposed marine SACs. Pending the outcome of

the consultation these are expected to be submitted to the Commission in October 2010. These are as follows:

- Margate and Long Sands (Thames Estuary)
- Poole Bay to Lyme Bay Reefs (Dorset and Devon Coast)
- Prawle Point to Plymouth Sound and Eddystone (Devon Coast)
- Lizard Point (Cornwall)
- Lands End and Cape Bank (Cornwall)
- Shell Flat and Lune Deep (Morecambe Bay)
- Haisborough, Hammond and Winterton (East Coast)
- Inner Dowsing, Race Bank and North Ridge (East Coast)
- Basseurelle (Channel)
- North west Rockall (North of Scotland)

There are currently 73 SPAs with marine components designated in the UK. This includes Bae Caerfyrddin/Carmarthen Bay SPA, the only entirely marine SPA, which was classified in 2003 for its non-breeding aggregations of common scoter. Figure 2 illustrates the locations of the current SPAs. In addition, in September 2009 the Scottish Government announced that 31 of Scotland's seabird breeding colony SPAs were to be extended to protect their adjacent marine habitats**.** The extensions go out to 1, 2 or 4km, depending on which species are protected within the existing terrestrial (not marine) SPA.

Between November 2009 and February 2010, JNCC (in conjunction with Natural England and the Countryside Council for Wales (CCW)) began formal consultation on two SPAs; the Outer Thames Estuary pSPA and the Liverpool Bay/Bae Lerpwl pSPA.

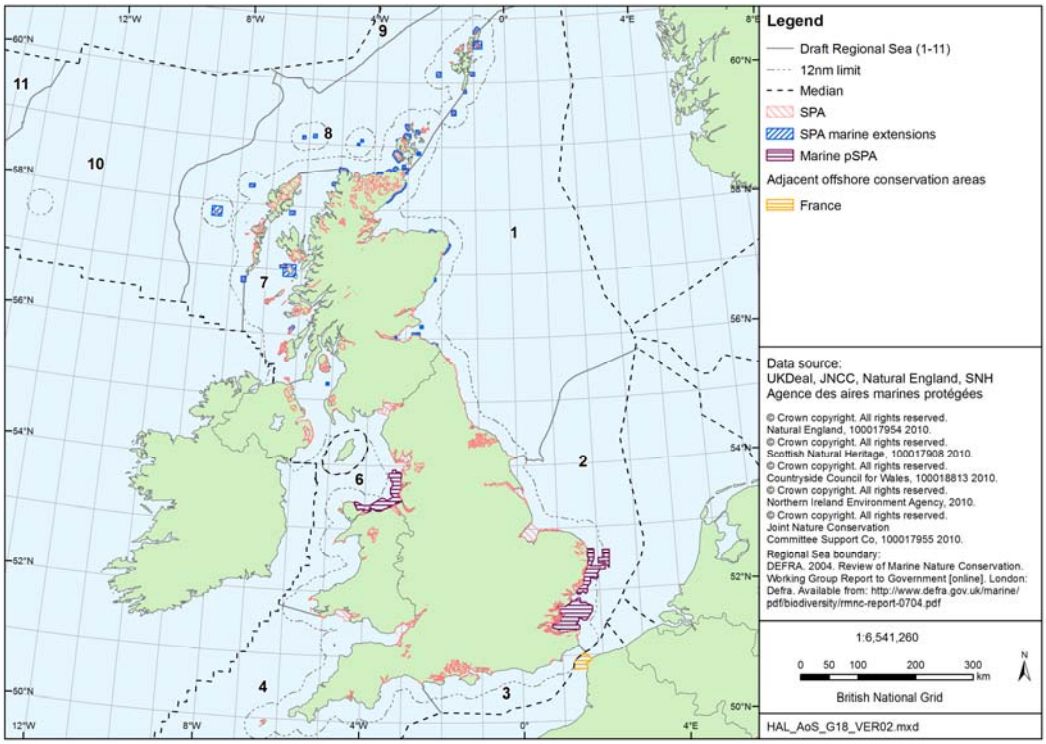

Figure 2 Map illustrating SPAs in UK waters

In addition to the above sites, it is UK policy that sites designated under the 1971 Ramsar Convention for their internationally important wetlands should be afforded the same protection as Natura sites. There are 146 Ramsar sites across the whole of the UK. However, the Ramsar sites relevant to the MPS are those that cover coastal areas (the designation does not extend beyond the subtidal zone). Seventy three Ramsar sites in the UK are situated in coastal areas.

2.2 Qualifying Interests of the European Sites

SACs with a marine component

'SACs with a marine component' can be defined on the basis of presence of Habitats Directive Annex I and/or Annex II interest features associated with the marine environment (JNCC Marine Natura Project Group, September 2007).

In practice, this means that one or more of the habitats listed below must be a qualifying feature within a SAC for it to be considered a SAC with a marine component:

1110 Sandbanks which are slightly covered by sea water all the time;
1130 Estuaries;
1140 Mudflats and sandflats not covered by seawater at low tide;
1150 Coastal lagoons (except where landwards of Highest Astronomical Tide and not directly connected to the sea);
1160 Large shallow inlets and bays;
1170 Reefs;
1180 Submarine structures made by leaking gases;
8330 Submerged or partially submerged sea caves;

1210 Annual vegetation of drift lines;
1310 Salicornia and other annuals colonising mud and sand;
1320 Spartina swards (*Spartinion maritimae*);
1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) (except where landwards of Highest Astronomical Tide);
1420 Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*) (except where landwards of Highest Astronomical Tide).

With respect to marine species, one or more of the species below must be a qualifying feature within a SAC for it to be considered a SAC with a marine component. All of these species are dependent upon the marine environment for part or all of their life cycle. In order to avoid the inclusion of freshwater SACs designated for anadromous/catadromous fish species, Sea lamprey, Allis shad and Twaite shad need to be associated with intertidal or subtidal areas within the SAC for the site to be classified as having a marine component. This also applies to otters, as some SACs contain otter populations which are either not reliant on the marine environment, or are reliant on marine areas outside SAC boundaries. The species are as follows:

1349 Bottlenose dolphin (*Tursiops truncatus*);
1351 Harbour porpoise (*Phocoena Phocoena*);
1364 Grey seal (*Halichoerus grypus);*
1365 Common seal (*Phoca vitulina*);
1095 Sea lamprey (*Petromyzon marinus*);
1102 Allis shad (*Alosa alosa*);
1103 Twaite shad (*Alosa fallax*);
1355 Otter (*Lutra lutra*).

SPAs with a marine component

JNCC has defined ‘SPAs with a marine component’ as those SPAs with qualifying Birds Directive Annex I species, or regularly occurring migratory species, that are dependent on the marine environment for all or part of their lifecycle, where these species are found in association with intertidal or subtidal habitats. These marine SPA habitats (as listed in JNCC’s International Designations Database) are:

N01 Marine areas and Sea inlets;
N02 Tidal rivers, Estuaries, Mud flats, Sand flats and Lagoons (including saltwork basins);
N03 Salt marshes, Salt pastures and Salt steppes.

There are 103 migratory and/or Annex 1 bird species for which SPAs are selected in the UK, and these are listed in Appendix 1. For the purposes of this HRA, and specifically the screening presented in Appendix 2, bird species with similar habitats/behaviours are listed together to minimise repetition (these groupings are presented in Appendix 1).

SPAs that do not contain a marine habitat component but support birds which use the marine environment (even for passage) may also need to be assessed under Article 6(3) of the Habitats Directive.

2.3 Conservation Objectives of the European Sites

Under Regulation 35(3) of the Habitats Regulations 2010, Regulation 33 of the Habitats Regulations 1994, Regulation 28 of the Northern Ireland Regulations and Regulation 18 of the Offshore Marine Regulations, the appropriate statutory nature conservation body has a duty to communicate the conservation objectives for a European Marine Site to the relevant/competent authority responsible for that site. The information provided under these regulations must also include advice on any operations which may adversely affect/cause deterioration of the features for which the site is designated.

The conservation objectives for a European Marine Site are intended to represent the aims of the Habitats and Birds Directives in relation to that site. To this end, habitats and species of European Community importance should be maintained or restored to 'favourable conservation status' (FCS), as defined in Article 1 of the Habitats Directive below (note FCS applies to SACs and not SPAs):

The conservation status of a natural habitat will be taken as 'favourable' when:

- Its natural range and the area it covers within that range are stable or increasing;
- The specific structure and functions which are necessary for its long term maintenance exist and are likely to continue to exist for the foreseeable future; and
- Conservation status of typical species is favourable as defined in Article 1(i).

The conservation status of a species will be taken as favourable when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Guidance from the European Commission[19] indicates that the Habitats Directive intends FCS to be applied at the level of an individual site, as well as to habitats and species across their European range. Therefore, in order to properly express the aims of the Habitats Directive for an individual site, the conservation objectives for a site are essentially to maintain (or restore) the habitats and species of the site at (or to) FCS.

Advice, as required by the Regulations, from the relevant statutory nature conservation body has been provided in some form for all European Marine Sites in the UK.

[19] Managing Natura 2000 sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC. (European Commission 2000)

2.4 Vulnerability of the European Sites

In terms of assessing the favourable conservation status of habitats and species for which sites are designated, the results are mixed. Under Article 17 of the Habitats Directive member states of the EU are required to report on implementation of the Directive every six years. The first report on this round of monitoring was published by the JNCC in 2007[20]. The assessment covers the whole range of a habitat, not just areas covered by designations. The conservation status assessment of marine SAC habitats and species taken from this report are listed in the tables below.

