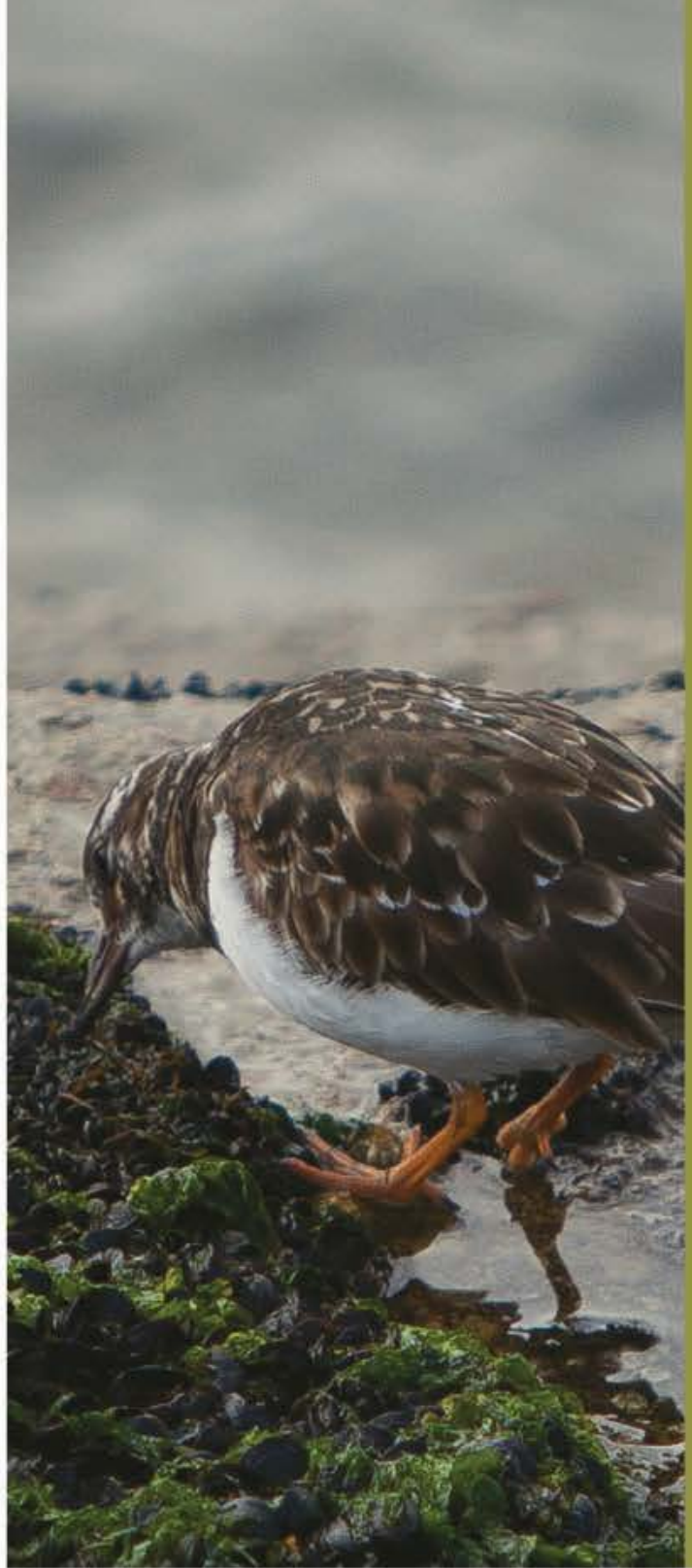




Marine
Management
Organisation



South Marine Plans Habitats Regulations Assessment: Pre-Screening Review Report

July 2014



MMO Project No: 1071

**South Marine Plans
Habitats Regulations Assessment: Pre-
Screening Review**

July 2014



Report prepared by: ABP Marine Environmental Research Ltd



**Marine
Management
Organisation**

Project funded by: The Marine Management Organisation

Version	Author	Note
1	E San Martin, Colin Scott	First draft for consultation
2	E San Martin, Colin Scott	Final Draft
3	E San Martin, Colin Scott	Final

© Marine Management Organisation 2014

You may use and re-use the information featured on this website (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. Visit www.nationalarchives.gov.uk/doc/open-government-licence/ to view the licence or write to:

Information Policy Team
The National Archives
Kew
London
TW9 4DU
Email: psi@nationalarchives.gsi.gov.uk

Information about this publication and further copies are available from:

Marine Management Organisation
Lancaster House
Hampshire Court
Newcastle upon Tyne
NE4 7YH

Tel: 0300 123 1032
Email: info@marinemanagement.org.uk
Website: www.marinemanagement.org.uk

If referencing this document, please cite it as: MMO (2014) South Marine Plans Habitats Regulations Assessment: Pre-Screening Review. A report produced by ABPmer Ltd. for the Marine Management Organisation MMO Project No: 1071. ISBN: 978-1-909452-38-1. July 2014.

Contents

Executive Summary	1
1. Introduction	2
2. Marine Plans HRA Process	5
2.1 Legal context.....	5
2.2 HRA approach	5
2.3 Key considerations and actions relevant to marine plan HRA	8
3. Pre-screening Approach and Results	10
3.1 HRA Stage 1: Deciding whether the South marine plans are subject to a HRA	10
3.2 HRA Stage 2: Identify European/Ramsar sites that should be considered in the appraisal.....	11
3.3 HRA Stage 3: Gather information about the European/Ramsar sites	17
3.4 HRA Stage 4: Consult on the method and scope of the appraisal	17
4. Summary and Next Stages	19
4.1 Pre-screening.....	19
4.2 Next Stages	19
4.2.1 Screening	19
4.2.2 Appropriate Assessment Information Report.....	19
Annex 1: List of European/Ramsar Sites and Interest Features Identified at Pre-screening	21
Annex 2: Screening methods.....	66
Annex 3. Assessment Methods	84

Figures

Figure 1: South marine plan areas showing 100km buffer zone for pre-screening ...	3
Figure 2: Stages of the HRA process for marine plans in England (adapted from David Tyldesley Associates, 2012).....	7
Figure 3a: Location of all designated UK SPA sites within and surrounding the South marine plan areas	12
Figure 3b: Location of all designated UK SAC sites within and surrounding the South marine plan areas	13
Figure 3c: Location of all designated UK Ramsar sites within and surrounding the South marine plan areas	14

Figure 4: Location of all UK and non-UK Natura 2000 sites within and surrounding the South marine plan areas	15
Figure 5: Location of all compensatory sites within and surrounding the South marine plan areas	16

Tables

Table 1: Considerations and actions relevant to marine plan HRA.....	9
Table 2: Are the South marine plans subject to HRA? (Adapted from Figure 3 in David Tyldesley and Associates, 2012).....	10
Table 3: List of UK compensatory sites that were identified at pre-screening.....	17
Table A1: List of European/Ramsar sites and their interest features that were identified at the pre-screening stage.	21

Executive Summary

This report has been prepared by ABP Marine Environmental Research Ltd (ABPmer) on behalf of the Marine Management Organisation (MMO). It presents guidance on the work that will be required to undertake a Habitats Regulations Assessment (HRA) for the South marine plans and evaluate the plans' effects on protected European/Ramsar sites. It also presents findings from the initial 'Pre-Screening' phase of this HRA process.

The HRA process will need to be clear, iterative and auditable. This is to ensure there is full clarity in the assessment findings and that issues of uncertainty are fully recognised and addressed. It will also need to be precautionary, follow available guidance and take account of the lessons/approaches in previous plan-level HRAs (including the East marine plans HRA). The full HRA process will be divided into the following four phases (with a report produced after each element):

- **Pre-Screening (this report):** identifying an initial list of potentially relevant European/Ramsar sites for consideration and setting out the HRA methods;
- **Screening:** identifying (i.e. 'screening in' to the next assessment stage) those European/Ramsar sites for which there is a 'likely significant effect' (LSE) from the South marine plans (or where a LSE cannot be excluded).
- **Appropriate Assessment Information Review (AAIR):** assessing the plans' effects on the integrity of the 'screened in' European/Ramsar sites
- **Appropriate Assessment (AA)** preparing the formal assessments and HRA record on the basis of the AAIR findings.

For the initial Pre-Screening phase, a 100km 'buffer zone' was defined around the South marine plan areas and all the European/Ramsar sites within that zone were identified. In total 293 European/Ramsar sites were identified comprising: 64 SPAs; 188 SACs/cSACs/SCIs; 33 Ramsar sites and 8 compensatory (managed realignment) sites. These sites will be reviewed further in the screening stage which will comprise two key elements:

- **Policy screening** to identify those South marine plan policies that could result in a LSE and, therefore, will need to be assessed; and
- **Ecological screening** to identify those European/Ramsar sites for which (in the context of available mitigation measures) there could be LSE from those 'screened in' policies and, therefore, will need to be assessed.

The subsequent two assessment stages will then consider the particular environmental pressures brought about by the relevant South marine plan policies. An assessment of their impacts on the integrity of the European/Ramsar sites will be made with regard to relevant conservation objectives of the European/Ramsar sites.

The impacts of these policies will need to be assessed in-combination with other plans or projects influencing the South marine plan areas. Any additional mitigation measures that might be needed to ensure the South marine plans will not have an adverse effect on integrity (AEOI) of any European/Ramsar sites will be identified.

This HRA will be steered by Natural England and the Joint Nature Conservation Committee (JNCC) and through ongoing consultations with key stakeholders.

1. Introduction

This report has been prepared by ABP Marine Environmental Research Ltd (ABPmer) on behalf of the Marine Management Organisation (MMO). It presents the results of the pre-screening stage of a Habitats Regulations Assessment (HRA) process¹ that is being followed for the South Inshore and Offshore Marine Plan Areas. This process is being undertaken as a requirement of the Habitats Regulations² for inshore and offshore waters and will assess the effects the marine plans may have on certain protected sites described below. A single HRA process is being undertaken to cover both marine plan areas together (hereafter referred to as the South marine plan areas), the boundaries of which are shown in Figure 1.

The report also describes a methodology for the remaining stages of the HRA screening and assessment process which will be carried out as the South marine plans are prepared. Evidence collected during the development of the South marine plans, for example for the South Plans Analytical Report (SPAR)³ or during the South Evidence and Issues Workshops, will feed into the future stages of the HRA process for the South marine plans.

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/or species that are rare, endangered, vulnerable or endemic within the European Community. Their creation is specified in the Habitats and Birds Directives as outlined below and referred to collectively as European sites. These European sites include:

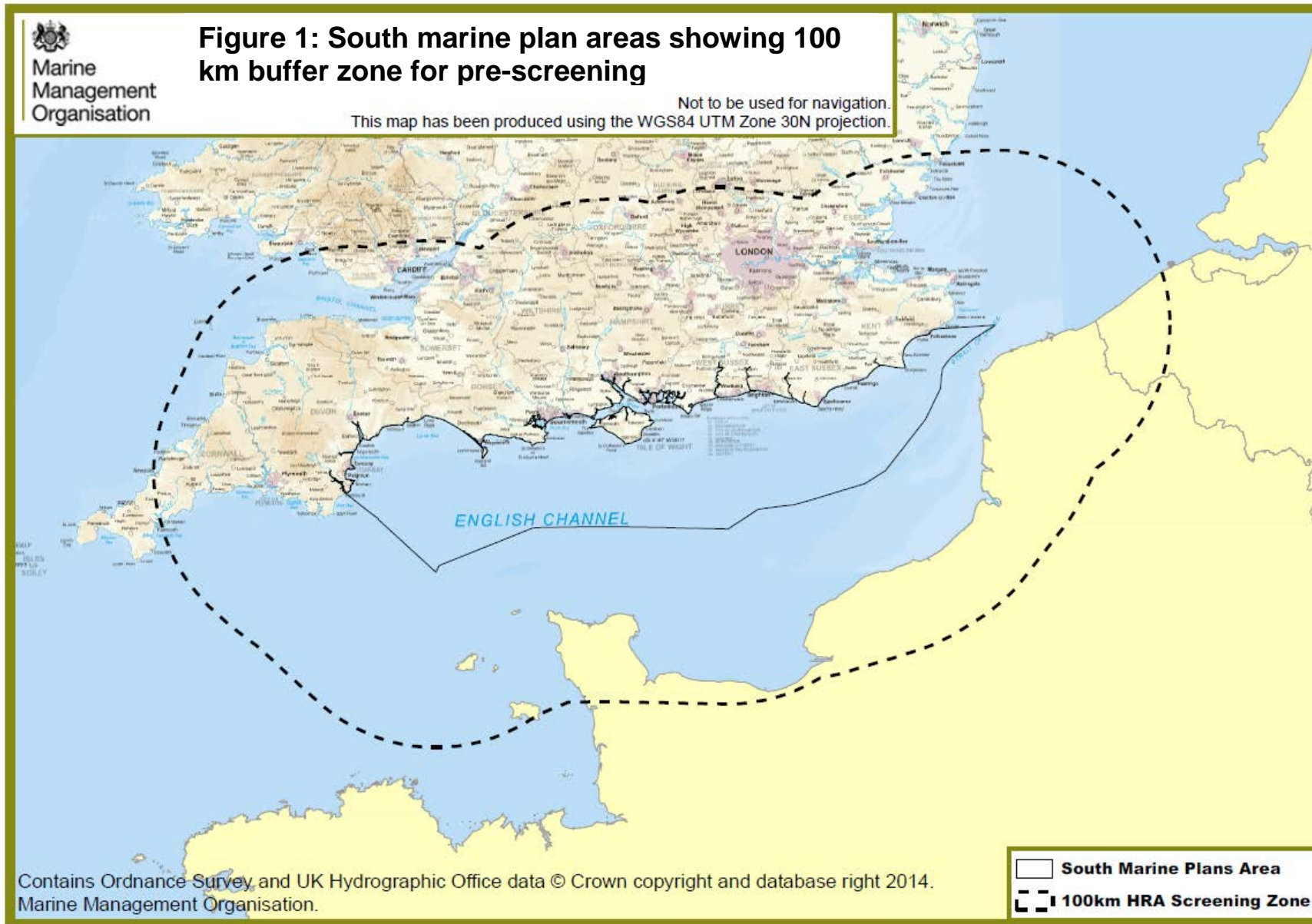
- Special Areas of Conservation (SACs) designated under the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive) for their habitats and/or species of European importance;
- Special Protection Areas (SPAs) classified under the EC Directive on the Conservation of Wild Birds (the Birds Directive) for rare, vulnerable and regularly occurring migratory bird species and internationally important wetlands;
- Sites of Community Importance (SCIs) that have been adopted by the European Commission but not yet formally designated by the government of each country; and
- Candidate SACs (cSACs) that have been submitted to the European Commission, but not yet formally adopted.