Table 2.1 Conservation Status Assessment of SAC Marine Habitats

Code	Habitat	Conservation Status
1110	Sandbanks which are slightly covered by sea water all the time	Bad and deteriorating
1130	Estuaries	Bad and deteriorating
1140	Mudflats and sandflats not covered by seawater at low tide	Bad and deteriorating
1150	Coastal lagoons	Inadequate
1160	Large shallow inlets and bays	Bad and deteriorating
1170	Reefs	Unknown
1180	Submarine structures made by leaking gases	Unknown
8330	Submerged or partially submerged sea caves	Unknown
1210	Annual vegetation of drift lines	Bad and deteriorating
1310	Salicornia and other annuals colonising mud and sand	Bad and deteriorating
1320	Spartina swards	Bad and deteriorating
1330	Atlantic salt meadows	Bad and deteriorating
1420	Mediterranean and thermo-Atlantic halophilous scrubs	Inadequate and deteriorating

Table 2.2 Conservation Status Assessment of SAC Marine Species

Code	Species	Conservation Status
1349	Bottlenose dolphin	Favourable

[20] Second Report by the UK under Article 17 on the implementation of the Habitats Directive from January 2001 to December 2006. Peterborough, JNCC, 2007 (www.http.//jncc.gov.uk/article17)

1351	Harbour porpoise	Favourable
1364	Grey seal	Favourable
1365	Common seal	Inadequate
1095	Sea lamprey	Inadequate but improving
1102	Allis shad	Bad
1103	Twaite shad	Inadequate
1355	Otter	Favourable

For those habitats where enough information is available to make an assessment, the generic pressures on habitats include habitat loss and degradation due to infrastructure development (including coastal defence works, industrial and port development), oil, gas and marine aggregate extraction, fisheries practices (especially damage caused by bottom-trawling fishing gear, shellfish dredging), marine pollution (including nutrient enrichment, toxic chemicals, oil slicks, sewage), shipping, pipelines and alterations in coastal and hydrological processes.

For all the species listed, whether the conservation status has been assessed as inadequate or favourable, there still exist threats to the long term survival of the species, including climate change, marine pollution, alterations in hydrological and coastal processes, human disturbance, fishing practices, invasive species and introduction of disease.

3 Screening

European Commission guidance (2001)[21] recommends that screening should fulfil the following steps:

1 Determine whether the plan (or policy) is directly connected with or necessary for the management of Natura 2000 sites.

2 Describe the plan and describe and characterise any other plans or projects which, in combination, have the potential for having significant effects on Natura 2000 sites.

3 Identify the potential effects on Natura 2000 sites.

4 Assess the likely significance of any effects on Natura 2000 sites.

3.1 Step 1: The strategy and management of international sites

The first part of the screening process requires consideration of the project or plan in respect of whether it is directly connected with or necessary for the management of European Sites. 'Directly' in this context means solely conceived for the conservation management of a site[22] and 'management' in this context refers to the management measures required in order to maintain in favourable condition the features for which the European Site has been designated.

Although elements of the policy document are targeted specifically at marine conservation, the MPS is not directly connected with, or necessary for, the management of international nature conservation sites in the UK.

3.2 Step 2: Description of the MPS and other plans that could affect Natura 2000 sites

The second stage of the screening process requires the description not only of the plan itself but also any other plans or projects which, in combination, have the potential for having significant effects on European Sites.

3.2.1 Description of the MPS

The MPS brings together a range of sustainable development principles of relevance to marine planning within the guidance it provides. It is consistent with existing EU and UK policy and seeks to provide a framework for the development of Marine Plans. It provides high-level guidance on considerations for decision-makers when determining consents for marine activities. The MPS is only the first stage in a tiered system of marine planning which will include more detailed and spatially specific Marine Plans. The MPS does not attempt to provide spatially specific guidance, set limits on activities (or areas) or provide a hierarchy of which activities have priority over others.

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[21] European Commission (2001) *Assessment of plans and projects significantly affecting Natura 2000 sites*

[22] It is possible to have a plan which contains a mix of conservation management and other objectives. In that case the non conservation management element of the plan may require assessment.

The MPS states that an assessment under the Habitats Directive will be required for a Marine Plan if that plan *'is likely to have a significant effect, either alone or in combination with other plans or projects, on a Natura 2000 site or on any site beyond Natura 2000 sites to which the same protection is applied as a matter of policy'.*

The MPS comprises the following elements:

Introduction

This provides an introduction to the MPS, its background, aims, scope and structure. It also introduces the AoS.

Chapter 1

This explains the MPSs role within the new marine planning system and its interaction with existing planning regimes.

Chapter 2

This sets out the high-level policy context and objectives for the marine environment as a whole, including the UK vision for the marine environment and reference to the overarching principles of sustainable development and the HLOs. It also sets out the environmental, social and economic considerations that need to be taken into account in marine planning.

It describes the high level approach to marine planning, which includes the overarching considerations for marine planners together with advice on how decision-makers should weigh the adverse impacts of each proposal against the benefits. This should include consideration of cumulative and synergistic impacts and where relevant an Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA) or HRA.

General advice is then provided on the topic-specific considerations which the marine plan authority should take into account when developing Marine Plans. High-level information is provided that reiterates existing policy. This section is very high level and does not intend to be exhaustive.

Chapter 3

This chapter sets out the sectoral policy objectives for the key activities taking place in the marine environment. The MPS identifies that Marine Plans should contribute to the delivery of these sectoral objectives and align with the guidance given in Chapter 2. It provides guidance on pressures and impacts associated with the activities, which decision-makers need to consider when planning for and permitting development in the UK marine area.

It first identifies overarching considerations and then outlines potential impacts and issues for consideration under sectoral headings.

3.2.2 Other Plans and Programmes and In-Combination Effects

The MPS is part of a series of strategic documents which could be considered to be separate plans or programmes that could, either independently of the

MPS or in conjunction with it, have impacts that contribute to the overall effect on European Sites around the UK coast. Within Chapter 2 of the MPS is stated:

'The UK vision for the marine environment is for clean, healthy, safe, productive and biologically diverse oceans and seas'.

'The process of marine planning will integrate delivery of the high level marine objectives alongside sectoral/activity-specific policy objectives'.

The UK HLOs[6], published by UK Administrations in April 2009 set out the broad outcomes for the marine area which UK Administrations are aiming to achieve and reflect the principles of sustainable development. They have been categorised into the five pillars of the UK Sustainable Development Strategy as follows:

- Achieving a sustainable marine economy;
- Ensuring a strong, healthy and just society;
- Living within environmental limits;
- Promoting good governance; and
- Using sound science responsibly.

Under each of the HLOs are intended outcomes, some of which could potentially have impacts upon European Sites. For example, one of the desired outcomes of the first HLO is that: 'infrastructure is in place to support and promote safe, profitable and efficient marine businesses'. However, it is important to note that the over-riding ethos behind all of the HLOs is that of sustainable development (including: *the precautionary principle is applied consistently in accordance with the UK Government and Devolved Administrations' sustainable development policy*). At this strategic level, therefore, the HLOs are aimed towards reducing or avoiding any potential adverse impacts upon European Sites.

The AoS report incorporates the requirements of the SEA Directive[23]. The purpose of the AoS is to appraise the content of the MPS and its alternatives in order to ensure the principles of sustainable development (including high levels of protection for the environment) are incorporated within the MPS proposals. This is an ongoing, iterative process, which runs alongside, but is separate from, the HRA process. The key aims of the AoS are as follows:

- To provide information on the MPS and the AoS processes;
- To present a summary of the existing social, economic and environmental conditions in the context of existing plans, programmes and environmental protection objectives and relevant baseline information;
- To evaluate alternatives to the MPS;
- To identify, describe and evaluate the likely significant effects of the MPS;

[23] Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and projects on the environment.

- To identify measures to avoid, reduce or offset any potentially significant adverse effects, and opportunities to improve or enhance the MPS to benefit environmental and sustainability receptors;
- To propose measures that can be used to monitor the significant effects identified;
- To consult the statutory consultation bodies, other relevant organisations and the public on the AoS results.

Integral to the AoS process is the development of mitigation measures which can be used to avoid, reduce or offset the potential adverse impacts of the MPS. As the drafting of the MPS and the preparation of the AoS have been carried out in parallel, MPS authors have considered mitigation measures proposed throughout the AoS on a rolling basis. Therefore, throughout the evolution of the MPS, the AoS has attempted to play a role in reducing or avoiding potential adverse impacts on the Natura 2000 network.

In addition to these high level policies, a large number of other SEAs of policies, plans or projects that have the potential to affect European Sites are being, or have recently been, undertaken for the UK marine environment including:

- The SEA of the Scottish Marine Bill (Scottish Government December 2008);
- The Scottish Marine Renewables SEA (Scottish Government March 2007);
- The SEA of options for tidal energy in the Severn (Department of Energy and Climate Change (DECC) ongoing);
- The Offshore Energy SEA (OES)(DECC January 2009) and OES2 Scoping (DECC March 2010);
- Previous offshore oil and gas licensing rounds SEAs (SEAs 1-7) (Department of Trade and Industry (DTI)/Department for Business, Enterprise and Regulatory Reform (BERR) 2002-2008);
- Northern Ireland Marine Renewables SEA (Northern Ireland Executive ongoing).

In addition, in England and Wales there are a number of NPSs currently being prepared for NSIPs in key sectors, including nuclear power, renewable energy infrastructure, gas supply infrastructure and gas and oil pipelines, ports and wastewater, all of which could involve impacts on the marine environment.

As well as the above, there are other plans and strategies which may have impacts upon the UK marine environment including, amongst others:

- Shoreline Management Plans;
- Water Resource Management Plans; and
- Joint Infrastructure Plans.

Some of the plans and programmes identified may, in combination with some of the NPSs, cumulatively add to the impacts on European Sites, whereas others may help to reduce impacts. This applies to a potentially large number of individual project applications in the marine and coastal environments which have the potential to adversely affect European Sites, and hence also result in in-combination effects.

At this level, it is not possible to provide an exhaustive list of all plans and projects which may lead to in-combination effects together with the MPS.

These will need to be considered further if a full Appropriate Assessment is required at subsequent stages of MPS implementation, in particular, Marine Plans and individual projects.

3.3 Step 3: Potential effects of the MPS

The third and fourth stages of the screening process involve setting out the European Sites that may be affected, the likely impacts of the policy on these sites, and an assessment of the likely significance of these impacts. As described in section 2, above, there are currently 81 SACs and cSACs with marine components and 73 SPAs with marine components designated across the UK, with further pSACs proposed; potentially, any of these could be affected.

However, until the Marine Plans are prepared, or individual projects proposed, it is not possible to assess accurately which of the sites in the Natura 2000 network may be affected by the activities resulting from the policy objectives in the MPS, and to what extent. As a result, rather than address all of these sites individually, the screening process has focused instead on generic impacts on all of the Annex I habitats and Annex II and bird species that are the constituent qualifying features of the SACs and SPAs; these comprise 13 habitats and 8 species for SACs, and 3 habitats and 103 bird species for SPAs. With respect to the bird species, these have been grouped for the impact assessment largely on the basis of their habits and/or taxonomic grouping (e.g. waders, seabirds, gulls, terns and skuas) (see Appendix 1).

Potential significant impacts on these habitats and species caused by the activities identified under the policy objectives listed in Chapters 2 and 3 of the MPS are summarised in Appendix 2. These are impacts that may occur without any mitigation measures being taken into consideration. The screening matrix in Appendix 2 considers each qualifying habitat or species in turn and assesses whether or not it could be adversely affected by each of the activities listed.

The impacts could occur from individual activities, in combination with other activities, or through the implementation of other plans and strategies, as set out in section 3.2.2 above. The MPS recognises the in-combination and cumulative impacts that may result from activities in a particular Marine Plan area, and states in Chapter 2, section 2.4 that the *'marine plan authority will need to consider the potential cumulative impact of activities, and whether, for example:*

- *The cumulative impact of activities, either by themselves over time or in conjunction with others, outweigh the benefits;*
- *A series of low impact activities would have a significant cumulative impact which outweighs the benefit;*
- *An activity may preclude the use of the same area/resource for another potentially beneficial activity.'*

3.4 Step 4: Assess the likely significance of any effects on Natura 2000 sites

The guidance and direction contained within the MPS recognises international designations for habitat and species protection, along with a range of potential impacts resulting from activities associated with policy objectives and mitigation measures. These are set out in detail in Appendix 2. However, the MPS is not a spatial plan and does not contain any detail about the locations, duration or magnitude of any of the activities that may result from the policy objectives. **Therefore the possibility of significant effects upon one or more sites of European importance from the policy objectives in the MPS cannot be excluded at this strategic level.**

3.5 Conclusion

As the possibility of significant effects upon one or more sites of European importance cannot be ruled out, an Appropriate Assessment of the MPS is required.

4 Appropriate Assessment

The screening matrix in Appendix 2 identifies potentially significant impacts on the qualifying features of European Sites as a result of the activities identified in the MPS and in the absence of any avoidance or mitigation measures. This clearly demonstrates that the possibility of significant effects upon one or more sites of European importance cannot be excluded on the basis of the objective information available at this stage (i.e. without any spatial element).

The purpose of Appropriate Assessment is to identify the impact on the integrity of the European Site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's conservation objectives and its structure and function. This stage also includes the development of mitigation measures to avoid or reduce any possible impacts.

In this context the integrity of the site can be viewed as the overall value of the site in relation to its status as a European Site and is related to its conservation objectives. For example, for the habitat features of a site (of which there may be several), the conservation objectives could include the following:

- To maintain the distribution and extent of habitats;
- To maintain the physical, biological and chemical structure and functions of the habitat so they are not degraded e.g. geology, sedimentology, geomorphology, water and sediment chemistry;
- Objectives for nutrient levels and pollution levels; and
- Objectives for restoration and recovery.

The conservation objectives do not aim to prevent all change to the site's features but aim to prevent further negative modification by human activity. Any proposals that are likely to affect the conservation objectives of the site thereby also affect the overall integrity of the site.

4.1 Potential Impacts

In an effort to establish potential impacts at a strategic level, it is possible to categorise the generic impacts associated with different activities resulting from policy objectives. The potential biophysical changes associated with the different activities resulting from policy objectives potentially include, but are not restricted to:

- Habitat degradation and loss;
- Disturbance (physical, visual, noise);
- Changes in coastal processes (siltation rates, distribution, scour);
- Hydrological changes;
- Pollution to air and water (hydrocarbons, heavy metals, radioactivity);
- Nutrient and organic enrichment;
- Barriers to species movement;
- Removal of non-target species;

- Introduction of other energy (e.g. temperature);
- Introduction of species/pathogens; and
- Litter.

The screening stage of this HRA has taken this a stage further by assessing the impacts more specifically against the particular qualifying habitats and species features of the European Sites (Appendix 2).

The high level nature of the MPS means that locations for particular activities are not identified. As a result, it has not been possible to provide detailed consideration of the impact on the integrity of a particular European Site with respect to the site's structure, function and conservation objectives, nor to provide specific mitigation proposals.

However, it should be reiterated that the MPS itself does not specifically promote activities; rather it provides high level guidance to marine plan authorities when developing Marine Plans and against which applications for consents should be judged. Throughout the development of the MPS, the ongoing AoS has sought to ensure that the principles of sustainable development are incorporated into the policy document as it develops, including the protection of important habitats and species. These aim to provide sufficient guidance to applicants and decision-makers to avoid or mitigate for any potential adverse effects. Key features of mitigation against the adverse effects of these possible activities are identified in section 4.2 below.

4.2 Avoidance and Mitigation Measures

The MPS includes a number of pieces of guidance which seek to avoid or mitigate the adverse environmental impacts of the activities identified. These are identified below:

- The vision shared by the UK Administrations, enshrined within the MPS, for *'clean, healthy, safe, productive and biologically diverse oceans and seas';*
- It is stated in the Introduction to the MPS that the MPS will '*facilitate and support the formulation of Marine Plans ensuring that marine resources are used in a sustainable way, and thereby ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems, and protects marine habitats, species and our most important heritage assets';*
- Chapter 2, section 2.1 states that, '*The process of marine planning will integrate delivery of the high level marine objectives alongside the achievement of sectoral/ activity specific policy objectives. This approach will help ensure the sustainable development of the UK marine area and deliver the UK vision*'. The relevant HLOs notably under 'living within environmental limits' are:
    - *Biodiversity is protected, conserved and, where appropriate, recovered, and loss has been halted;*
    - *Healthy marine and coastal habitats occur across their natural range and are able to support strong, biodiverse biological communities and the functioning of healthy, resilient and adaptable marine ecosystems;*

- *Our oceans support viable populations of representative, rare, vulnerable, and valued species.*

- When developing Marine Plans, the process needs to be conducted in a manner that is consistent with statutory requirements under UK and EU legislation and our obligations under international law (Chapter 2, section 2.3);
- Also in the introduction is a requirement that the process of marine planning is based on an ecosystems approach;
- The need, when developing Marine Plans, for the marine plan authority to take into account both benefits and adverse effects, including multiple and cumulative impacts of developments and activities (Chapter 2, section 2.4);
- That Marine Plans are subject to assessments under the Directive on SEA (Directive 2001/42/EC) and during the preparation of the plan an Environmental Report must be produced (Chapter 2, section 2.4);
- That HRA is undertaken, where required under the Habitats Directive, for all Marine Plans or projects which could affect the marine environment (Chapter 2, section 2.4);
- Under the guidance for Marine Ecology and Biodiversity, a number of issues for consideration are incorporated such as: '*As a general principle, development should aim to avoid harm to marine ecology, biodiversity and geological conservation interests, including through location, mitigation and consideration of reasonable alternatives. Where significant harm cannot be avoided, then appropriate compensatory measures should be sought. If appropriate compensation and mitigation of the impacts cannot be achieved then the development should be refused.'*
- Chapter 2, section 2.7 states that marine plan authorities should be mindful of the UK aims to ensure:
  - *'A halting, and if possible a reversal of biodiversity loss with species and habitats operating as part of healthy, functioning ecosystems; and*
  - *The general acceptance of biodiversity's essential role in enhancing the quality of life, with its conservation becoming a natural consideration in all relevant public, private and non-governmental decisions and policies.'*
- Sections 2.6 and 2.7 also draw attention of marine plan authorities to the need to achieve GES under the Marine Strategy Framework Directive. GES includes several key objectives in relation to biodiversity, including (amongst others):
  - *the maintenance of biological diversity;*
  - *all elements of the marine food web occur at normal abundance and diversity levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity;*
  - *Sea floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.*

- The commitment from UK Administrations to a 'no net loss' approach to biodiversity and to allowing damaged ecosystems to recover. '*This will be achieved through the integration of conservation considerations into marine planning and decision making.*' (Chapter 3, section 3.1);
- Sections 2.6 and 2.7 refer specifically to the Marine Strategy Framework Directive and the key requirements of the Directive and acknowledge that marine planning will be a key tool in ensuring that the targets and measures to be determined by the UK can be implemented;
- The UK commitment to delivering an ecologically coherent network of MPAs by 2012. It is acknowledged that MPAs will be a key tool in helping to achieve GES and particularly to ensuring that biodiversity is protected, conserved and where appropriate recovered, and loss of biodiversity is halted. (Chapter 3, section 3.1). MPAs will by definition involve the restriction of some (but not necessarily all) activities in the relevant marine areas. Marine planning will take account of the MPAs, their conservation objectives and management prescriptions.