¹ The acronym HRA has been used in the past as either a 'Habitats Regulations Assessment' or a 'Habitats Regulations Appraisal'. For clarity, it here defines the whole 'appraisal process' by which the plans are evaluated (from pre-screening to final assessment). There is, therefore, a distinction between this process and the final Appropriate Assessment (AA) (as needed to evaluate a plan's effects where it is deemed to have a 'Likely Significant Effect' (LSE) on European/Ramsar site(s)).

² The Conservation of Habitats and Species Regulations 2010 which replace the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) in England and Wales; and the Offshore Marine Conservation (Natural Habitats) Regulations 2007 (SI 2007 No. 1842) (as amended) (the Offshore Habitats Regulations).

³ http://www.marinemanagement.org.uk/marineplanning/areas/south_spar.htm

South marine plans HRA pre-screening report



South marine plans HRA pre-screening report

Furthermore, it is policy in England under the National Planning Policy Framework (DCLG, 2012) that the following wildlife sites should be given the same protection as European sites:

- Potential SPAs (pSPAs) and possible SACs (pSACs);
- Listed or proposed Ramsar sites under the 1971 Ramsar Convention on Wetlands of International Importance⁴; and
- Sites identified, or required, as compensatory measures for adverse effects on European sites (e.g. Medmerry).

These sites are collectively referred to throughout this report as European/Ramsar sites.

⁴ pSPAs, pSACs and proposed Ramsar sites are sites on which Government has initiated public consultation on the scientific case for designation as a SPA, cSAC or Ramsar site.

2. Marine Plans HRA Process

2.1 Legal context

The habitats regulation assessment (HRA) is made against the European/Ramsar sites' Conservation Objectives by the Competent Authority in compliance with the Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the EC Habitats Directive). This Directive is transposed into UK law through the following, which are collectively referred to in this document as the 'Habitats Regulations':

- The Conservation of Habitats and Species Regulations 2010 which replace the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) in England and Wales; and
- The Offshore Marine Conservation (Natural Habitats) Regulations 2007 (SI 2007 No. 1842) (as amended) (the Offshore Habitats Regulations).

The types of designated sites that must be considered under EU and English legislation are listed in section 1. The legislation is such that where a plan or project is not directly connected with or necessary for the management of European sites, and where the possibility of a 'Likely Significant Effect' (LSE) on these sites cannot be excluded, either alone or in combination with other plans or projects, an Appropriate Assessment (AA) should be undertaken.

The Competent Authority can adopt the plan only after having ascertained that it will not adversely affect the integrity of the European/Ramsar sites concerned. The MMO is the Competent Authority for undertaking the HRA of the South marine plans.

If it is concluded that the South marine plans will have an adverse effect on integrity (AEOI) of a European/Ramsar site (either alone or in combination with other plans or projects) the South marine plans can only be adopted if it has been ascertained that there are no alternative solutions and it is necessary for Imperative Reasons of Overriding Public Interest (IROPI), including those of a social or economic nature. In these circumstances before such a plan can proceed, compensatory measures must be secured to ensure that the overall coherence of the network of Natura 2000 sites is maintained.

2.2 HRA approach

Guidance has been produced by the European Commission on the 'Assessment of plans and projects significantly affecting Natura 2000 sites' (EC, 2001). Guidance on the methods for undertaking "plan-level HRAs" (i.e. HRAs for strategic plans) has also been prepared for Natural England, Scottish Natural Heritage (SNH) and Countryside Council for Wales (CCW) (David Tyldesley Associates, 2009a; b; 2012).

The guidance divides the whole plan-level HRA process into 13 distinct stages which provides a clear process that can be followed for plan-level HRAs (Figure 2). Adhering to this guidance, and clearly following the key stages, ensures that there is

South marine plans HRA pre-screening report

as much clarity as possible in the process and in understanding how assessment decisions are reached. It is also important for understanding and addressing many of the particular challenges that are faced with respect to undertaking HRAs specifically for marine plans (as highlighted below). Having a transparent and phased process also ensures that the relevant documentation can be readily accessed, interpreted and interrogated.

It should be noted that the existing plan-level HRA guidance is inherently tailored towards terrestrial/land planning. Despite this, it has been successfully applied to plans for marine activities in the past and as described further in this report can be used effectively for the South marine plans (Figure 2). It should be recognised, though, that there is no specific guidance available on the process for undertaking marine plan HRAs. A number of specific challenges arise when considering the application of plan-level HRA to multi-sectoral marine plans. In particular:

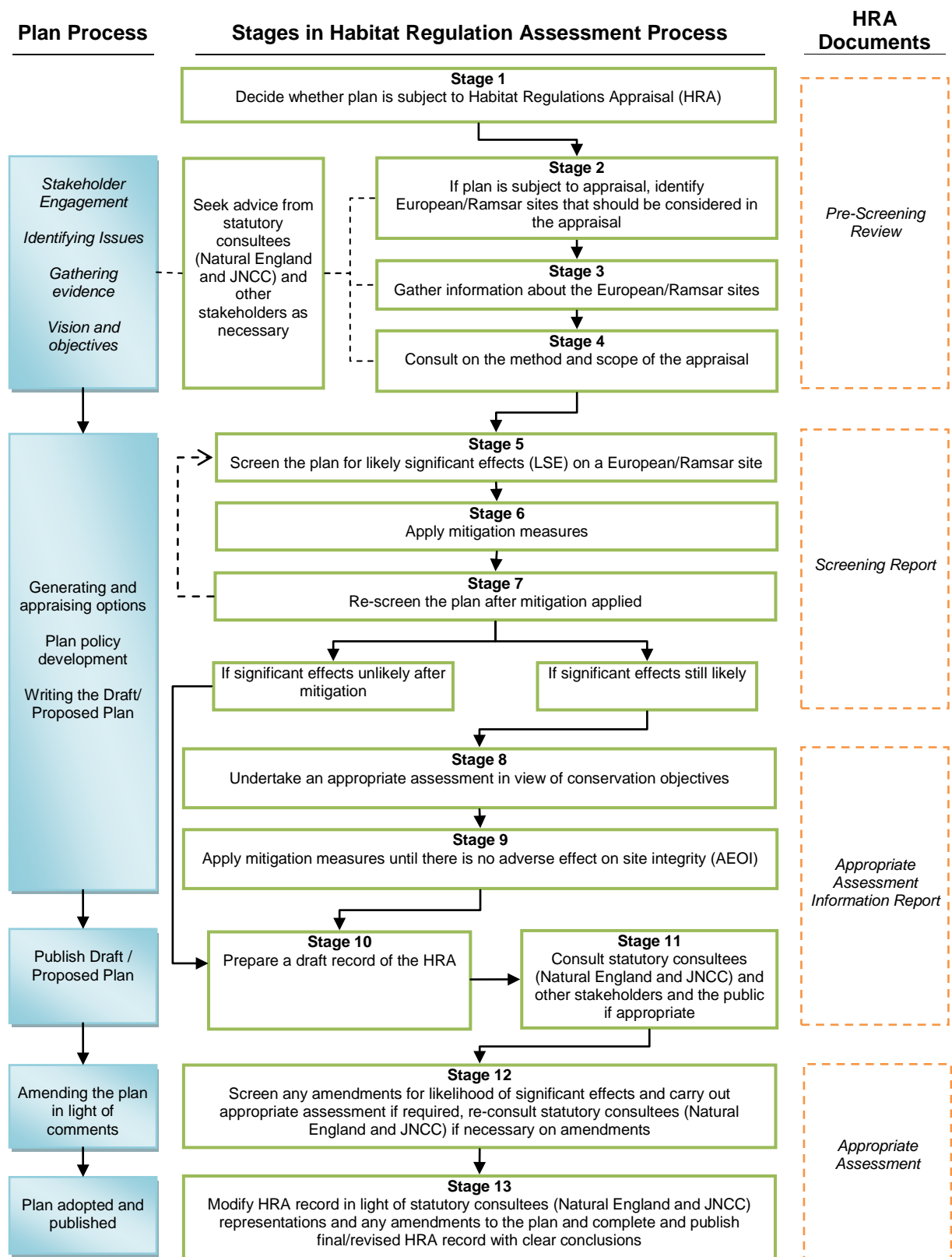
- The relationship between the activities driven by the marine plan policies and those that have been assessed through pre-existing sectoral plan HRAs such as offshore wind and oil & gas licensing rounds must be considered;
- Limited information is available for potential future marine activities covered by marine plans, and this means the potential impacts of the plan for assessment are inherently uncertain; and
- The extent to which spatial marine plan policies for activities or developments might create a presumption in favour of development and/or provide grounds for an 'IROPI' case must be addressed.

In order to address these issues, the project team has sought to follow a similar approach as was used for the HRA of the East marine plans (MMO, 2013) which also drew on plan-level HRA guidance (for example, David Tyldesley and Associates 2009a and 2012). Key considerations and actions relevant to the South marine plans HRA are provided in section 2.3.

The methods applied for this HRA also take account of the lessons learned from and approaches taken during previous plan-level HRA projects. These projects include the following:

- The Crown Estate's Wave and Tidal Further Leasing plan (ABPmer, in prep.);
- The Crown Estate's Offshore Floating Wind Test Sites plan (AMEC, in prep.);
- The three Draft Sectoral Plans for Wind, Wave and Tidal Energy Generation in Scottish waters (ABPmer, 2013a);
- Draft Plan for Wave and Tidal Energy in Scottish Waters (ABPmer, 2013b);
- Draft Plan for Offshore Wind Energy (OWE) in Scottish Waters (ABPmer, 2011a);
- National Renewables Infrastructure Plan (N-RIP) (ABPmer, 2011b);
- Northern Ireland Offshore Renewable Energy Strategic Plan 2009-2020 (Entec, 2011);
- Pentland Firth Strategic Area (PFSA) Leasing Round (ABPmer, 2010a; b); and
- Habitats Regulations Assessment of the Round 3 Offshore Wind Farm Plan (Entec, 2009a; b).

Figure 2: Stages of the HRA process for marine plans in England (adapted from David Tyldesley Associates, 2012).



South marine plans HRA pre-screening report

This HRA Pre-Screening Review presents the results of the initial pre-screening phase (Stages 1 to 3 of the plan-level HRA guidance, Figure 2). The purpose of the initial pre-screening is to identify the European/Ramsar sites that will need to be considered within the subsequent 'screening' stage of the HRA process.

This Pre-Screening Review also presents the proposed methods for undertaking the subsequent screening and assessment stages in fulfilment of Stage 4 of the plan-level HRA guidance (Figure 2). These methods, in particular, are presented to illustrate the next steps in the HRA process (Annexes 2 and 3).

As required by the Habitats Regulations for inshore and offshore waters, the HRA for the South Inshore and Offshore Marine Plans will be steered by Natural England and the Joint Nature Conservation Committee (JNCC).

2.3 Key considerations and actions relevant to marine plan HRA

A review of available guidance has been undertaken for the East marine plans HRA (MMO, 2013) and agreed with consultees. Following this, it is recognised that when assessing the South marine plan policies there will not be a need to assess those existing plans for which a plan-level HRA has already been undertaken. In other words there is no need to re-assess activities that have already been assessed. The exception would be where there has been a further definition of, or change to, existing and assessed proposals resulting from marine plan policies. In such a case then these would need to be assessed within the marine plan HRA.

Necessarily, where there is no equivalent plan, and no HRA has been undertaken, it is appropriate to consider activities which the marine plan influences within this HRA. In addition, given the broad nature of marine plans, in-combination effects are unlikely to be sufficiently addressed in any existing HRA, and will generally need to be assessed at a plan scale within the South marine plans HRA process.

Based on previously agreed principles adopted for the East marine plans HRA, it will not be necessary to appraise 'criteria-based' policies or other general policy statements that have no spatial aspect⁵. This is because even though such general policies "*may promote or encourage changes, which in theory could affect a European site, they only express the tests or expectations of the plan making authority when it comes to consider particular proposals [and they] can be screened out at an early stage because they will not have a significant effect on a European site*" (David Tyldesley and Associates, 2009a). Therefore, the appraisal can discount these general policies and focus on those policies with a definable spatial component.

The key considerations and actions that will help to support the overall HRA are summarised in Table 1. Further details and guidance about the proposed approach are presented in Annex 2.

⁵ One example of such a policy is "*Proposals that provide economic productivity benefits which are additional to Gross Value Added currently generated by existing activities should be supported*".