The purpose of the MPS as set out in the Introduction is to provide *'the framework for preparing Marine Plans and taking decisions affecting the marine environment. It will contribute to the achievement of sustainable development in the United Kingdom marine area'*

The above statements will help to reduce the risk of European Sites being adversely affected by activities in the marine environment.

At this strategic level, therefore, the MPS is interpreted as seeking to reduce or avoid any potential adverse impacts upon European Sites. However, whilst this is one of the aims of the document, the MPS is also designed to provide guidance on the consenting process for the use of natural resources within the marine environment, and clearly there is the potential for conflict between these two objectives.

4.2.1 Marine Plan and Project level mitigation

Given that many of the activities set out in Appendix 2 clearly have the potential to adversely affect the qualifying features of numerous SACs and SPAs around the UK coastline, it is clearly necessary to understand what mitigation measures might be implemented to avoid or reduce these impacts to acceptable levels at the Marine Plan or individual project level.

The following principles should be applied to all plans or projects when considering avoidance and mitigation measures:

- Developing management plans and procedures to reduce the risk of adverse effects on the integrity of a qualifying habitat or species' population;
- Ensuring there is a high level of certainty that the mitigation will be successful; and
- A commitment to a timescale to undertake the mitigation measures, monitoring the measures and rectifying any failures that may occur.

Whilst not specifically avoidance or mitigation, early liaison with regulatory and statutory nature conservation bodies to develop/amend a project or plan so that

it avoids/reduces the risk of adverse effects on the integrity of a qualifying habitat or species population is an important part of the mitigation development process.

Appendix 3 sets out examples of generic mitigation measures that can be applied to activities resulting from policy objectives in the MPS. Provided that these measures are both enforceable and successful, many of them should be able to avoid or reduce damage to European Sites in most cases.

However, this uncertainty is important. Whilst for some of the activities (e.g. marine aggregate dredging) the mitigation measures are tried and tested and may even be standard practice, other activities (e.g. tidal power and carbon capture storage) are technologies in their infancy, and the effectiveness of any mitigation measures is impossible to predict accurately at this stage. Therefore caution should be adopted when assessing whether or not these could potentially have a significant effect.

4.3 Results of Appropriate Assessment

The mitigation measures outlined in the MPS (as summarised above) seek to avoid adverse environmental impacts. The importance of the Natura 2000 network and the need to undertake HRAs on a Marine Plan, where required under the Habitats Directive, is also identified. However, the MPS also seeks to provide guidance for a range of activities which may potentially affect the integrity of these sites, and at this level it is not considered appropriate to develop a blanket policy of complete avoidance of effects on integrity on all European Sites either alone or in-combination.

Without such a blanket policy it will never be possible to rule out adverse effects at this level. At the Marine Plan or individual project level, individual HRAs may conclude, following Appropriate Assessment and implementation of mitigation measures that effects on integrity are unavoidable. For example, the location of activities that are constrained by geography, such as oil exploration or offshore wind turbines, within or close to a European Site may be unavoidable. For these activities, it may be necessary to go further down the HRA process, to assess alternative solutions or to demonstrate IROPI[24] and compensatory measures.

Without location and design specific details at this stage, these decisions cannot be made at this level.

In the absence of further information about activities and individual projects, this HRA cannot exclude (beyond all reasonable scientific doubt) the possibility that the integrity of one or more European Sites could be adversely affected by activities resulting from policy objectives, either alone or in-combination with other plans and projects.

[24] IROPI – as outlined in Regulation 49 of the Habitats Regulations.

5 Assessment of Alternative Solutions and IROPI

5.1 Alternative solutions

Where it cannot be proved beyond reasonable scientific doubt that a plan (in this case the MPS) will not have significant adverse effects on the integrity of a European Site, or sites, then it is necessary to investigate alternative solutions that would clearly not have such an effect.

Given the vast range of potential alternative solutions which may be possible for a range of different activities identified in the MPS, it is not practicable to attempt to undertake an assessment for all of these in this HRA. Instead, it is considered that the assessment of alternative solutions should be focussed upon strategic alternatives to the development of the MPS.

A set of feasible alternatives was prepared in March 2010 these are summarised in Table 5.1 below:

Table 5.1 Strategic Alternatives proposed in March 2010

Alternatives Proposed
Alternatives to MPS production
1. Do not produce an MPS (BUSINESS AS USUAL SCENARIO)
Alternative approaches to the MPS production
2. Produce an MPS which outlines existing high-level UK and EU policy for the marine environment, provides a framework for marine plans and guides decision-making affecting the marine area (PREFERRED OPTION)
3. Produce an MPS which also provides specific criteria-based policy guidance for activities such as: • An MPS which also provides specified criteria based policy guidance for activities within different zones. • An MPS which considers environmental limits or standards that marine activities should achieve • An MPS which stipulates temporal restrictions for activities in certain areas
Alternative priorities for the MPS
4. An MPS which prioritises the protection of biodiversity and, in particular, designated sites above all other activities
5. An MPS which prioritises activities which will assist in delivering the UK's carbon emissions targets above all other activities
6. An MPS which gives preference to multiple uses in a given area, in all cases, over activities which would prevent the use of that area for other activities

Alternatives Proposed
Alternative forms of decision-making through the MPS
7. An MPS which encourages decisions to be made taking a zero-risk approach in contrast to a risk-based approach

The appraisal of strategic alternatives in the AoS Report considers implications for the environment, the economy and for society. However, for the HRA it is the implications for the environment (in particular the Natura 2000 qualifying habitats and species listed in Appendix 2) that are most relevant. A summary of the options, the possible effects on European Sites and the justification for taking forward or otherwise each alternative is presented below.

Option1: Do not produce an MPS

This represents the business as usual scenario against which the proposed MPS has been assessed. The most recent conservation status assessment of marine habitats and species for which sites are designated provided mixed results (See section 2.4). All of the habitats (where enough information was available to make an assessment) were assessed as bad and/or deteriorating. For the species listed, half were assessed as being at favourable conservation status, with the remainder classified as inadequate or bad.

This is the business as usual scenario against which the preferred MPS has been appraised. This would see a continuation of existing policies and practices including existing environmental protection legislation. Marine activities are predicted to continue to expand and put further pressure on environmental resources including, potentially, European Sites. There would also be no consistent basis for marine planning across the UK.

Although the proposed Marine Plans would be able to give a more specific direction on proposals within a given area, there would be no consistent guidance on how to produce a Marine Plan in the first place. However, this option means that HRA would still be required for all Marine Plans and projects that may affect a European Site.

Justification

This was considered to be a feasible option, being a continuation of existing practice. However, the benefits of producing an MPS were considered to outweigh those of not producing an MPS. This option has therefore not been pursued.

Without the MPS, it is considered that Marine Plans would be harder to produce and Devolved Administration plans would be limited in scope as they could not include all activities in the marine area. There would be no planning powers for Scottish Ministers for retained matters if there were no MPS, for example. As such, this option has not been pursued.

Option 2: Produce an MPS which outlines existing high-level UK and EU policy for the marine environment, provides a framework for Marine Plans and guides decision-making affecting the marine area.

Option 2 is the preferred option and is the basis upon which the AoS and HRA were produced.

The MPS outlines existing environment policy and specifically re-iterates a number of environmental protection principles in line with the HLOs. It also identifies how Marine Plans need to consider a range of environmental issues.

The MPS has been informed by the HLOs in order to achieve the UK Government's vision for 'clean, healthy, safe, productive and biologically diverse oceans and seas.' The MPS states a need to apply precaution within an overall risk-based approach to decision-making. This approach has the potential to allow development which may have adverse impacts on the integrity of European Sites in cases where there are no alternative solutions, IROPI exists and compensatory measures can be applied.

The current MPS does not intend to provide new policy in relation to biodiversity, and, as such, it is not considered that further protection of European Sites is achieved over and above existing mechanisms. Significant emphasis would be placed on the forthcoming marine plans to provide additional detail and further positive outcomes and the MPS sets out the consideration of how this should be done. As with all options, HRA would still be required for Marine Plans and specific projects.

Notwithstanding the above, the MPS clearly aims to achieve sustainable development, and will also play a role in the integration and implementation of the targets and measures under the MSFD in achieving GES for our seas. The MPS indicates that marine plan authorities should be mindful that the UK aims to ensure a halting/reversal of declines in priority habitats and species, and biodiversity conservation as a consideration in all decisions and policies.

The MPS provides guidance for the marine plan authorities to consider in the development of its Marine Plans which are also applicable at a development specific level, and includes a number of issues for consideration, for instance that development should avoid significant harm and where appropriate provide suitable compensatory measures, and aim to provide built-in beneficial biodiversity features. This approach is consistent with existing policy and legislation.

Justification

This is the preferred option taken forward in the proposed MPS. It is consistent with broader UK Administrations policies and objectives and will help ensure the sustainable development of the UK marine area, with a balance between economic, environmental and social considerations, and deliver the HLOs and the UK vision.

Option 3: Produce an MPS which also provides specific criteria-based policy guidance for activities such as:

- An MPS which provides specified criteria based policy guidance for activities within different zones;
- An MPS which considers environmental limits of standards that marine activities should achieve e.g. limits on emissions or scale of activities;
- An MPS which stipulates temporal restrictions for activities in certain areas

Whilst the actual implications would depend upon the exact details of the criteria, limits or zoning, this approach would provide opportunities to improve levels of environmental protection and enhancement in line with the emerging criteria for good environmental status.

In particular, limits could be set on activities that may affect European habitats or species, for example avoiding construction activities on sensitive habitats or at certain times of the year, or setting limits on emissions. This option could provide greater levels of certainty in the decision-making process as clear criteria would be set out and the processes of sustainable development would be encouraged.

Depending upon how such criteria are developed, Option 3 has potential to provide greater certainty over the impacts upon European Sites and may allow for higher levels of protection. This is very much dependent upon specific criteria being developed with this aim in mind.

It should be noted that for all options, the UK Government and the devolved administrations as the Competent Authorities under the MSFD will be under a duty to contribute to the achievement of GES in UK seas.

Justification

This would mean a much more detailed and prescriptive MPS than the current high level approach envisaged, which would be very difficult to develop between UK Administrations in view of the different approaches being taken to developing Marine Plans as well as devolved responsibilities. It would also have the potential to constrain Marine Plans and not allow flexibility for considering projects on a case by case basis based on the geographic features of the area and area-specific policy objectives. For these reasons, this alternative is not considered justified and has not been pursued further.

Option 4: An MPS which prioritises the protection of biodiversity and, in particular designated sites above all other activities

This would involve taking an approach when licensing other activities which ensures that there would be no possibility of a loss of biodiversity and no potentially damaging activities would be licensed in MPAs.

Clearly this option would contribute strongly to the achievement of GES. It does not preclude the continued licensing of economic activities in the marine environment but is likely to pose greater restrictions than the preferred option.

This option is likely to provide very high levels of protection for European Sites potentially at the expense of other important activities.

Justification

In reality, there are many aspects of this option which are consistent with existing requirements and which have been included in the preferred option. However, this option also goes beyond existing legislative requirements by requiring zero impacts upon biodiversity and no development in MPAs. This would not reflect the balance between economic, environmental and social aspects to contribute to achievement of sustainable development which is the stated aim of the MPS. It is not consistent with either the UK HLOs for achieving a sustainable marine economy or the 2005 UK Sustainable Development Strategy, and would be likely to have significant adverse impacts on the national economy by severely constraining development opportunities. For these reasons, this alternative has not been pursued further.

Option 5: An MPS which prioritises activities which will assist in delivering the UK's carbon emissions targets above all other activities

This option would maximise renewable energy deployment and reduce focus on more carbon intensive industries in the marine environment. This option would contribute strongly towards achieving the UK's carbon reduction targets and may reduce adverse environmental effects associated with non low-carbon activities.

Whilst existing policies to protect European Sites would still exist, this option has potential to result in greater pressures on these sites by focussing primarily on maximising delivery of energy infrastructure, with a more limited focus on environmental protection (including specifically European Sites). In reality (as will all options), HRA would still be required at the Marine Plan and project level if there is potential for risks to occur to European Sites.

By reducing the focus on other marine activities which could themselves result in adverse effects upon European Sites, this option could have positive effects. The effects upon European Sites of this option are likely to depend primarily upon the relative impact of any activities which may be displaced by renewable energy infrastructure.

Justification

This would not reflect the balance between economic, environmental and social aspects to contribute to achievement of sustainable development which is the aim of the MPS, and would not be consistent with the UK HLOs. It would be contrary to the free market approach. It would constrain Marine Plans and remove flexibility to be able to consider projects on a case by case basis based on the geographic character of the area and area specific policy objectives. It would also be likely to have significant adverse impacts on the UK economy and the achievement of security of energy supply objectives by severely constraining the UK's ability to store gas offshore and maximise oil and gas production on the UK Continental Shelf. For these reasons, this alternative has not been pursued further.

Option 6: An MPS which gives preference to multiple uses in a given area, in all cases, over activities which would prevent the use of that area for other activities.

The preferred option for the MPS encourages the co-existence of multiple activities but this option goes much further. It has the potential to restrict a number of activities which cannot readily co-exist with others such as wind energy developments, oil and gas platforms and tidal barrages.

Giving preference to multiple uses in an area, rather than restrictive uses such as oil platforms could result in adverse environmental effects both at an individual project level and, more significantly, through cumulative impacts on European Sites. Conversely, the use of an area by one major project may have greater environmental impacts than a larger number of smaller individual projects. The effects would be dependent upon the exact nature and location of the projects in question.

As with option 5 it is not the overall level of development that is being restricted but the emphasis is being placed on the prioritisation and distribution of activities within a given area. Multiple uses may encourage designated areas to coexist with industrial activities (which may or may not lead to adverse effects) and for those sites that are located in such an area the cumulative impacts could be significant. At this strategic level it is difficult to predict what the impacts on European Sites could be of this option, as much depends upon the type of activity, its location and any mitigation/avoidance measures implemented.

Justification

This option would be restrictive as it would require multiple uses in all except exceptional cases and so would constrain some key activities. It also has the potential to constrain marine economic development opportunities which are of increasing importance. It would constrain Marine Plans by removing the opportunity for area-based decisions to be made on a case-by-case basis. This would not reflect the balance between economic, environmental and social aspects to contribute to achievement of sustainable development which is the aim of the MPS, and would not be consistent with the UK HLOs. For these reasons, this alternative has not been pursued further.

Option 7: An MPS which encourages decisions to be made taking a zero risk approach in contrast to a risk-based approach.

This option would seek to avoid all risks to aspects of the environment (not just biodiversity).

The preferred approach to the MPS applies a precautionary risk-based approach to decision-making which requires the decision-maker to weigh up the possible adverse impacts and benefits of a proposal drawing upon a range of existing policy, legislation and sustainability considerations. This requires a judgement on behalf of the decision-makers to decide between potentially competing priorities. However, taking the zero risk approach with this option means that it is likely to deter the granting of any licences for developments which have a possibility to cause environmental damage, irrespective of the wider benefits they could bring.

In terms of European Sites, option 7 presents the greatest opportunity to ensure habitats and species are protected, conserved and, where appropriate,

recovered. However, this would go beyond what is required under the Directives for the conservation of the sites as it would remove the possibility of regulators utilising the IROPI aspects of Article 6(4) of the Habitats Directive.

Justification

Applying a zero-risk approach would mean that many activities, including deployment of offshore renewables, Carbon Capture and Storage (CCS), oil and gas exploration and extraction and offshore gas storage could not proceed. This would be likely to have significant adverse impacts on the UK economy and jobs in the industries affected. It would not reflect a balance between environmental, economic and social aspects, would be contrary to the aim of the MPS which is to contribute to achievement of sustainable development, and would not be consistent with the UK HLOs. For these reasons, the option has not been pursued further.

5.2 Conclusions

Option 1, the business as usual scenario, would offer no protection to European Sites beyond that already required in law. It would not provide a co-ordinated approach that would enable a more strategic management of the marine environment.

Of the remaining options, option 3 has potential to allow for higher levels of certainty over the effects upon European Sites and potentially higher levels of protection but only if specific criteria were developed to do so. This option was discounted on the basis that it involves a very detailed and prescriptive approach, which contrasts with the high level strategic approach envisaged and reduces the flexibility required by the UK Administrations in the preparation of Marine Plans.

The options relating to different priorities and types of decision making (options 4, 5, 6 and 7) have not been pursued as they do not represent the balance between economic, social, and environmental aspects to contribute to sustainable development. In addition, they may have significant adverse impacts on the national economy and free-market forces. Of these options, options 4 and 7 offer very high levels of protection to European Sites by avoiding practically all potentially damaging activities. These options would go above and beyond the requirements of the Habitats Directive by providing blanket protection at the strategic level. For the remaining options it is difficult to predict what the impacts on European Sites could be, as much depends upon the type of activity, its location and any mitigation/avoidance measures implemented.

Therefore the alternative options to the preferred MPS approach are considered to have significant limitations and would not be in the best interests of wider sustainable development in the UK, despite some options (4 and 7) being likely to provide greater protection to European Sites.

5.3 IROPI and compensatory measures

5.3.1 Imperative Reasons of Overriding Public Interest (IROPI)

In the absence of suitable alternative solutions, UK Administrations examined the existence of IROPI to justify adopting the MPS.