Table 1: Considerations and actions relevant to marine plan HRA

Consideration	Action
<p>1. Whether, and how, plan policy will be materially influenced by any existing sectoral plans or projects so that:</p> <ul style="list-style-type: none"> a. existing plans for which a plan-level HRA has already been undertaken but which are not influenced by the marine plan do not need to be assessed as part of the plan, although they will need to be assessed as part of the in-combination assessment; and b. only material changes will be assessed (see also Point 2 in this table and Annex 2 for further detail). 	<p>Review the marine plan policies in consultation with Natural England and JNCC to clearly identify and exclude general or criteria-based policies, while selecting and assessing those which will materially influence existing sectoral plans or projects.</p>
<p>2. The identification and exclusion of general or criteria-based policies so that the assessment can focus on policies with a spatially definable component.</p>	
<p>3. How existing sectoral plans will fit into the plan implementation hierarchy.</p>	<p>Assess only those sectoral plans for which an HRA does not already exist.</p>
<p>4. How the marine plan itself will be implemented to address in-combination issues.</p>	<p>Present further details on how in-combination issues will be addressed within the Appropriate Assessment Information Report that will follow the screening process.</p>
<p>5. The framing of any relevant marine plan policies should be such that inclusion of a project within a plan is not a sufficient ground for an IROPI case.</p>	<p>Address the issue of IROPI within the marine plan in terms of the plan's intended use as a decision making document.</p>

3. Pre-screening Approach and Results

The pre-screening review presented in this section covers stages 1-4 of Figure 2.

3.1 HRA Stage 1: Deciding whether the South marine plans are subject to a HRA

In order to decide whether the South marine plans should be subject to HRA, it was necessary to consider the questions that are set out in Table 2.

Table 2: Are the South marine plans subject to HRA? (Adapted from Figure 3 in David Tyldesley and Associates, 2012)

Questions to decide if HRA is required	Yes / no	Outcome
1. Is the whole of the plan directly connected with and necessary to the management of a European site for nature conservation purposes?	No	Go to question 2
2. Is the plan a 'strategic development plan' or 'local development plan' or 'supplementary guidance' (regulation 85A), or a core path plan (regulation 69A) or a revision thereof?	Yes	MMO should proceed to identify the European/Ramsar sites that may potentially be affected, gather the information about them and 'screen' the plan for LSE
3. Does the plan provide a framework for deciding applications for project consents and/or does it influence decision makers on the outcome of applications for project consents?	Yes	
4. Does the plan contain a programme, or policies, or proposals which could affect one or more particular European sites?	Highly likely	
5. Is the plan a general statement of policy, showing only the general political will or intention of the plan-making body, and no effect on any particular European site can reasonably be predicted?	No	

Given the answers to the questions posed in Table 2, i.e. that the South marine plans are much broader than just for conservation management and have the potential to affect one or more European/Ramsar sites, there is a requirement for an HRA. The next stages of the HRA pre-screening are to identify the European/Ramsar sites that may potentially be affected, gather the relevant information about them and then consult on the method and scope of the appraisal.

3.2 HRA Stage 2: Identify European/Ramsar sites that should be considered in the appraisal

Stage 2 of the plan-level HRA guidance involves identifying the locations of European/Ramsar sites within and around UK Waters. A 100 kilometre (km) buffer zone was drawn around the South marine plan areas, and the designated European/Ramsar sites within that buffer were identified. The latest Geographic Information System (GIS) mapping layers for designated and proposed European/Ramsar sites in the UK were sourced from JNCC in March 2014. These sites will be taken forward to the screening stage which will be carried out and reported on in parallel to the South marine plans development. The position of the 100km buffer zone relative to the South marine plan areas is shown in Figure 1.

A 100km buffer was used because it is deemed to be a quantifiable and objective area that is likely to encompass many of the highly mobile species interest features (i.e. fish, seabirds and mammals) within European/Ramsar sites that could be indirectly affected by the South marine plans. However, it has not been used to limit further review of more distant locations or to presume that all relevant features within this area, for which impact pathways exist, are necessarily affected. In particular, it is recognised that impacts, especially to migratory and foraging bird and cetacean species, may extend to sites beyond this 100km buffer and this aspect will need to be considered throughout the whole HRA process.

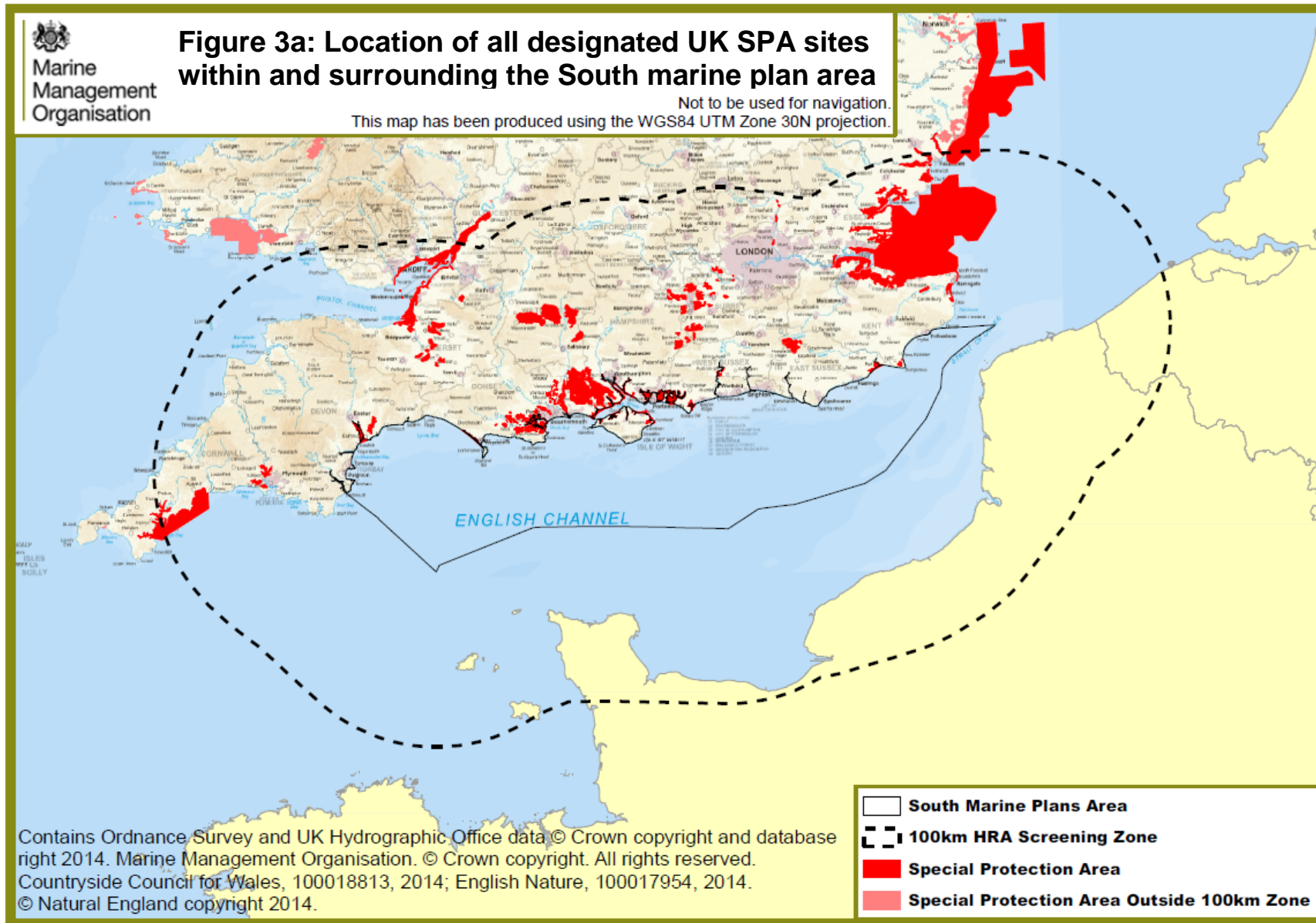
In addition to considering UK European/Ramsar sites, the effects outside the marine plan areas could also extend into the Natura 2000 sites of other EU Member states and therefore the non-UK sites that are potentially sensitive to transnational effects within the 100km buffer zone for the South marine plan areas have also been identified and included in this list of sites to take forward to screening. The GIS mapping layers for non-UK sites were sourced from the latest EU online mapping resource⁶ in January 2014). The distribution of all the UK and non-UK sites and their positions relative to the South marine plan areas are shown in Figures 3a-c and 4 respectively.

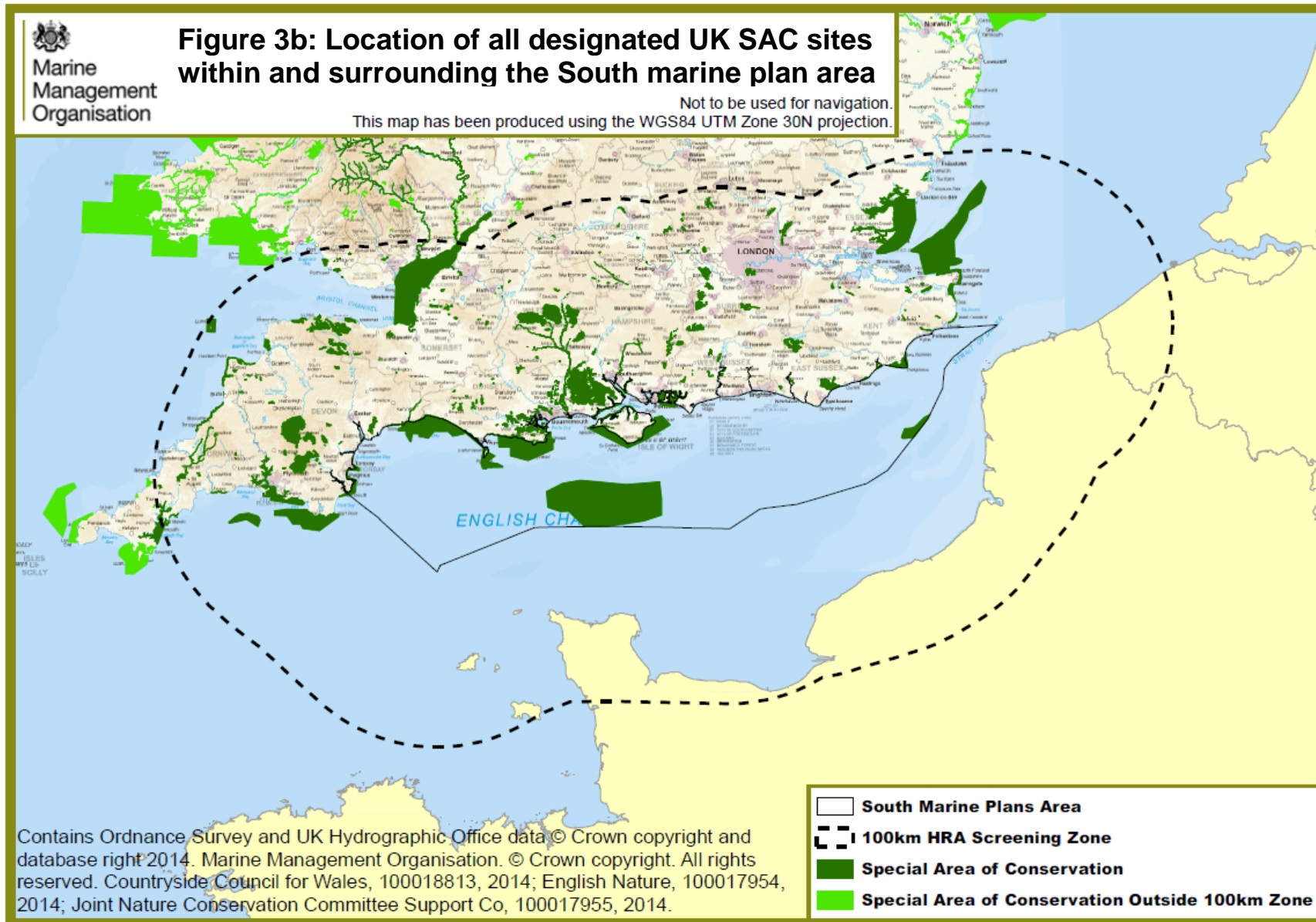
As noted in section 1, it is policy in England (DCLG, 2012) that sites identified or required as compensatory measures for adverse effects on European sites should be given the same protection as European sites. On this basis, and following advice from Natural England during the early stages of this HRA consultation process, all completed managed realignment or regulated tidal exchange sites that have been created for compensatory purposes in the UK have been identified from ABPmer's Online Managed Realignment Guide (OMReG) website⁷.