In demonstrating IROPI the UK Administrations acknowledge that it cannot be excluded (beyond reasonable doubt) that the MPS has potential- at a strategic level- to have an adverse effect on the integrity of European sites, including possible impacts on some priority habitats (coastal lagoons, sand dunes). They have therefore examined the existence of IROPI against the criteria in the Habitats Directive-Article 6(4). Their considerations fall within the heading of beneficial consequences of primary importance to the environment. As such it is not necessary to seek an opinion from the Commission.

Before IROPI can be demonstrated it is necessary to show (a) why the marine environment needs to be managed within a strategic framework (b) what alternatives to the MPS have been considered and (c) why the plan (the MPS) is needed despite any possible impacts on European Sites.

<u>Why does the marine environment need to be managed within a strategic framework?</u>

The UK marine environment is a vital resource. It contains extremely rich and varied habitats which support a wide variety and abundance of living organisms. A healthy marine environment provides many valuable goods and services such as recycling nutrients and capturing and fixing carbon. These processes are enhanced by the diversity of the organisms in the seas, their abundance and the ecosystem services they provide. However our marine environment is subject to competing demands, with pollution and other damage from a range of activities putting increasing pressure on marine habitats and species and the wider marine ecosystem. We are also facing significant environmental changes, such as rising sea levels and increasing sea temperatures.

With these growing pressures, there needs to be a more consistent and coherent approach to the way marine resources are managed within an overarching framework to set out the UK vision for the marine environemnt (building on the UK HLOs) and the high level approach to marine planning and principles for decision making that will contribute to achieving this vision across the UK. This will ensure that policy objectives for key activities and uses such as achievement of GES under the Marine Strategy Framework Directive, GES under the Water Framework Directive, marine conservation objectives, such as on MPAs and other objectives such as on climate change adaptation are delivered through marine planning. It will also ensure that all impacts of decisions on the marine environment including cumulative impacts are fully addressed in a consistent way throughout the UK. It will set out key considerations for marine planning and decision making including aiming to avoid harm to marine ecology, biodiversity and conservation interests and attaching weight to designated sites of international, national and local importance and protected habitats and species.

The UK Administrations' view is that without such a framework there will not be the integrated, forward looking approach and direction across the UK marine area. Such an approach will be in the public interest and have beneficial consequences of primary importance for the environment.

What alternatives to the MPS in its current form have been considered?

The MPS as envisaged will provide the high level strategic context and considerations for marine planning and decision making, with Marine Plans then setting out how the MPS will be implemented in more detail in specific areas, reflecting particular activities, pressures and priorities in those areas. Alternatives to the MPS as envisaged have been considered (see section 5.1 above. These have not been pursued for the reasons explained above) including in the case of options 4 and 7 going beyond the requirements of the Habitats Directive. Therefore the MPS as envisaged is the only alternative that has been pursued by UK Administrations.

Why the MPS is needed?

Whilst the MPS may potentially have an adverse impact on the integrity of European sites, including some sites designated for priroity habitats, it is important that there is a UK wide policy framework for manging our marine environment so that all uses, including conservation of European sites, are covered and can be subject to area-specific Marine Plans in due course. The MPS will provide the means by which consistency and coherence will be achieved across the UK marine area so benefiting the marine environment as a whole. Each Marine Plan must be developed in accordance with the MPS so ensuring that plans developed by all UK Administrations and other decisions affecting the marine area will be aligned with UK objectives as set out in the MPS and drawn up in accordance with the guidance and steer in the MPS.

Without the MPS, some marine planning could take place but this would be limited in scope. As indicated above it would be more difficult to meet policy objectives for the marine environment and achieve a joined up and integrated approach to considering and addressing impacts on the marine environment.

Summary

The MPS will set a strategic framework to enable more sustainable use of marine resources, thus ensuring a sustainable marine environment which promotes healthy and functioning marine ecosystems and protects marine habitats and species. Notwithstanding any potential adverse effects on site integrity, which are considered unlikely, the MPS is needed for overriding reasons of public interest, because it will provide beneficial consequences of primary importance to the environment.

In due course, all Marine Plans will be subject to HRA during their development if they are likely to have a significant effect, either alone or in combination with other plans or projects, on a European site. At the project level also, developers will be required to follow the requirements set out by the Habitats Regulations and related guidance if adverse impacts are likely in respect of a European site including addressing issues relating to IROPI, site integrity and compensation.

5.3.2 Compensatory measures

The aim of compensatory measures is to maintain the coherent network of European Sites. As such compensatory measures are to be considered as a last resort when all other methods of preventing damage to a site have been exhausted and the need for the scheme is judged to outweigh the need to protect the European Site.

Compensation can either be 'in-kind' i.e. that which is lost is compensated for with something of a similar nature, or 'off-kind' i.e. compensation is of a different nature.

Before a plan or project that will have an adverse impact on a European Site can be permitted to proceed, it is necessary to justify the compensatory measures being offered to offset the negative impacts.

To be acceptable compensatory measures should:

- Address, in comparable proportions, the habitats and species negatively affected;
- Provide functions comparable to those which will be affected and which are critical to support the qualifying habitats and species interests affected;
- Relate to the same biogeographical region in the same Member State and be in close proximity to the site that has been adversely affected by the plan; and
- Have clearly defined implementation and management objectives so that the compensatory measures can achieve the maintenance of Natura 2000 coherence[25] .

Without information regarding the likely extent of any effects on integrity on individual European Sites as a result of marine activities in the future, it is not possible to predict what compensatory measures might be appropriate in individual cases. The range of impacts and hence compensatory measures are very wide in nature and geographical location and it would be inappropriate to attempt to recommend such in the absence of detailed information.

In such cases, developers will be expected to identify and acquire suitable locations for compensatory habitat at the project level or alternatively if the same conclusion is made following HRA of the more spatially specific Marine Plans. The key factors in determining whether and what compensatory habitat would be appropriate include:

- That it must be able to maintain and protect the ecological coherence of the Natura 2000 network; and
- That it should be able to integrate with any regional long-term plans, for example coastal zone management plans, with a view to ensuring the overall integrity of Natura 2000 is best protected, assuming that the development will be able to satisfy the 'alternatives' and 'IROPI' components of the Directive tests.

[25] European Commission (2001) *Assessment of plans and projects significantly affecting Natura 2000 sites*

- That it is appropriate for the area and the loss caused by the project;
- That it is capable of implementation;
- That it will be successful beyond reasonable scientific doubt;
- That it is in operation at the time the damage occurs;
- That it is directed in measurable proportions to the habitats and species negatively affected;
- That it serves functions that are comparable to those that motivated the original area's submission for designation; and
- That it is clearly defined, with implementation goals and managed so that the compensatory measures can achieve the goal of maintaining or improving the overall coherence of Natura 2000.

6 Conclusions and Future HRAs

Although the MPS should provide the framework to deliver sustainable development of the UK marine area, it is not a *spatial* plan that specifies where future marine activities are likely to take place. It is a non-location specific policy statement on planning in the marine environment. As a result, the HRA at this stage is unable to exclude the possibility that the integrity of one or more European Sites could be adversely affected by activities identified in the MPS until such time as it is known when and where these activities might take place. For this reason the assessment of alternative solutions and IROPI has been undertaken.

This HRA of the MPS has been constrained in what it can achieve and it has been undertaken at a level that is comparable to the high-level nature of the MPS itself. Owing to the lack of this spatial element, it has not been possible to be very specific about impacts, possible mitigation measures or alternative solutions for individual activities. It has only been possible to state that significant impacts are possible given the significant uncertainty that remains about individual applications.

The HRA process will need to be revisited through the consideration of the subsequent Marine Plans and any individual projects that are proposed under these plans. Both the Marine Plans themselves and any projects will contain more information on location, duration and magnitude of specific activities than was possible at the MPS stage, such that it will be much easier to assess the impacts upon individual European Sites (and, most importantly, their qualifying habitats and species).

Appendix 1

Appendix 1. Migratory and/or Annex 1 bird species that make regular use of marine habitats and for which SPAs are selected in the UK

Divers and Grebes
Red-throated Diver *Gavia stellata*
Black-throated Diver *Gavia arctica*
Little Grebe *Tachybaptus ruficollis*
Great Crested Grebe *Podiceps cristatus*
Slavonian Grebe *Podiceps auritus*

Seabirds
Fulmar *Fulmarus glacialis*
Manx Shearwater *Puffinus puffinus*
Storm-petrel *Hydrobates pelagicus*
Leach's Storm-petrel *Oceanodroma leucorhoa*
Gannet *Morus bassanus*
Cormorant *Phalacrocorax carbo carbo*
Shag *Phalacrocorax aristotelis*
Guillemot *Uria aalge*
Razorbill *Alca torda*
Puffin *Fratercula arctica*

Gulls, terns and skuas
Arctic Skua *Stercorarius parasiticus*
Great Skua *Stercorarius skua*
Mediterranean Gull *Larus melanocephalus*
Black-headed Gull *Larus ridibundus*
Common gull *Larus canus*
Lesser Black-backed Gull *Larus fuscus*
Herring Gull *Larus argentatus*
Great Black-backed Gull *Larus marinus*
Kittiwake *Rissa tridactyla*
Sandwich Tern *Sterna sandvicensis*
Roseate Tern *Sterna dougallii*
Common Tern *Sterna hirundo*
Arctic Tern *Sterna paradisaea*
Little Tern *Sternula albifrons*