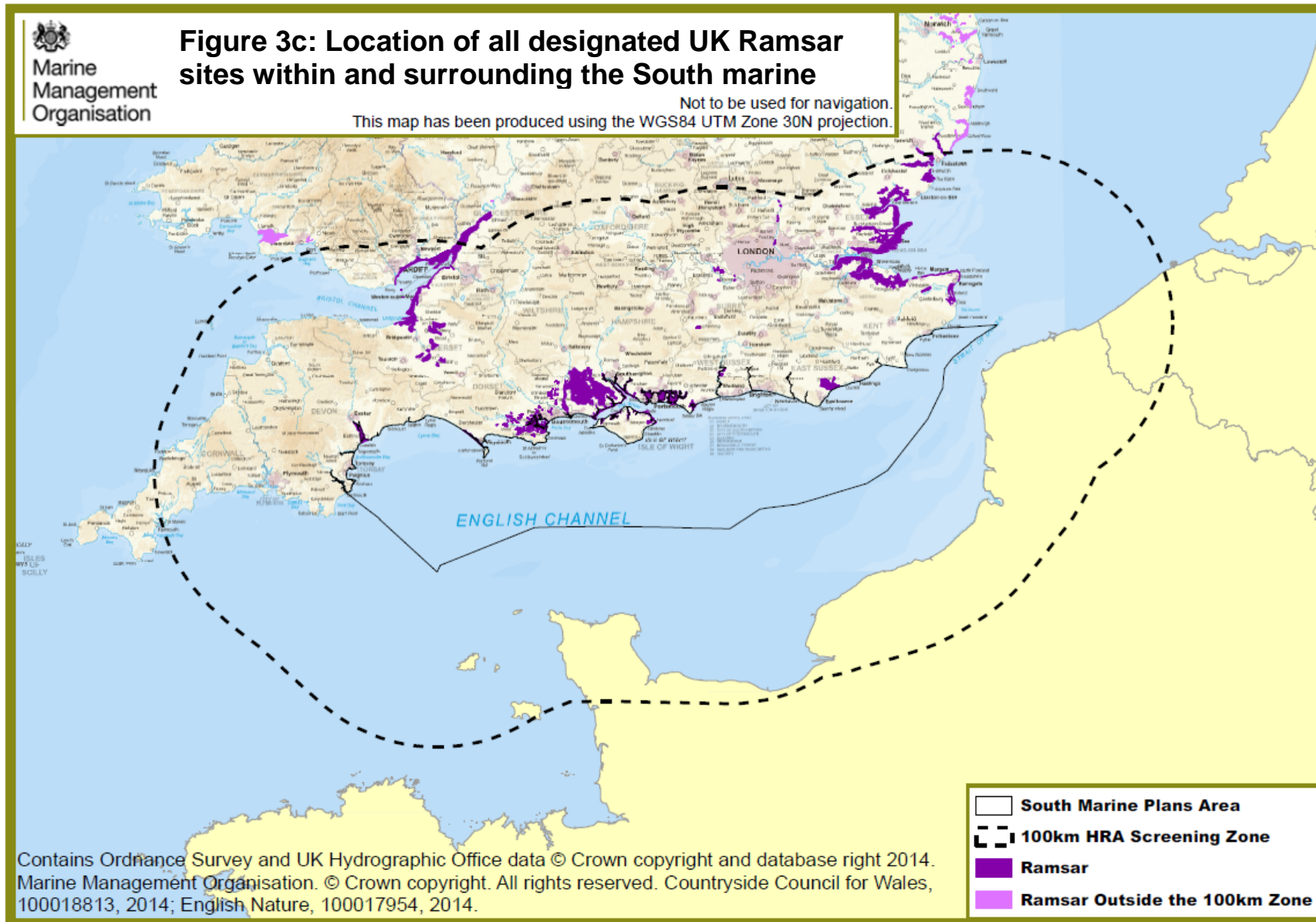
The location of these sites within and surrounding the South marine plan areas is shown in Figure 5.

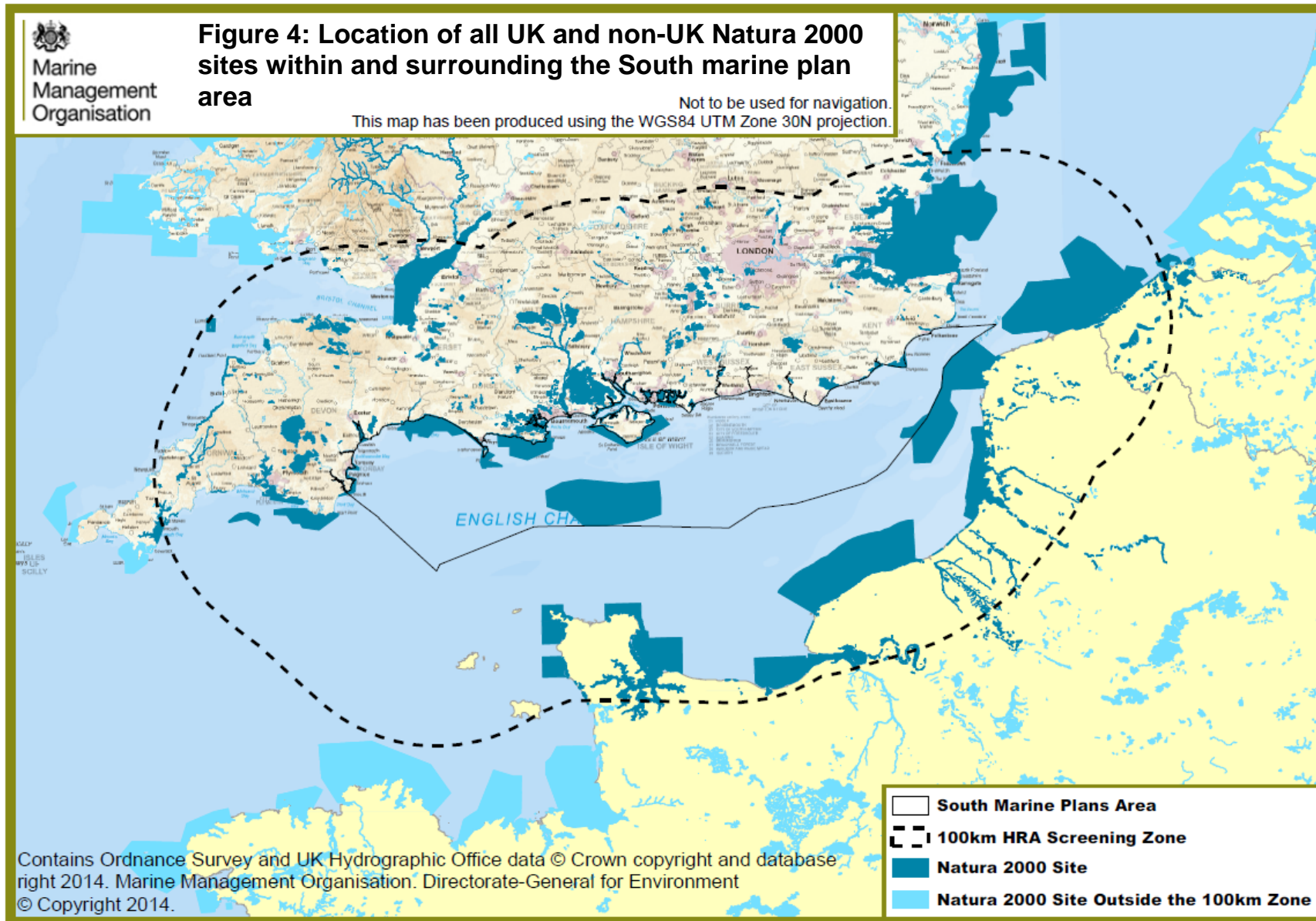
⁶ <http://www.eea.europa.eu/data-and-maps/figures/distribution-of-natura-2000-sites-across-eu-member-states>

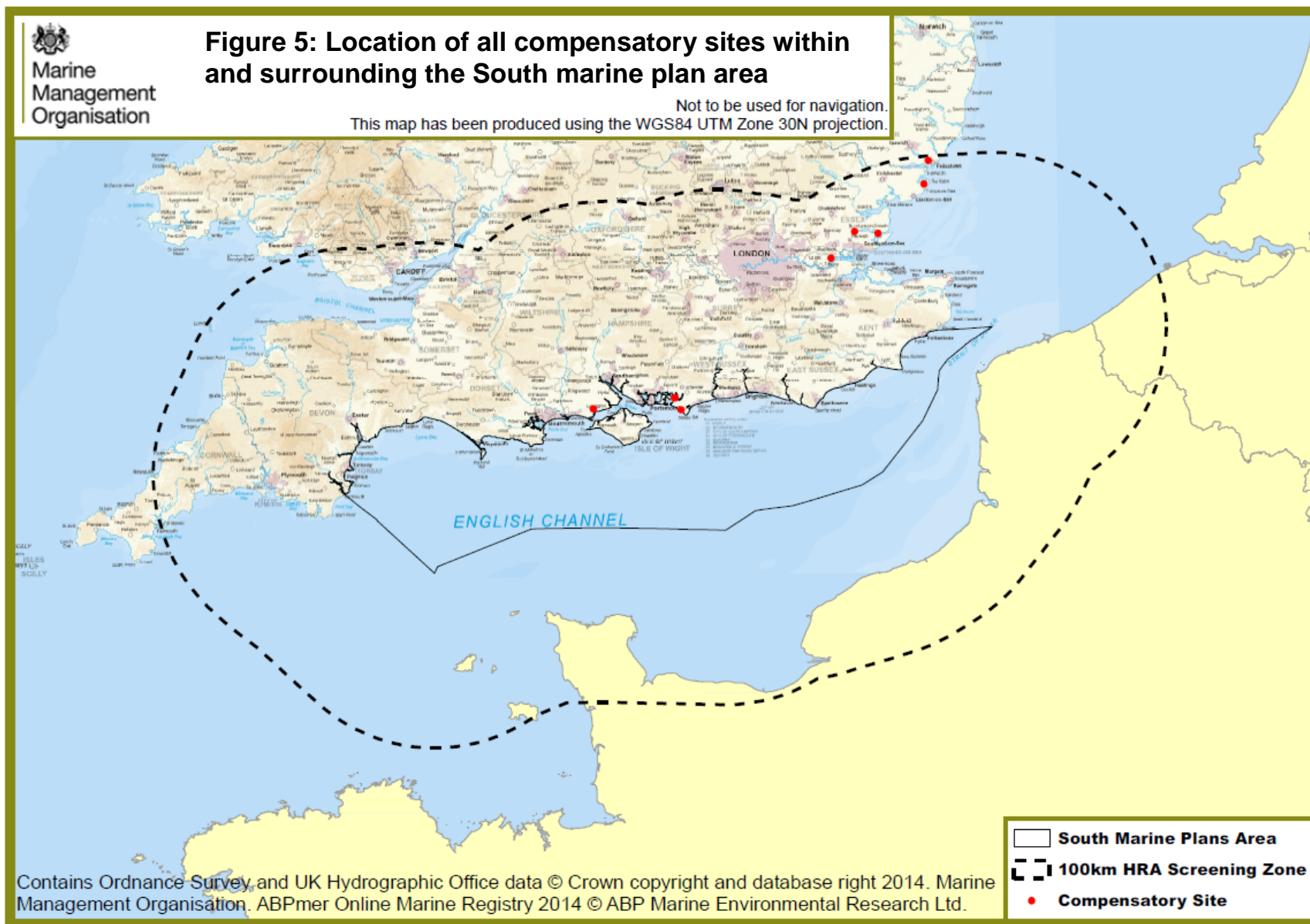
⁷ <http://www.abpmer.net/omreg/>











3.3 HRA Stage 3: Gather information about the European/Ramsar sites

For the next stage in the pre-screening process, information on the qualifying interest features of the ‘screened in’ European/Ramsar sites was collated. All of the European/Ramsar sites present within the 100km buffer zone for the South marine plan areas are presented in Annex 1. Table A.1 in Annex 1 details their qualifying interests, including non-coastal terrestrial habitats and species. It includes those sites located within the 100km buffer zone that lie beyond UK waters.

In total, 285 sites (200 UK sites and 85 non-UK sites) were identified as requiring further consideration in the screening phase of the HRA (Stage 5; Figure 2). For each of the relevant European/Ramsar site designations, the following numbers of UK and non-UK sites were identified and screened in:

- **SPAs and pSPAs:** 64 sites;
- **SACs, cSACs, and SCIs:** 188 sites; and
- **Ramsar sites:** 33 sites.

Table 3 lists all the UK compensatory sites present within the 100km buffer zone for the South marine plan areas. In total, 8 sites were identified. All the specific qualifying interest features of these compensatory sites are not known as the sites have only recently been created and are in the early stages of development. However, it is considered that these will support features designated by other European/Ramsar sites already screened into the assessment, in particular coastal habitats (mudflat and saltmarsh) and supporting species, and foraging and migratory birds.

Table 3: List of UK compensatory sites that were identified at pre-screening.

Compensatory site	Area (ha) ⁸
Brandy Hole	12
Cobnor	7
Deveraux Farm	15
London Gateway Wildlife Reserve	27
Lymington	20
Medmerry	183
Trimley Marsh	17
Allfleet’s Marsh (Wallasea Island)	115

3.4 HRA Stage 4: Consult on the method and scope of the appraisal

The subsequent screening stage (Stage 5, Figure 2) may ‘screen out’ some of the sites identified under Stage 3. No attempt has been made to refine the list of sites on the basis of the species or habitats for which they are designated at this pre-

⁸ Areas have been rounded up to the nearest hectare.

South marine plans HRA pre-screening report

screening stage. The methods for site screening and assessment were agreed with Natural England and JNCC (Stage 4 of the plan-level HRA guidance) and are defined in detail in Annexes 2 and 3.

During the screening stage of the HRA process (Stage 5, Figure 2) it will be necessary to determine whether the policies within the South marine plans will have a LSE on the screened in European/Ramsar sites and their interest features. Given the need for a high level of certainty to meet Habitats Regulations requirements there will be a presumption made during screening and throughout the HRA process that sites and interest features listed within Annex 1 and the compensatory sites in Table 3 will be screened into the assessment unless a definitive judgement of no LSE can be made, in which case they will be excluded from the process.

4. Summary and Next Stages

4.1 Pre-screening

As a result of the pre-screening review that has been undertaken and presented in section 3 of this report, a list of national and non-UK European/Ramsar sites and their accompanying interest features have initially been screened into the HRA. A total of 293 European/Ramsar sites were identified for consideration at the screening stage. These include: 64 SPAs, 188 SACs/cSACs/SCIs, 33 Ramsar sites and 8 compensatory sites. These sites comprise a range of habitat and species interest features which are described in detail in Annex 1.

4.2 Next Stages

4.2.1 Screening

The next stage of the HRA process will involve screening (Stage 5 of the plan-level HRA guidance, Figure 2). Methods to complete the screening stage are presented in detail in Annex 2 of this report. The methods were agreed in consultation with Natural England and JNCC. Any specific mitigation measures that have been applied as part of this screening process will be identified (Stages 6 and 7 of the plan-level HRA guidance, see Figure 2). The outputs of this screening process will be documented in a Screening Report.

4.2.2 Appropriate Assessment Information Report

Following screening, the impacts to the screened in European/Ramsar sites and interest features from the relevant marine plan policies will need to be assessed following the steps outlined in Annex 3 of this report (Stage 8 of the plan-level HRA guidance, Figure 2). The impacts of these policies will also need to be assessed both in-combination with each other and with all other sectoral activities within the South marine plan areas irrespective of whether they have been previously subject to an HRA.

Any additional mitigation measures that are needed to ensure that the South marine plans will not have an AEOI of any European/Ramsar sites will be identified and reviewed for the assessment work (Stage 9 of the plan-level HRA guidance, Figure 2). The outputs of this assessment stage will be documented in an Appropriate Assessment Information Report (Stage 10 of the plan-level HRA guidance, Figure 2).

The Appropriate Assessment Information Report outputs will be designed to both inform the appropriate assessment of the South marine plan policies but also to provide a product that developers can draw upon for project-level HRA screening and assessment work.

During the screening and assessment process there will be ongoing consultations with key statutory consultees (Natural England and JNCC) and other stakeholders as necessary (e.g. Stage 11 of the plan-level HRA guidance, Figure 2) regarding the

South marine plans HRA pre-screening report

appropriateness of the methodology being adopted, the value of the outputs being produced and the validity of the conclusion reached.

After consultation under Stage 11 (Figure 2), amendments to the report/plan will be screened for likely significant effects and an appropriate assessment undertaken if necessary (Stage 12 of the plan-level HRA guidance, Figure 2). Following further consultation, the HRA record may be modified in light of consultation responses and any amendments to the plan (Stage 13 of the plan-level HRA guidance, Figure 2) before it is finalised and published.

Annex 1: List of European/Ramsar Sites and Interest Features Identified at Pre-screening

Table A1: List of European/Ramsar sites and their interest features that were identified at the pre-screening stage.

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Anse de Vauville	SAC	France	Grey seals, Harbour seals, Harbour porpoise, Bottlenose dolphin, Sandbanks which are slightly covered by sea water all the time, Reefs, Marine area and sea inlets.
Arun Valley	SCI	UK	Ramshorn snail.
Ashdown Forest	SAC	UK	Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, and Great crested newt.
Aston Rowant	SAC	UK	<i>Juniperus communis</i> formations on heaths or calcareous grasslands and <i>Asperulo-Fagetum</i> beech forests.
Avon Gorge Woodlands	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) and <i>Tilio-Acerion</i> forests of slopes, screes and ravines.
Baie de Canche et couloir des trois estuaires	SAC	France	Sandbanks which are slightly covered by sea water at all times, Estuaries, Mudflats and sandflats not covered by seawater at low tide and Annual vegetation of stony banks. Harbour porpoise, Grey seal and Harbour seal.
Baie de Seine occidentale	SAC	France	Sandbanks which are slightly covered by sea water all the time, Large shallow inlets and bays, Reefs, Bottlenose dolphin and Harbour seal.
Baie de Seine orientale	SAC	France	Sandbanks which are slightly covered by sea water all the time, Large shallow inlets and bays.
Bancs et récifs de Surtainville	SAC	France	Sandbanks which are slightly covered by sea water all the time and reefs. Bottlenose dolphin.
Bancs des Flandres	SAC	France	Sandbanks which are slightly covered by sea water all the time. Harbour porpoise, Harbour seal and Grey seal.
Basse vallée de la Somme de Pont-Rémy à Breilly	SAC	France	Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflora</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Water

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, <i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Transition mires and quaking bogs, Alkaline fens, Bog woodland and Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>). Great crested newt, Greater horseshoe bat, Geoffroy's bat and <i>Sisymbrium supinum</i> .
Bassin de l'Arques	SAC	France	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation and Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>). Sea lamprey, Brook lamprey, River lamprey, Atlantic salmon and Bullhead.
Bassurelle Sandbank	SCI	UK	Sandbanks which are slightly covered by sea water all the time.
Bath and Bradford-on-Avon Bats	SAC	UK	Lesser horseshoe bat, Greater horseshoe bat, Bechstein's bat.
Beer Quarry and Caves	SAC	UK	Lesser horseshoe bat, Greater horseshoe bat, Bechstein's bat.
Blackmill Woodlands	SAC	UK	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles.
Blackstone Point	SAC	UK	Shore dock.
Blean Complex	SAC	UK	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i> .
Bracket's Coppice	SAC	UK	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Bechstein's bat.
Braunton Burrows	SAC	UK	Mudflats and sandflats not covered by seawater at low tide, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes"), Fixed dunes with herbaceous vegetation ("grey dunes"), Dunes with <i>Salix repens</i> ssp.

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			<i>argentea</i> (<i>Salicion arenariae</i>), Humid dune slacks, Petalwort.
Breney Common and Goss and Tregoss Moors	SAC	UK	Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Transition mires and quaking bogs, Marsh fritillary butterfly.
Briddlesford Copses	SAC	UK	Bechstein's bat.
Bois de la Roquette	SAC	France	Caves not open to the public, Lesser horseshoe bat, Greater horseshoe bat, Barbastelle, Geoffroy's bat and Greater mouse-eared bat.
Bossen, heiden en valleigebieden van zandig Vlaanderen: westelijk deel	SCI	Belgium	Inland dunes with open <i>Corynephorus</i> and <i>Agrostis</i> grasslands, Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , tural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i> , Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains and Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>).
Boucles de la Seine Aval	SAC	France	Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Rivers with muddy banks with vegetation <i>Chenopodium rubric</i> and <i>Bidention</i> , Northern Atlantic wet heaths with <i>Erica tetralix</i> , Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Species-rich Nardus grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), <i>Molinia</i>

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Active raised bogs, Degraded raised bogs still capable of natural regeneration, Depressions on peat substrates of the <i>Rhynchosporion</i> , Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> , Petrifying springs with tufa formation (<i>Cratoneurion</i>), Caves not open to the public, Bog woodland, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), <i>Asperulo-Fagetum</i> beech forests and <i>Tilio-Acerion</i> forests of slopes, screes and ravines. Desmoulin`s whorl snail, Marsh fritillary butterfly, Stag beetle, Hermit beetle, Great crested newt, Lesser horseshoe bat, Greater horseshoe bat, Barbastelle, Geoffroy`s bat, Bechstein`s bat, Greater mouse-eared bat, Creeping marshwort and Floating water-plantain.
Burnham Beeches	SAC	UK	Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>).
Butser Hill	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Taxus baccata</i> woods of the British Isles.
Cardiff Beech Woods	SAC	UK	<i>Asperulo-Fagetum</i> beech forests, <i>Tilio-Acerion</i> forests of slopes, screes and ravines.
Castle Hill	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) and Early gentian.
Cerne and Sydling Downs	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) and Marsh fritillary butterfly.
Chesil and the Fleet	SAC	UK	Coastal lagoons, Annual vegetation of drift lines, Perennial vegetation of stony banks, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>).

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Chilmark Quarries	SAC	UK	Lesser horseshoe bat, Greater horseshoe bat, Barbastelle and Bechstein's bat.
Chilterns Beechwoods	SAC	UK	<i>Asperulo-Fagetum</i> beech forests, Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) and Stag beetle.
Coteau de Dannes et de Camiers	SAC	France	<i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>). <i>Sisymbrium supinum</i> .
Coteau de la Montagne d'Acquim et pelouses du Val de Lumbres	SAC	France	<i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) and <i>Asperulo-Fagetum</i> beech forests. Greater horseshoe bat, Pond bat, Geoffroy's bat, Bechstein's bat and Greater mouse eared bat.
Cothill Fen	SAC	UK	Alkaline fens and Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>).
Crookhill Brick Pit	SAC	UK	Great crested newt.
Crowdy Marsh	SAC	UK	Transition mires and quaking bogs.
Culm Grasslands	SAC	UK	Northern Atlantic wet heaths with <i>Erica tetralix</i> , <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Marsh fritillary butterfly.
Dartmoor	SAC	UK	Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Blanket bogs, Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles, Southern damselfly, Atlantic salmon, European otter.
Dawlish Warren	SAC	UK	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes"), Fixed dunes with herbaceous vegetation ("grey dunes"), Humid dune slacks and Petalwort.
Dorset Heaths	SAC	UK	Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths,

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Depressions on peat substrates of the <i>Rhynchosporion</i> , Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davalliana</i> , Alkaline fens, Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains, Southern damselfly, Great crested newt.
Dorset Heaths (Purbeck and Wareham) and Studland Dunes	SAC	UK	Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes"), Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>), Humid dune slacks, Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Northern Atlantic wet heaths with <i>Erica tetralix</i> , Temperate Atlantic wet heaths with <i>Erica ciliaris</i> and <i>Erica tetralix</i> , European dry heaths, <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Depressions on peat substrates of the <i>Rhynchosporion</i> , Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davalliana</i> , Alkaline fens, Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains, Bog woodland, Southern damselfly, Great crested newt.
Dover to Kingsdown Cliffs	SAC	UK	Vegetated sea cliffs of the Atlantic and Baltic Coasts and Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites).
Duingebieden Inclusief Ijzermonding En Zwin	SCI	Belgium	Estuaries, Mudflats and sandflats not covered by seawater at low tide, <i>Salicornia</i> and other annuals colonising mud and sand, <i>Spartina</i> swards (<i>Spartinion maritimae</i>), Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes"), Fixed dunes with herbaceous vegetation ("grey dunes"), Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>), Dunes with <i>Hippophae rhamnoides</i> , Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Wooden dunes of the Atlantic Continental and Boreal region, Humid dune slacks, Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. Creeping marshwort, Fen orchid, Great crested newt, Narrow-mouthed whorl snail and Desmoulin's whorl snail.
Duncton to Bignor	SAC	UK	<i>Asperulo-Fagetum</i> beech forests.

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Escarpment			
Dunes de la plaine maritime flamande	SAC	France	Sandbanks which are slightly covered by sea water all the time, Mudflats and sandflats not covered by seawater at low tide, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (‘white dunes’), Fixed dunes with herbaceous vegetation (‘grey dunes’), Dunes with <i>Hippophae rhamnoides</i> , Wooden dunes of the Atlantic Continental and Boreal region, Humid dune slacks, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>). Great crested newt and Harbour porpoise.
Dunes de l’Authie et Mollières de Berck	SAC	France	Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (‘white dunes’), Fixed dunes with herbaceous vegetation (‘grey dunes’), Dunes with <i>Hippophae rhamnoides</i> , Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Wooden dunes of the Atlantic Continental and Boreal region, Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. and Alkaline fens. Creeping marshwort.
Dunes et marais arrière-littoraux de la plaine maritime picarde	SAC	France	Annual vegetation of drift lines, Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (‘white dunes’), Fixed dunes with herbaceous vegetation (‘grey dunes’), Dunes with <i>Hippophae rhamnoides</i> , Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Wooden dunes of the Atlantic Continental and Boreal region, Humid dune slacks, Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation. Narrow-mouthed whorl snail, Desmoulin’s whorl snail, Great crested newt and Fen orchid.
Dunes flandriennes décalcifiées de Ghyvelde	SAC	France	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (‘white dunes’), Fixed dunes with herbaceous vegetation (‘grey dunes’), Dunes with <i>Hippophae rhamnoides</i> , Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion</i>

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			<i>arenariae</i>), Wooden dunes of the Atlantic Continental and Boreal region, Humid dune slacks, Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) and Narrow-mouthed whorl snail.
Dungeness	SAC	UK	Annual vegetation of drift lines, Perennial vegetation of stony banks and Great crested newt.
Dunraven Bay	SAC	UK	Shore dock.
East Devon Pebblebed Heaths	SAC	UK	Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Southern damselfly.
East Hampshire Hangers	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Asperulo-Fagetum</i> beech forests, <i>Tilio-Acerion</i> forests of slopes, screes and ravines, <i>Taxus baccata</i> woods of the British Isles, Early gentian.
Ebernoe Common	SAC	UK	Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), Barbastelle, Bechstein's bat.
Emer Bog	SAC	UK	Transition mires and quaking bogs.
Epping Forest	SAC	UK	Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths and Stag beetle.
Essex Estuaries	SAC	UK	Estuaries, Mudflats and sandflats not covered by seawater at low tide, <i>Salicornia</i> and other annuals colonising mud and sand, <i>Spartina</i> swards (<i>Spartinion maritimae</i>), Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>) and Sandbanks which are slightly covered by seawater all the time.
Estuaire de la Canche, dunes picardes plaquées sur l'ancienne falaise, forêt	SAC	France	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Annual vegetation of drift lines, Vegetated sea cliffs of the Atlantic and Baltic coasts, <i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Embryonic

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
d'Hardelot et falaise d'Equihen			<p>shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (‘white dunes’), Fixed dunes with herbaceous vegetation (‘grey dunes’), Dunes with <i>Hippophae rhamnoides</i>, Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Wooden dunes of the Atlantic Continental and Boreal region, Humid dune slacks, Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>, Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine, Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>), Bog Woodland, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>). Narrow-mouthed whorl snail, Great crested newt, Greater horseshoe bat, Harbour porpoise and Fen orchid.</p>
Estuaire de la Seine	SAC	France	<p>Sandbanks which are slightly covered by sea water all the time, Estuaries, Mudflats and sandflats not covered by seawater at low tide, Reefs, Annual vegetation of drift lines, Perennial vegetation of stony banks, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (‘white dunes’), Fixed dunes with herbaceous vegetation (‘grey dunes’), Dunes with <i>Hippophae rhamnoides</i>, Wooden dunes of the Atlantic Continental and Boreal region, Humid dune slacks, Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>), Caves not open to the public, Atlantic acidophilous</p>

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), <i>Asperulo-Fagetum</i> beech forests and <i>Tilio-Acerion</i> forests of slopes, screes and ravines.
Estuaires et littoral picards (baies de Sommes et d'Authie)	SAC	France	Sandbanks which are slightly covered by water all the time, Estuaries, Mudflats and sandflats not covered by seawater at low tide, Coastal lagoons, Annual vegetation of drift lines, Perennial vegetation of stony banks, Vegetated sea cliffs of the Atlantic and Baltic coasts, <i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>), Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>), Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes'), Dunes with <i>Hippophae rhamnoides</i> , Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Wooden dunes of the Atlantic Continental and Boreal region, Humid dune slacks, Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Alkaline fens, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>). Great crested newt, Geoffroy's bat, Harbour seal, Creeping marshwort and Fen orchid.
Exmoor and Quantock Oakwoods	SAC	UK	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), Barbastelle, Bechstein's bat and European otter.
Exmoor Heaths	SAC	UK	Vegetated sea cliffs of the Atlantic and Baltic coasts, Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Blanket bogs, Alkaline fens, Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles.
Falaises du Cran aux Oeufs et du Cap Gris-	SAC	France	Sandbanks which are slightly covered by sea water all the time, Mudflats and sandflats not covered by seawater at low tide, Reefs, Vegetated sea

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Nez, Dunes du Chatelet, Marais de Tardinghen et Dunes de Wissant			cliffs of the Atlantic and Baltic coasts, Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (‘white dunes’), Fixed dunes with herbaceous vegetation (‘grey dunes’), Dunes with <i>Hippophae rhamnoides</i> , Wooden dunes of the Atlantic Continental and Boreal region, Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Petrifying springs with tufa formation (<i>Cratoneurion</i>). Great crested newt, Harbour porpoise, Grey seal and harbour seal.
Falaises et dunes de Wimereux, estuaire de la Slack, Garennes et Communaux d'Ambleteuse-Audresselles	SAC	France	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Reefs, Annual vegetation of drift lines, Perennial vegetation of stony banks, Vegetated sea cliffs of the Atlantic and Baltic coasts, <i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>), Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (‘white dunes’), Fixed dunes with herbaceous vegetation (‘grey dunes’), Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>), Dunes with <i>Hippophae rhamnoides</i> , Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Wooden dunes of the Atlantic Continental and Boreal region, Humid dune slacks, Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Petrifying springs with tufa formation (<i>Cratoneurion</i>). Brook lamprey, River lamprey, Bullhead and Great crested newt.