Waders
Oystercatcher *Haematopus ostralegus*
Avocet Recurvirostra avosetta
Ringed Plover *Charadrius hiaticula*
Golden Plover *Pluvialis apricaria*
Grey plover *Pluvialis squatarola*
Lapwing *Vanellus vanellus*
Knot *Calidris canutus*
Sanderling *Calidris alba*
Purple Sandpiper *Calidris maritima*
Dunlin *Calidris alpina*

Waders (continued)
Black-tailed Godwit *Limosa limosa*
Bar-tailed Godwit *Limosa lapponica*
Whimbrel *Numenius phaeopus*
Curlew *Numenius arquata*
Redshank *Tringa totanus*
Greenshank *Tringa nebularia*
Turnstone *Arenaria interpres*
Red-necked Phalarope *Phalaropus lobatus*
Ruff *Philomachus pugnax*
Snipe *Gallinago gallinago*

Waterfowl
Pink-footed Goose *Anser brachyrhynchus*
Barnacle Goose *Branta leucopsis*
Greylag Goose *Anser anser*
Shelduck *Tadorna tadorna*
Wigeon *Anas penelope*
Gadwall *Anas strepera*
Teal *Anas crecca*
Mallard *Anas platyrhynchos*
Pintail *Anas acuta*
Shoveler *Anas clypeata*
Scaup *Aythya marila*
Eider *Somateria mollissima*
Long-tailed Duck *Clangula hyemalis*
Common Scoter *Melanitta nigra*
Velvet Scoter *Melanitta fusca*
Goldeneye *Bucephala clangula*
Red-breasted Merganser *Mergus serrator*
Goosander *Mergus merganser*

Raptors
Marsh Harrier *Circus aeruginosus*
Hen Harrier *Circus cyaneus*
Osprey *Pandion haliaetus*
Merlin *Falco columbarius*
Peregrine Falcon *Falco peregrinus*

Appendix 2

Appendix 2: Potential impacts of Activities listed in the MPS on the qualifying features of European Sites

			Potential for the activity to have implications for a European Site							
European Site			**National Security**		**Energy Infrastructure Development**					
	Identifying number	**Qualifying Features**	**Use of naval vessels** (implications, include species disturbance through sonar use, habitat disturbance, oil spills)	**Activities associated with naval bases** (implications include species disturbance, habitat loss, pollution)	**Offshore wind power** (implications include disturbance from construction noise, wind turbines forming a barrier, diversion or collision risk for marine species of birds; hydrological changes)	**Tidal range, tidal stream and wave power** (implications include habitat loss, disturbance, alterations in sediment movement, collision risk)	**Offshore electricity networks** (implications include habitat disturbance and loss, temporary noise disturbance)	**Offshore oil and gas exploration and infrastructure** (implications include risk of oil spill, noise from exploration and production, oil based cuttings piles)	**Offshore gas supply infrastructure and storage** (implications include habitat and species disturbance, habitat loss)	**Carbon Capture Storage** (implications include leakage of CO_2 and failure of infrastructure e.g. pipes)
SAC Habitats	1110	Sandbanks which are slightly covered by seawater all the time		✓	✓	✓	✓	✓	✓	✓
	1130	Estuaries	✓	✓	✓	✓	✓	✓	✓	✓
	1140	Mudflats and sandflats not covered by seawater at low tide		✓	✓	✓	✓	✓	✓	✓
	1150	Coastal lagoons (except where landwards of highest Astronomical High Tide and not directly connected to the sea)		✓		✓		✓		
	1160	Large shallow inlets and bays	✓	✓	✓	✓	✓	✓	✓	✓
	1170	Reefs	✓	✓	✓		✓	✓	✓	✓
	1180	Submarine structures made by leaking gases			✓		✓	✓	✓	✓
	8330	Submerged or partially submerged sea caves			✓		✓	✓	✓	✓
	1210	Annual vegetation of drift lines		✓		✓		✓		
	1310	Salicornia and other annuals colonising mud and sand	✓	✓		✓	✓	✓	✓	✓
	1320	Spartina swards *(Spartinion maritimae)*	✓	✓		✓	✓	✓	✓	✓
	1330	Atlantic salt meadows (*Glauco-Puccinellietalia maritimae)* (except where landwards of highest Astronomical High Tide)		✓		✓	✓	✓	✓	✓
	1420	Mediterranean and thermo-Atlantic halo-philous scrub (*Sarcocornetea fruticosi*) (except where landwards of highest Astronomical High Tide)		✓			✓	✓	✓	✓
SAC Species	1349	Bottlenose dolphin (*Tursiops truncatus*)	✓	✓	✓	✓	✓	✓	✓	✓
	1351	Harbour porpoise (*Phocoena Phocoena*)	✓	✓	✓	✓	✓	✓	✓	✓
	1364	Grey seal (*Halichoerus grypus)*	✓	✓	✓	✓	✓	✓	✓	✓
	1365	Common seal (*Phoca vitulina*)	✓	✓	✓	✓	✓	✓	✓	✓
	1095	Sea lamprey (*Petromyzon marinus*)		✓	✓	✓	✓	✓	✓	✓
	1102	Allis shad (*Alosa alosa*)		✓	✓	✓	✓	✓	✓	✓
	1103	Twaite shad (*Alosa fallax*)		✓	✓	✓	✓	✓	✓	✓
	1355	Otter *(Lutra lutra)*	✓	✓		✓	✓	✓	✓	✓
SPA Habitats	NO1	Marine areas and Sea inlets	✓	✓	✓	✓	✓	✓	✓	✓
	NO2	Tidal rivers, Estuaries, Mudflats, Sandflats and Lagoons (including saltwork basins)	✓	✓	✓	✓	✓	✓	✓	✓
	NO3	Salt marshes, salt pastures and salt steppes		✓		✓	✓	✓	✓	✓
SPA Species		Divers and grebes	✓	✓	✓	✓	✓	✓	✓	✓
		Seabirds	✓	✓	✓	✓	✓	✓	✓	✓
		Skuas, gulls and terns	✓	✓	✓	✓	✓	✓	✓	✓
		Waders	✓	✓	✓	✓		✓		✓
		Waterfowl	✓	✓	✓	✓	✓	✓	✓	✓
		Raptors		✓						

			Potential for the activity to have implications for a European Site							
European Site			**Ports and shipping**		**Aggregates and dredging**			**Fishing**		
	Identifying number	**Qualifying Features**	**Port Development** (implications include habitat loss and degradation, disturbance)	**Increase in shipping activity** (implications include species and habitat disturbance, introduction of alien species/pathogens, pollution incidents)	**Navigation dredging** (implications include exposure to contaminants, turbidity, hydrological changes)	**Dredging for marine aggregates** (implications include adverse impacts to sedimentary systems, hydrological changes, turbidity, exposure to contaminants)	**Sea disposal of dredged materials** (implications include burial of seabed flora and fauna, turbidity, exposure to contaminants)	**Pelagic fishing (nets deployed in the water)** (implications include removal of non-target species, organic enrichment, litter)	**Demersal trawling (net dragged along the seabed)** (implications include habitat damage and loss, removal of non-target species, organic enrichment, litter)	**Fixed gear (pots and nets left in place for a period before being recovered)** (implications include removal of non-target species, organic enrichment, litter)
SAC Habitats	1110	Sandbanks which are slightly covered by seawater all the time	✓		✓	✓	✓			
	1130	Estuaries	✓	✓	✓	✓	✓	✓	✓	✓
	1140	Mudflats and sandflats not covered by seawater at low tide	✓		✓	✓	✓			
	1150	Coastal lagoons (except where landwards of highest Astronomical High Tide and not directly connected to the sea)	✓							
	1160	Large shallow inlets and bays	✓	✓	✓	✓	✓	✓		✓
	1170	Reefs	✓	✓	✓	✓	✓	✓	✓	✓
	1180	Submarine structures made by leaking gases				✓	✓		✓	
	8330	Submerged or partially submerged sea caves				✓	✓		✓	
	1210	Annual vegetation of drift lines	✓							
	1310	Salicornia and other annuals colonising mud and sand	✓	✓	✓	✓	✓			
	1320	Spartina swards *(Spartinion maritimae)*	✓	✓	✓	✓	✓			
	1330	Atlantic salt meadows (*Glauco-Puccinellietalia maritimae)* (except where landwards of highest Astronomical High Tide)	✓		✓	✓	✓			
	1420	Mediterranean and thermo-Atlantic halo-philous scrub (*Sarcocornetea fruticosi*) (except where landwards of highest Astronomical High Tide)	✓							
SAC Species	1349	Bottlenose dolphin (*Tursiops truncatus*)	✓	✓	✓	✓	✓	✓	✓	✓
	1351	Harbour porpoise (*Phocoena Phocoena*)	✓	✓	✓	✓	✓	✓	✓	✓
	1364	Grey seal (*Halichoerus grypus)*	✓	✓	✓	✓	✓	✓	✓	✓
	1365	Common seal (*Phoca vitulina*)	✓	✓	✓	✓	✓	✓	✓	✓
	1095	Sea lamprey (*Petromyzon marinus*)	✓		✓	✓	✓	✓	✓	✓
	1102	Allis shad (*Alosa alosa*)	✓		✓	✓	✓	✓	✓	✓
	1103	Twaite shad (*Alosa fallax*)	✓		✓	✓	✓	✓	✓	✓
	1355	Otter *(Lutra lutra)*	✓	✓				✓	✓	✓
SPA Habitats	NO1	Marine areas and Sea inlets	✓	✓	✓	✓	✓	✓	✓	✓
	NO2	Tidal rivers, Estuaries, Mudflats, Sandflats and Lagoons (including saltwork basins)	✓	✓	✓	✓	✓	✓	✓	✓
	NO3	Salt marshes, salt pastures and salt steppes	✓			✓	✓			
SPA Species		Divers and grebes	✓	✓	✓	✓	✓	✓	✓	✓
		Seabirds	✓	✓	✓	✓	✓	✓	✓	✓
		Gulls, terns and skuas	✓	✓	✓	✓	✓	✓	✓	✓
		Waders	✓	✓	✓	✓	✓	✓	✓	✓
		Waterfowl	✓	✓	✓	✓	✓	✓	✓	✓
		Raptors	✓					✓	✓	✓