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Falaises et pelouses du Cap Blanc Nez, du Mont d'Hubert, des Noires Mottes, du Fond de la Forge et du Mont de Couple	SAC	France	Mudflats and sandflats not covered by seawater at low tide, Reefs, Vegetated sea cliffs of the Atlantic and Baltic coasts, <i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Petrifying springs with tufa formation (<i>Cratoneurion</i>).
Fal and Helford	SAC	UK	Sandbanks which are slightly covered by sea water all the time, Mudflats and sandflats not covered by seawater at low tide, Large shallow inlets and bays, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Estuaries, Reefs, Shore dock.
Folkestone to Etechinghill Escarpment	SAC	UK	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>).
Fontmell and Melbury Downs	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) and Early gentian.
Forêt d'Eawy	SAC	France	Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>) and <i>Asperulo-Fagetum</i> beech forests.
Forêts de Desvres et de Boulogne et bocage prairial humide du Bas-Boulonnais	SAC	France	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Northern Atlantic wet heaths with <i>Erica tetralix</i> , <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Bog woodland, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), <i>Asperulo-Fagetum</i> beech forests and Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains.
Forêt de Tournehem et pelouses de la cuesta	SAC	France	<i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
du pays de Licques			(<i>Festuco-Brometalia</i>), Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Caves not open to the public.
Glaswelltiroedd Cefn Cribwr/ Cefn Cribwr Grasslands	SAC	UK	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Marsh fritillary butterfly.
Great Yews	SAC	UK	<i>Taxus baccata</i> woods of the British Isles.
Hackpen Hill	SAC	UK	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) and Early gentian.
Hamford Water	cSAC	UK	Fisher's estuarine moth.
Hartslock Wood	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Taxus baccata</i> woods of the British Isles.
Hastings Cliffs	SAC	UK	Vegetated sea cliffs of the Atlantic and Baltic Coasts.
Hestercombe House	SAC	UK	Lesser horseshoe bat.
Holme Moor and Clean Moor	SAC	UK	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt laden soils (<i>Molinion caeruleae</i>), Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> , Alkaline fens.
Holnest	SAC	UK	Great crested newt.
Isle of Portland to Studland Cliffs	SAC	UK	Annual vegetation of drift lines, Vegetated sea cliffs of the Atlantic and Baltic coasts, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Early gentian.
Isle of Wight Downs	SAC	UK	Vegetated sea cliffs of the Atlantic and Baltic coasts, European dry heaths, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Early gentian.
Kenfig/Cynffig	SAC	UK	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Fixed dunes with herbaceous vegetation ("grey dunes"), Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Humid dune slacks, Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Petalwort, Fen orchid.
Kennet and Lambourn Floodplain	SAC	UK	Desmoulin's whorl snail.
Kennet Valley	SAC	UK	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> ,

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Alderwoods			<i>Alnion incanae, Salicion albae</i> .
Kingley Vale	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Taxus baccata</i> woods of the British Isles.
Landes, mares et bois acides du Plateau de Sorrus Saint Josse, prairies alluviales et bois tourbeux en aval de Montreuil	SAC	France	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), ral eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Northern Atlantic wet heaths with <i>Erica tetralix</i> , European Dry heaths, Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Depressions on peat substrates of the <i>Rhynchosporion</i> , Bog woodland, Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains. Greater horseshoe bat.
La forêt d'Eu et les pelouses adjacentes	SAC	France	Northern Atlantic wet heaths with <i>Erica tetralix</i> , <i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), <i>Asperulo-Fagetum</i> beech forests and Marsh fritillary butterfly.
Lewes Downs	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>).
Littoral Cauchois	SAC	France	Sandbanks which are slightly covered by sea water all the time, Mudflats and sandflats not covered by seawater at low tide, Reefs, Vegetated sea cliffs of the Atlantic and Baltic coasts, Temperate Atlantic wet heaths with <i>Erica ciliaris</i> and <i>Erica tetralix</i> , Active raised bogs, Degraded raised bogs still capable of natural regeneration, Petrifying springs with tufa formation (<i>Cratoneurion</i>), <i>Tilio-Acerion</i> forests of slopes, screes and ravines.
Little Wittenham	SAC	UK	Great crested newt.

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Littoral ouest du Cotentin de Saint-Germain-sur-Ay au Rozel	SAC	France	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Reefs, Annual vegetation of drift lines, Vegetated sea cliffs of the Atlantic and Baltic coasts, Fixed dunes with herbaceous vegetation ('grey dunes'), Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Wooded dunes of the Atlantic, Continental and Boreal region, Humid dune slacks and Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels. Great crested newt, Creeping marshwort and Fen orchid.
Lundy	SAC	UK	Reefs, Submerged or partially submerged sea caves, Sandbanks which are slightly covered by seawater all the time, Grey seal.
Lydden and Temple Ewell Downs	SAC	UK	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites).
L'Yères	SAC	France	Estuaries, Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation, <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Alkaline fens, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>). Brook lamprey, River lamprey, Bullhead.
Lyme Bay and Torbay	SCI	UK	Reefs, Submerged or partially submerged sea caves.
Marais arrière-littoraux du Bessin	SAC	France	Mudflats and sandflats not covered by seawater at low tide, Annual vegetation of drift lines, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), Fixed dunes with herbaceous vegetation ('grey dunes'), Dunes with <i>Hippophae rhamnoides</i> , Humid dune slacks, Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> and Alkaline fens. Desmoulin's whorl

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			snail.
Marais arrière-littoraux picards	SAC	France	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, European dry heaths, Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Transition mires and quaking bogs, Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> , Alkaline fens, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>). Great crested newt, Creeping marshwort and Fen orchid.
Marais de la grenouillère	SAC	France	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels and Desmoulin`s whorl snail.
Marais du Cotentin et du Bessin - Baie des Veys	SAC	France	Estuaries, Mudflats and sandflats not covered by seawater at low tide, Coastal lagoons, Annual vegetation of drift lines, <i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>), Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (`white dunes`), Fixed dunes with herbaceous vegetation (`grey dunes`), Dunes with <i>Salix repens ssp. argentea</i> (<i>Salicion arenariae</i>), Humid dune slacks, Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Natural dystrophic lakes and ponds, <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Transition mires and quaking bogs, Calcareous fens with <i>Cladium mariscus</i> and species of

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			the <i>Caricion davallianae</i> , Alkaline fens. Southern damselfly, Marsh fritillary butterfly, Stag beetle, Sea lamprey, River lamprey, Allis shad, Twaite shad, Atlantic salmon, Great crested newt, Greater horseshoe bat, Greater mouse-eared bat, Harbour seal, Floating water-plantain and fen orchid.
Marais et monts de Mareuil-Caubert	SAC	France	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, <i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Transition mires and quaking bogs, Alkaine fens and Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>). Greater horseshoe bat, Geoffroys bat, Greater mouse eared bat.
Marais Vernier, Risle Maritime	SAC	France	Mudflats and sandflats not covered by seawater at low tide, Fixed dunes with herbaceous vegetation ('grey dunes'), Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>), Humid dune slacks, Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp., Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Active raised bogs, Depressions on peat substrates of the <i>Rhynchosporion</i> , Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> , Alkaline fens, Caves not open to the public, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), <i>Asperulo-</i>

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			<i>Fagetum</i> beech forests and Tilio-Acerion forests of slopes, screes and ravines. Southern damselfly, Stag beetle, Brook lamprey, River lamprey, Bullhead, Great crested newt, Greater horseshoe bat, Greater mouse eared bat, Geoffroy's bat, and Bechstein's bat.
Margate and Long Sands	SCI	UK	Sandbanks which are slightly covered by sea water all the time.
Massif dunaire de Héauville à Vauville	SAC	France	Mudflats and sandflats not covered by seawater at low tide, Annual vegetation of drift lines, Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophils arenaria</i> (white dunes), Fixed coastal dunes with herbaceous vegetation (grey dunes), Dunes with <i>Salix repens ssp argentea</i> (<i>Salicion arenariae</i>), Humid dune slacks, Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp, Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation, Marine area, Sea inlets. Northern (Great) crested newt, Natterjack toad, Parsley frog, Marbled newt, Smooth newt.
Massif forestier de Crécy-en-Ponthieu	SAC	France	Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>) and <i>Asperulo-Fagetum</i> beech forests.
Mells Valley	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Caves not open to the public, Greater horseshoe bat.
Mendip Limestone Grasslands	SAC	UK	European dry heaths, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Caves not open to the public, <i>Tilio-Acerion</i> forests of slopes, screes and ravines, Greater horseshoe bat.
Mendip Woodlands	SAC	UK	<i>Tilio-Acerion</i> forests of slopes, screes and ravines.
Mole Gap to Reigate Escarpment	SAC	UK	European dry heaths, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Asperulo-Fagetum</i> beech forests, <i>Taxus baccata</i> woods of the British Isles, Great crested newt, Bechstein's bat.
Mottisfont Bats	SAC	UK	Barbastelle bats.
Newlyn Downs	SAC	UK	Temperate Atlantic wet heaths with <i>Erica ciliaris</i> and <i>Erica tetralix</i> ,

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			European dry heaths.
North Downs Woodlands	SAC	UK	<i>Asperulo-Fagetum</i> beech forests, <i>Taxus baccata</i> woods of the British Isles and Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites).
North Meadow and Clattinger Farm	SAC	UK	Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>).
North Somerset and Mendip Bats	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Caves not open to the public, <i>Tilio-Acerion</i> forests of slopes, screes and ravines, Lesser horseshoe bat, Greater horseshoe bat.
Oxford meadows	SAC	UK	Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) and Creeping marshwort.
Parkgate Down	SAC	UK	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites).
Pays de Bray – Cuestas Nord et Sud	SAC	France	<i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Asperulo-Fagetum</i> beech forests, <i>Tilio-Acerion</i> forests of slopes, screes and ravines. Marsh fritillary butterfly and Stag beetle.
Pays De Bray Humide	SAC	France	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara spp.</i> , Northern Atlantic wet heaths with <i>Erica tetralix</i> , Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Active raised bogs, Degraded raised bogs still capable of natural regeneration, Siliceous rocky slopes with chasmophytic vegetation, Bog woodland, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), Atlantic acidophilous beech forests

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>) and Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains. Stag beetle, Brook lamprey, Bullhead, Great crested newt and Geoffroy's bat.
Pelouses, bois acides à neutrocalcicoles, landes nord-atlantiques du plateau d'Helfaut et système alluvial de la moyenne vallée de l'Aa	SAC	France	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, <i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Medio-European calcareous of hill and amp montane level, Cave not open to the public, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), <i>Asperulo-Fagetum</i> beech forests, Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains. Great crested newt, Pond bat and Geoffroy's bat.
Pelouses, bois, forêts neutrocalcicoles et système alluvial de la moyenne vallée de l'Authie	SAC	France	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, <i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), <i>Asperulo-Fagetum</i> beech forests, <i>Tilio-Acerion</i> forests of slopes, scree and ravines. Brook lamprey, Bullhead, Great crested newt, Barbastelle bat and Greater mouse eared bat.

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Pelouses Et Bois Neutrocalcicoles De La Cuesta Sud Du Boulonnais	SAC	France	<i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Petrifying springs with tufa formation (<i>Cratoneurion</i>), <i>Asperulo-Fagetum</i> beech forests and <i>Tilio-Acerion</i> forests of slopes, screes and ravines.
Pelouses et bois neutrocalcicoles des cuestas du Boulonnais et du Pays de Licques et forêt de Guines	SAC	France	<i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Caves not open to the public, <i>Asperulo-Fagetum</i> beech forests. Greater horseshoe bat, Geoffroy's bat and Pond bat.
Peter's Pit	SAC	UK	Great crested newt.
Pewsey Downs	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Early gentian.
Pevensey Levels	SCI	UK	Ramshorn snail.
Phoenix United Mine and Crow's Nest	SAC	UK	Calaminarian grasslands of the <i>Violetalia calaminariae</i> .
Plymouth Sound and Estuaries	SAC	UK	Sandbanks which are slightly covered by sea water all the time, Estuaries, Large shallow inlets and bays, reefs, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Mudflats and sandflats not covered by seawater at low tide, Shore dock, Allis shad.
Polders	SAC	Belgium	<i>Salicornia</i> and other annuals colonising mud and sand, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Transition mires and quaking bogs, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) and Pond bat.
Polruan to Polperro	SAC	UK	Vegetated sea cliffs of the Atlantic and Baltic coasts, European dry heaths,

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			Shore dock.
Prairies et marais tourbeux de Guines	SAC	France	Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural eutrophic lakes with Magnopotamion or <i>Hydrocharition</i> -type vegetation, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Transition mires and quaking bogs, Alkaline fens, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>). Desmoulin`s whorl snail and Great crested newt. Brook lamprey, Atlantic salmon, Bullhead and Great crested newt.
Prairies et marais tourbeux de la basse vallée de l'Authie	SAC	France	Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Transition mires and quaking bogs, Alkaline fens.
Prescombe Down	SAC	UK	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Marsh fritillary butterfly, Early gentian.
Quants	SAC	UK	Marsh fritillary butterfly.
Queendown Warren	SAC	UK	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites).
Récifs et landes de la Hague	SAC	France	Grey seal, Harbour seal, Harbour porpoise, Bottlenose dolphin, Shore dock, Sandbanks which are slightly covered by sea water all the time, Reefs, Mudflats and sandflats not covered by water at low tide, Annual vegetation of drift lines, Vegetated sea cliffs of the Atlantic and Baltoc Coasts, Atlantic salt meadow, Humid dune slacks, Marine areas, Sea inlets and saltmarshes salt pastures and Salt steppes. Jersey tiger moth, Killarney fern, European dry heaths, Hydrophilous tall herb fringe communities of plains and of the

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			montane to alpine levels, Degraded raised bogs still capable of natural regeneration, Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), <i>Tilio-Acerion</i> forests of slopes, screes and ravines, Bechstein's Bat, Geoffroys bat, Mouse eared bat, Greater horseshoe bat.
Récifs et marais arrière-littoraux du Cap Lévi à la Pointe de Saire	SAC	France	Grey seal, Harbour seal, Harbour porpoise, Bottlenose dolphin, Sandbanks which are slightly covered by sea water all the time, Reefs, Mudflats and sandflats not covered by water at low tide, Annual vegetation of drift lines, Vegetated sea cliffs of the Atlantic and Baltic Coasts, Atlantic salt meadow, Humid dune slacks, Marine areas, Sea inlets and saltmarshes salt pastures & Salt steppes, reefs, Perennial vegetation of stony banks, <i>Salicornia</i> and other annuals, Mediterranean salt meadows, Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes), fixed coastal dunes with herbaceous vegetation, Northern crested newt, Bechstein's bat, Greater horseshoe bat, Oligotrophic waters containing very few minerals of sandy plains, European dry heaths, Species-rich <i>Nardus</i> grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>), Atlantic acidophilous beech forests with <i>Ilex</i> and <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>).
Récifs Gris-Nez Blanc-Nez	SAC	France	Sandbanks which are slightly covered by sea water all the time and Reefs. Harbour porpoise, Grey seal and Harbour seal.
Réseau de cavités du nord-ouest de la Seine-Maritime	SAC	France	Cave not open to the public, Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i> , Lesser horseshoe bat.
Réseau de coteaux calcaires du Ponthieu	SAC	France	<i>Juniperus communis</i> formations on heaths or calcareous grasslands and Semi-natural dry grasslands and scrubland facies: on calcareous substrates

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
méridional			(<i>Festuco-Brometalia</i>).
Réseau de coteaux calcaires du Ponthieu oriental	SAC	France	<i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Asperulo-Fagetum</i> beech forests, <i>Tilio-Acerion</i> forests of slopes, screes and ravines.
Richmond Park	SAC	UK	Stag beetle.
Ridens et dunes hydrauliques du détroit du Pas-de-Calais	SAC	France	Sandbanks which are slightly covered by sea water all the time and Reefs. Harbour porpoise, Grey seal and Harbour seal.
River Avon	SAC	UK	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, Desmoulin's whorl snail, European brook Lamprey, European bullhead, Sea lamprey, Atlantic salmon.
River Axe	SAC	UK	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, Sea lamprey, European brook lamprey, European bullhead.
River Camel	SAC	UK	European dry heaths, Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), Atlantic salmon, European bullhead, European otter.
River Itchen	SAC	UK	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, Southern damselfly, European freshwater crayfish, European brook lamprey, Atlantic salmon, European bullhead, European otter.
River Lambourn	SAC	UK	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, European brook lamprey, European bullhead.
River Usk/ Afon Wysg	SAC	UK	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, Sea lamprey, European brook lamprey, European river lamprey, Allis shad, Twait shad, Atlantic salmon, European bullhead, European otter.

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
River Wye/ Afon Gwy	SAC	UK	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, European bullhead, Brook lamprey, Transition mires and quaking bogs, White clawed crayfish, Sea lamprey, River lamprey, Twaite shad, Atlantic salmon, European otter, Allis shad.
Rook Clift	SAC	UK	<i>Tilio-Acerion</i> forests of slopes, screes and ravines.
Rooksmoor	SAC	UK	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) and Marsh fritillary butterfly.
Salisbury Plain	SAC	UK	<i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Marsh fritillary butterfly.
Sandwich Bay	SAC	UK	Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes'), "Fixed coastal dunes with herbaceous vegetation ('grey dunes'), Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>) and Humid dune slacks.
Severn Estuary/ Môr Hafren	SAC	UK	Sandbanks which are slightly covered by sea water all the time, Estuaries, Mudflats and sandflats not covered by seawater at low tide, Reefs, Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Sea lamprey, European river lamprey, Twaite shad.
Shortheath Common	SAC	UK	European dry heaths, Transition mires and quaking bogs, Bog woodland.
Sidmouth to West Bay	SAC	UK	Annual vegetation of drift lines, Vegetated sea cliffs of the Atlantic and Baltic coasts, <i>Tilio-Acerion</i> forests of slopes, screes and ravines.
Singleton and Cocking Tunnels	SAC	UK	Barbastelle, Bechstein's bat.
Solent and Isle of Wight Lagoons	SAC	UK	Coastal lagoons.
Solent Maritime	SAC	UK	Sandbanks which are slightly covered by sea water all the time, Estuaries, Mudflats and sandflats not covered by seawater at low tide, Coastal lagoons, Annual vegetation of drift lines, Perennial vegetation of stony banks, <i>Salicornia</i> and other annuals colonising mud and sand, <i>Spartina</i> swards (<i>Spartinion maritimae</i>), Atlantic salt meadows (<i>Glauco-</i>

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			<i>Puccinellietalia maritimae</i>), Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes"), Desmoulin's whorl snail.
South Dartmoor Woods	SAC	UK	European dry heaths, Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles.
South Devon Shore Dock	SAC	UK	Vegetated sea cliffs of the Atlantic and Baltic coasts, Shore dock.
South Hams	SAC	UK	Vegetated sea cliffs of the Atlantic and Baltic coasts, European dry heaths, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Caves not open to the public, <i>Tilio-Acerion</i> forests of slopes, screes and ravines, Greater horseshoe bat.
South Wight Maritime	SAC	UK	Reefs, Vegetated sea cliffs of the Atlantic and Baltic coasts, Submerged or partially submerged sea caves.
Start Point to Plymouth Sound and Eddystone	SCI	UK	Reefs.
Studland to Portland	cSAC	UK	Reefs.
St Albans Head to Durlston Head	SAC	UK	Vegetated sea cliffs of the Atlantic and Baltic coasts, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), Greater horseshoe bat, Early gentian.
St Austell Clay Pits	SAC	UK	Western rustwort.
Stodmarsh	SAC	UK	Desmoulin's whorl snail.
Tankerton Slopes and Swalecliffe	cSAC	UK	Fisher's estuarine moth.
Tatihou - Saint-Vaast-la-Hougue	SAC	France	Mudflats and sandflats not covered by seawater at low tide, Reefs, Annual vegetation of drift lines, Perennial vegetation of stony banks, Vegetated sea cliffs of the Atlantic and Baltic coasts, <i>Salicornia</i> and other annuals colonising mud and sand, <i>Spartina</i> swards (<i>Spartinion maritimae</i>), Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>), Embryonic shifting dunes, Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes').

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Thanet Coast	SAC	UK	Reefs and Submerged or partially submerged sea caves.
The Mens	SAC	UK	Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), Barbastelle.
The New Forest	SAC	UK	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> , Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Depressions on peat substrates of the Rhynchosporion, Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), <i>Asperulo-Fagetum</i> beech forests, Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains, Bog woodland, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), Transition mires and quaking bogs, Alkaline fens, Southern damselfly, Stag beetle, Northern crested newt.
Thursley, Ash, Pirbright and Chobham	SAC	UK	Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Depressions on peat substrates of the Rhynchosporion.
Tintagel-Marsland-Clovelly Coast	SAC	UK	Vegetated sea cliffs of the Atlantic and Baltic coasts, European dry heaths, Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles.
Val Eglantier	SAC	France	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), Brook lamprey and bullhead.
Vallée de la Bresle	SAC	France	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, <i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>),

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), <i>Asperulo-Fagetum</i> beech forests. Sea lamprey, Brook lamprey, River lamprey, Atlantic salmon, Bullhead, Greater horseshoe bat, Geoffroy's bat, Bechstein's bat, Greater mouse eared bat.
Vallée de l'Authie	SAC	France	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>), Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation, <i>Juniperus communis</i> formations on heaths or calcareous grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Transition mires and quaking bogs, Alkaline fens, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), <i>Asperulo-Fagetum</i> beech forests, Atlantic salmon and Creeping marshwort.
Vlaamse Banken	SAC	Belgium	Sandbanks which are slightly covered by sea water all the time, Reefs.
West Dorset Alder Woods	SAC	UK	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains, Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), Marsh fritillary butterfly, Great crested newt.
Westvlaams Heuvelland	SAC	Belgium	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation, Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Species-rich <i>Nardus</i> grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe), <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>), Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>), <i>Asperulo-Fagetum</i> beech forests, Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i> , Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>), Great crested newt.
Wight-Barfleur Reef	cSAC	UK	Reefs.
Wimbledon Common	SAC	UK	Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths and Stag beetle
Windsor Forest and Great Park	SAC	UK	Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains, Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>) and Violet click beetle.
Woolmer Forest	SAC	UK	Natural dystrophic lakes and ponds, Northern Atlantic wet heaths with <i>Erica tetralix</i> , European dry heaths, Transition mires and quaking bogs, Depressions on peat substrates of the <i>Rhynchosporion</i> .
Wormley Hoddesdonpark Woods	SAC	UK	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i> .
Wye and Crundale Downs	SAC	UK	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites).
Abberton Reservoir	SPA	UK	Wintering populations of Northern shoveler, Eurasian teal, Eurasian wigeon, Gadwall, Common pochard, Tufted duck, Common goldeneye, Mute swan, Eurasian coot, Great crested grebe and breeding populations of Great cormorant. 39,763 waterfowl.
Arun Valley	SPA	UK	Overwintering populations of Tundra swan. 27,241 waterfowl (Article 4.2) supported in the non-breeding season.
Ashdown Forest	SPA	UK	Breeding populations of European nightjar and Dartford warbler.
Avon Valley	SPA	UK	Overwintering populations of Tundra swan. Article 4.2 overwintering populations of Gadwall.
Basses Vallées du	SPA	France	Populations of Eurasian bittern, Little egret, Ruff, Kentish plover, Sandwich

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Cotentin et Baie des Veys			tern, Little tern, Black tern, Short eared owl, Common kingfisher, Aquatic warbler, Common eider, Eurasian curlew, Common redshank, Common shelduck, Red knot and Herring gull. Breeding populations of White stork, Western marsh harrier, Montagu's harrier, Spotted crake, Corn crake, Mediterranean gull, Common tern, Whiskered tern, Bluethroat, Eurasian teal, Northern shoveler, Garganey, Common snipe, Black-tailed godwit, Northern lapwing, Black headed gull and Sedge warbler. Wintering populations of Great egret, Bar-tailed godwit, Peregrine falcon, Golden plover, Gadwall, Northern pintail, Spotted redshank, Greylag goose, Dunlin, oystercatcher, Ringed plover, Grey plover, Sanderling, Ruddy turnstone, Common gull, Horned lark and Snow bunting.
Benfleet and Southend Marshes	SPA	UK	Over wintering populations of Brent geese, Dunlin, Red knot, Common ringed plover and Grey plover. 34,789 water fowl.
Blackwater Estuary (Mid-Essex Coast Phase 4)	SPA	UK	Breeding populations of Common pochard, Ringed plover and Little tern. Wintering populations of Hen harrier, Dark-bellied brent goose, Ringed plover, Dunlin, Black-tailed godwit and Grey plover, supports 109,964 waterfowl.
Cap Gris-Nez	SPA	France	Populations of Cory's shearwater, Storm petrel, Little egret, Ruff, Bar-tailed godwit, Wood sandpiper, Osprey, Merlin, Black kite, European marsh harrier, Hen harrier, Peregrine falcon, Black winged stilt, Roseate tern, Kentish plover, Golden plover, Common tern, Artic tern, Little tern, Pied avocet, Whiskered tern, Black tern, Short eared owl, Kingfisher, woodlark, Red-backed shrike, Teal, Greater white-front goose, Greylag goose, Northern goshawk, Oystercatcher, Little ringed plover, Ringed plover, Pomarine skua, Greater Skua, Wintering populations of Red throated diver, Bittern, White stork, Eurasian spoonbill, Barnacle goose, Smew, European honey buzzard, Mediterranean gull, Sandwich tern, Black throated diver, Great Northern Diver, Horned grebe, Manx shearwater, Greater scaup, Common eider, Northern gannet, Great cormorant, Eurasian curlew, Barnacle goose, Common scoter, Velvet scoter, Red-breasted merganser, Purple sandpiper, Dunlin, Grey plover, Northern lapwing,