			Potential for the activity to have implications for a European Site						
European Site			**Telecommunications cabling**	**Aquaculture**	**Climate change adaptation**	**Waste water treatment and disposal**	**Tourism and recreation**		
	Identifying number	**Qualifying Features**	**Telecommunications and cabling** (implications include habitat loss and damage, species disturbance through introduction of electromagnetic radiation)	**Aquaculture (salmon and shellfish farming)** (implications include habitat loss and damage, nutrient enrichment, increased occurrence and spread of disease)	**Climate Change** (implications include rising sea levels, increased water temperatures, ocean acidification, changes in oceanic circulation)	**Waste water treatment and disposal** (implications include pollution through organic and nutrient enrichment)	**Recreational fishing** (implications include removal of non-target species, litter)	**Boating and watersports** (implications include hydrocarbon contamination, introduction of alien species/pathogens, species disturbance)	**Coastal access** (implications include habitat degradation and species disturbance)
SAC Habitats	1110	Sandbanks which are slightly covered by seawater all the time	✓		✓	✓		✓	
	1130	Estuaries	✓	✓	✓	✓		✓	
	1140	Mudflats and sandflats not covered by seawater at low tide	✓		✓	✓		✓	
	1150	Coastal lagoons (except where landwards of highest Astronomical High Tide and not directly connected to the sea)		✓	✓	✓		✓	
	1160	Large shallow inlets and bays	✓	✓	✓	✓		✓	
	1170	Reefs	✓		✓	✓		✓	
	1180	Submarine structures made by leaking gases	✓		✓				
	8330	Submerged or partially submerged sea caves	✓		✓			✓	
	1210	Annual vegetation of drift lines							✓
	1310	Salicornia and other annuals colonising mud and sand	✓		✓	✓		✓	✓
	1320	Spartina swards *(Spartinion maritimae)*	✓		✓	✓		✓	✓
	1330	Atlantic salt meadows (*Glauco-Puccinellietalia maritimae)* (except where landwards of highest Astronomical High Tide)	✓		✓	✓		✓	✓
	1420	Mediterranean and thermo-Atlantic halo-philous scrub (*Sarcocornetea fruticosi*) (except where landwards of highest Astronomical High Tide)	✓		✓	✓		✓	✓
SAC Species	1349	Bottlenose dolphin (*Tursiops truncatus*)	✓	✓	✓	✓	✓	✓	
	1351	Harbour porpoise (*Phocoena Phocoena*)	✓	✓	✓	✓	✓	✓	
	1364	Grey seal (*Halichoerus grypus)*	✓	✓	✓	✓	✓	✓	✓
	1365	Common seal (*Phoca vitulina*)	✓	✓	✓	✓	✓	✓	✓
	1095	Sea lamprey (*Petromyzon marinus*)	✓	✓	✓	✓	✓		
	1102	Allis shad (*Alosa alosa*)	✓	✓	✓	✓	✓		
	1103	Twaite shad (*Alosa fallax*)	✓	✓	✓	✓	✓		
	1355	Otter *(Lutra lutra)*	✓	✓	✓	✓	✓	✓	✓
SPA Habitats	NO1	Marine areas and Sea inlets	✓	✓	✓	✓		✓	
	NO2	Tidal rivers, Estuaries, Mudflats, Sandflats and Lagoons (including saltwork basins)	✓	✓	✓	✓		✓	

	NO3	Salt marshes, salt pastures and salt steppes	✓		✓	✓		✓	✓
SPA Species		Divers and grebes	✓	✓	✓	✓	✓	✓	✓
		Seabirds	✓	✓	✓	✓	✓	✓	✓
		Gulls, terns and skuas	✓	✓	✓	✓	✓	✓	✓
		Waders		✓	✓	✓	✓	✓	✓
		Waterfowl	✓	✓	✓	✓	✓	✓	✓
		Raptors		✓	✓		✓	✓	✓

Appendix 3

Appendix 3: Generic mitigation measures for activities resulting from policy objectives

Policy objective and activity	Potential impacts	Generic mitigation measures
National Security		
Continued use of naval vessels	Species and habitat disturbance from underwater noise , introduction of alien species/pathogens, pollution incidents	Alternative routes, timing of activity, methods and monitoring to reduce risk of introducing alien species/pathogens, pollution control measures
Activities associated with defence bases	Habitat loss and degradation, disturbance	Location and extent of activity, timing and methods of construction (if required)
Energy Infrastructure development		
Offshore wind power	Habitat loss and damage, noise disturbance, barriers, diversion or collision risk, hydrological changes	Siting, size, design and distribution of turbines, noise barriers for construction activities, acoustic deterrents, timing and methods of construction
Tidal range, tidal stream and wave power	Habitat loss and damage, disturbance, alterations in sediment movement, collision risk	siting, size and design of project, timing and methods of construction
Offshore electricity networks	Habitat disturbance and loss, temporary noise disturbance, electromagnetic disturbance	Route of cabling, burying cables, changes in permeability/conductivity of cable armour, use of substations to convert voltage and reduce current, timing and methods of construction
Offshore oil and gas exploration and infrastructure	Risk of oil spill, noise from exploration and production, oil based cuttings piles	Location and extent of activity, noise barriers during construction, timing and methods of construction, pollution control measures
Offshore gas supply infrastructure and storage	Habitat and species disturbance, habitat loss	Location and extent of activity, route of cables, burying cables, noise barriers during construction, timing and methods of construction
Carbon Capture	Leakage of CO_2 and failure	Use of existing features and

Policy objective and activity	Potential impacts	Generic mitigation measures
Storage	of infrastructure e.g. pipes	infrastructure, route and location of cabling, timing and methods of construction
Ports and Shipping		
Port Development	Habitat loss and degradation, disturbance	Location and extent of activity, timing and methods of construction
Increase in shipping activity	Species and habitat disturbance, introduction of non-indigenous species, pollution incidents	Alternative routes, timing of shipping activity, methods and monitoring to reduce risk of introducing alien species/pathogens, pollution control measures
Aggregates and dredging		
Marine dredging and disposal (capital and maintenance dredging)	Exposure to contaminants, turbidity, hydrological changes, noise disturbance	Minimise area to be dredged, dredge parallel to peak currents, appropriate operation of equipment Screening of wastes, alternatives to disposal i.e. re-use, recycle or treat waste
Dredging for marine aggregates	Loss of seabed habitat, changes to sedimentary systems, hydrology, turbidity, noise disturbance	Leave layer of existing sediment at least 0.5m thick over underlying substrata, minimise area to be dredged, avoid sensitive sites, dredge parallel to peak currents, appropriate operation of equipment, monitoring of site before, during and after extraction
Fishing		
Pelagic fishing	Removal of non-target species, over fishing, net entanglement, collisions, organic enrichment, litter	Avoid sensitive areas, streamer lines, tori lines, warp scarers, brady bafflers, line weighting, net cleaning, offal discharge control, time restrictions for line setting, methods to achieve size specific catches e.g. implementation of zone/depth limit catches, net sizes

Policy objective and activity	Potential impacts	Generic mitigation measures
Demersal trawling	Habitat damage and loss, removal of non-target species, over fishing, organic enrichment, litter	Time/area closures to protect species and habitats, eliminate use of destructive gear, offal discharge control
Fixed gear	Removal of non-target species, organic enrichment, litter.	Time/area closures to protect species, offal discharge control
Telecommunications cabling		
Laying and maintenance of undersea cables and associated infrastructure	Habitat disturbance and loss, temporary noise disturbance, electromagnetic disturbance	Route of cabling, burying cables, changes in permeability/conductivity of cable armour, timing and methods of construction
Aquaculture		
Salmon and shellfish farming	Habitat loss and damage, organic enrichment, genetic dilution of local populations, increased occurrence and spreads of disease, litter.	Location of farms, closed containment technology
Waste water treatment and disposal		
Outfalls both directly and via rivers	Pollution from sewage, organic and nutrient enrichment, toxic contaminants, pathogens	Location of outfalls, screening and treatment of waste water
Climate change adaptation		
Priority to recognise and adapt to climate change	Sea level rise, increased seawater temperatures, ocean acidification and changes in oceanic circulation	Consideration of how the proposal will take account the projected impacts of climate change, use of the precautionary principle
Tourism and recreation		
Boating and watersports	Hydrocarbon contamination, introduction of alien species/pathogens, species disturbance, litter	Exclusion areas, limits on type, number of craft
Recreational fishing	Removal of non-target species, litter	Exclusion areas, limits on catch numbers/species

Policy objective and activity	Potential impacts	Generic mitigation measures
Coastal access	Habitat and species disturbance, litter	Limits on numbers, time/area closures to protect species and habitats