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			Sanderling, Black legged kittiwake, Guillemot, Razorbill, Atlantic puffin, Great crested grebe, Red necked grebe, Black necked grebe and Fulmar.
Chesil Beach and the Fleet	SPA	UK	Article 4.2 overwintering populations of Brent goose.
Chew Valley Lake	SPA	UK	Article 4.2 overwintering populations of Northern shoveler.
Chichester and Langstone Harbours	SPA	UK	Breeding populations of Little tern, Common tern and Sandwich tern. Overwintering populations of Bar-tailed godwit. Article 4.2 overwintering populations of Northern pintail, Northern shoveler, Eurasian teal, Eurasian wigeon, Ruddy turnstone, Brent goose, Sanderling, Dunlin, Ringed plover, Red-breasted merganser, Eurasian curlew, Grey plover, Common shelduck and Common redshank. 93,230 waterfowl (Article 4.2) supported over the winter.
Colne Estuary (Mid-Essex Coast Phase 2)	SPA	UK	Breeding population of Common pochard, Ringed plover and Little tern. Wintering population of Dark-bellied brent goose, Hen harrier and Redshank, supports 38,600 waterfowl.
Crouch & Roach Estuaries (Mid-Essex Coast Phase 3)	SPA	UK	Wintering populations of Hen harrier and Dark-bellied brent goose, supports 18607 waterfowl.
Deben Estuary	SPA	UK	Wintering populations of Dark-bellied brent goose and Pied avocet.
Dengie (Mid-Essex Coast Phase 1)	SPA	UK	Wintering populations of Dark-bellied brent goose, Hen harrier, Grey plover and Knot, supports 31,454 waterfowl.
Dorest Heathlands	SPA	UK	Breeding populations of European nightjar, Woodlark and Dartford warbler. Overwintering populations of Hen harrier and Merlin.
Dunes de Merlimont	SPA	France	Populations of Little egret, Black stork, Eurasian spoonbill, Osprey, Western marsh harrier, Short eared owl, Kingfisher, Bluethroat, Aquatic warbler, Teal, Northern pintail, Garganey and Common gull. Wintering populations of Bittern, Great egret, Breeding populations of European honey buzzard, Hen harrier, European nightjar, Black wood pecker.
Dungeness to Pett Level	SPA	UK	Wintering population of Northern shoveler and Bewick's swan. Breeding population of Mediterranean gull, Little tern and Common tern.

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
East Devon Heaths	SPA	UK	Breeding populations of European nightjar and Dartford warbler.
Estuaire de la Canche	SPA	France	Populations of Little bittern, Black-crowned night heron, Little egret, Great egret, Purple heron, White stork, Black stork, Eurasian spoonbill, Ruff, Bar-tailed godwit, Wood sandpiper, Greater spotted eagle, Osprey, Barnacle goose, Smew, Hen harrier, Montagu's harrier, Peregrine falcon, Spotted crane, Common crane, Black winged stilt, Pied avocet, Kentish plover, Golden plover, Red necked phararope, Common tern, artic tern, Little tern, Black tern and Woodlark. Wintering populations of Red throated diver, Bittern, Merlin, White tailed eagle, Western marsh harrier, Mediterranean gull, Sandwich tern, Short eared owl, Kingfisher, and Black throated diver. Breeding populations of European nightjar and Blue throat.
Estuaire de l'Orne	SPA	France	Populations of Leach's storm petrel, Purple heron, Ruff, Wood sandpiper, Osprey, Brent goose, Eurasian honey buzzard, Western marsh harrier, Montagu's harrier, Common crane, Black winged stilt, Eurasian thick knee, Golden plover, Sandwich tern, Common tern, Artic tern, Little tern, Roseate tern, Black tern and Dartford warbler. Wintering populations of Little egret, Eurasian Spoonbill, Whooper swan, Hen harrier, Pied avocet and Short eared owl.
Estuaire et marais de la Basse Seine	SPA	France	Populations of Little bittern, Purple heron, Black Stork, Eurasian Spoonbill, Ruff, Woodsandpiper, Booted eagle, Osprey, Smew, Black kite, Red kite, Western marsh Western marsh harrier, Hen harrier, Peregrine Falcon, Common crane, Golden plover, Mediterranean Gull, Little Gull, Sandwich tern, Common tern, Artic tern, Aquatic warbler, Ortolan, Wintering populations of Red throated diver, Bittern, Little egret, Bar-tailed godwit, Merlin, Breeding populations of White stork, European Honey Buzzard, Spotted crane, Corn crane, Black winged stilt, Pied avocet, Kentish plover, Short eared owl, European nightjar, Kingfisher, Red-backed shrike, Bluethroat.
Estuaires picards: Baie de Somme et d'Authie.	SPA	France	Breeding and wintering populations of Little egret, Wintering populations of Great egret, Smew and wintering population of Short eared owl. Populations of Brent goose. Breeding population of Mediterranean gull and

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			resident population of Pied avocet.
Étang et marais du bassin de la Somme	SPA	France	Breeding populations of Little bittern, Black-crowned night heron, European Honey Buzzard, Western Marsh Harrier, Hen harrier, Spotted Crake, Common tern, Common kingfisher and Blue throat. Populations of Little egret.
Exe Estuary	SPA	UK	Wintering populations of Brent goose, Gray plover, Dunlin, Eurasian oystercatcher, Black tailed godwit, Horned grebe, Pied avocet. 23,811 waterfowl.
Falaise du Bessin Occidental	SPA	France	Wintering populations of Red throated diver, Peregrine Falcon, Short eared owl, Great cormorant, Red-breasted merganser, Guillemot, Razorbill, Breeding population of Dartford warbler, Lesser black-backed gull, herring gull, Black legged kittiwake.
Falmouth Bay to St Austell Bay	pSPA	UK	Overwintering populations of black throated diver, Great northern divers and Slovenian grebe.
Foulness (Mid-Essex Coast Phase 5)	SPA	UK	Wintering populations of Hen harrier, Bar-tailed godwit, Pied avocet, Dark-bellied brent goose, Knot, Eurasian oystercatcher, Grey plover and Redshank, supports 107,999 waterfowl. Breeding populations of Ringed plover, Pied avocet, Little tern, Common tern and Sandwich tern.
Hamford Water	SPA	UK	Wintering populations of Eurasian Teal, Dark-bellied brent goose, Ringed plover, Black-tailed godwit, Grey plover, Pied avocet, Redshank and Common shelduck. Breeding population of Little tern.
Ijzervallei	SPA	Belgium	Wintering populations of Lesser white fronted goose, Short eared owl, Bittern, Brent goose, Hen harrier, Bewick's swan, Whooper swan, Peregrine Falcon, Smew, Golden plover, Northern pintail; Northern shoveler, Teal, Wigeon, Mallard, Gadwall, Greater white-fronted goose, Pink footed goose, Common pochard, Tufted duck, Mute swan, Coot, Great crested grebe, Little grebe and shelduck. Population of Black stork, Corn crake, Merlin, Osprey, Ruff, Spotted crake, Greylag goose, Grey heron, Bar-tailed godwit, Curlew, Whimbrel and Great cormorant. Breeding population of Western marsh harrier.

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Landes et dunes de la Hague	SPA	France	Breeding populations of Northern shoveler, Garganey, Gadwall, Common pochard, Tufted duck, Sanderling, European nightjar, Kentish plover, Ringed plover, Western marsh-harrier, Hen harrier, Peregrine falcon, Eurasian hobby, European shag, Dartford warbler and Little grebe. Overwintering populations of Common kingfisher, Gadwall, Short-eared Owl, Eurasian bittern, Kentish plover, Western marsh-harrier, Hen harrier, Merlin, Peregrine falcon, Black-throated loon, Great northern loon, Red-throated diver and Mediterranean gull.
Lee Valley	SPA	UK	Wintering populations of Eurasian bittern, Northern shoveler and Gadwell.
Littoral augeron	SPA	France	Wintering populations of Red throated diver, common eider, Great cormorant, common scoter, Velvet scoter, Great crested grebe, Resident populations of sandwich tern, common tern, Horned grebe.
Littoral seino-marin	SPA	France	Wintering population of Red throated diver and Black throated diver, Northern gannet, Great skua, Razorbill, Great crested grebe, Breeding and wintering populations of Great Cormorant, European shag, , Herring gull, Kittiwake, Guillemot and Northern Fulmar. Breeding population of Peregrine falcon, Population of Mediterranean gull, Little gull, Sandwich tern, common tern, Pomarine skua.
Marais arrière-littoraux picards	SPA	France	Wintering and breeding populations of Bittern, Populations of Western Marsh Harrier, Breeding populations of Spotted crake, Baillon's crake, Black winged stilt and Bluethroat.
Marais de Balançon	SPA	France	Wintering populations of Bittern and Merlin.
Medway Estuary & Marshes	SPA	UK	Breeding populations of Pied avocet, Little tern and Common tern, and an internationally important assemblage of breeding waterfowl. Wintering populations of Bewick's swan, Pied avocet, Northern pintail, Northern shoveler, Eurasian Teal, Eurasian Wigeon, Ruddy turnstone, Dark-bellied brent goose, Dunlin, Knot, Ringed plover, Eurasian oystercatcher, Black-tailed godwit, Curlew, Grey plover, Common shelduck, Redshank and Common greenshank, supports 65,496 waterfowl.
New Forest	SPA	UK	Breeding population of European nightjar, Woodlark, European honey

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			buzzard and Dartford warbler. Overwintering populations of Hen harrier. Article 4.2 breeding populations of Eurasian hobby and Wood warbler.
Outer Thames Estuary	SPA	UK	Wintering population of Red-throated Diver.
Pagham Harbour	SPA	UK	Breeding populations of Little tern and Common tern. Overwintering populations of Ruff. Article 4.2 overwintering populations of Brent goose.
Platier d'Oye	SPA	France	Wintering population of bittern, Eurasian spoonbill, Barnacle goose, Smew, Dunlin, Sanderling, Horned lark, Twite, Snow bunting, Population of Merlin, Bewicks swan, Golden plover, Snipe, Redshank, Northern lapwing, Breeding population of Pied avocet, Red necked phalarope, Mediterranean gull, sandwich tern, Ringed plover and Black necked grebe. Breeding and wintering population of Kentish plover.
Poldercomplex	SPA	Belgium	Breeding populations of Kingfisher, Short eared owl, Bittern, Western march harrier, Black winged stilt, Little bittern, Bluethroat, Pied avocet, Common tern. Wintering populations of Northern pintail, Northern shoveler, Teal, Wigeon, Greater white fronted goose, Pink fronted goose, Lesser white fronted goose, bean goose, Common pochard, Barnacle goose, Red-breasted goose, Hen harrier, Tundra swan, Whooper swan, Red throated diver, Smew, Golden plover, Little grebe, Common shelduck, Concentration of Merlin, Eurasian curlew, Ruff.
Poole Harbour	SPA	UK	Breeding populations of Mediterranean gull and Common tern. Overwintering populations of Pied avocet. Article 4.2 overwintering populations of Black-tailed godwit and Common shelduck. 25,091 waterfowl (Article 4.2) supported over the winter.
Porton Down	SPA	UK	Breeding populations of Eurasian stone-curlew.
Portsmouth Harbour	SPA	UK	Article 4.2 Overwintering populations of Brent goose, Dunlin, Black-tailed godwit and Red-breasted merganser.
Salisbury Plain	SPA	UK	Breeding populations of Eurasian stone-curlew. Overwintering populations of Hen harrier. Article 4.2 breeding populations of Quail and Eurasian hobby.
Sbz 1 / Zps 1	SPA	Belgium	Wintering population of Black throated diver, Red throated diver, common

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			scoter, Great crested grebe and Guillemot. Concentration of Little gull, Common tern, Sandwich tern.
Sbz 2 / Zps 2	SPA	Belgium	Wintering population of Black throated diver, Red throated diver, common scoter, Great crested grebe and Guillemot. Concentration of Little gull, Common tern, Sandwich tern.
Sbz 3 / Zps 3	SPA	Belgium	Wintering population of Black throated diver, Red throated diver, common scoter, Great crested grebe and Guillemot. Concentration of Little gull, Common tern, Sandwich tern.
Severn Estuary	SPA	UK	Overwintering populations of Tundra swan. Article 4.2 overwintering populations of Gadwall, Greenland white-fronted goose, Dunlin, Common shelduck and Common redshank. 84,317 waterfowl (Article 4.2) supported over the winter.
Solent and Southampton Water	SPA	UK	Breeding populations of Mediterranean gull, Little tern, Roseate tern, Common tern and Sandwich tern. Article 4.2 overwintering populations of Eurasian teal, Barnacle goose, Ringed plover and Black-tailed godwit. 51,361 waterfowl (Article 4.2) supported over the winter.
Somerset levels and Moors	SPA	UK	Overwintering populations of Tundra swan and European golden plover. Article 4.2 overwintering populations of Eurasian teal and Northern lapwing. 73,014 waterfowl (Article 4.2) supported over the winter.
South West London Waterbodies	SPA	UK	Overwintering populations of Northern shoveler and Gadwall.
Stodmarsh	SPA	UK	Wintering populations of Eurasian bittern, Hen harrier, Northern shoveler and Gadwall. Breeding populations of Gadwall, and an internationally important assemblage of breeding waterfowl.
Stour and Orwell Estuaries	SPA	UK	Breeding population of Pied avocet. Wintering populations of Northern pintail, Dark-bellied brent goose, Dunlin, Knot, Black-tailed godwit, Grey plover, Redshank, supports 63,017 waterfowl. Population of Redshank on passage.
Tamar Estuaries Complex	SPA	UK	Overwintering populations of Pied avocet. On passage the area regularly supports Little egret.

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Thames Basin Heaths	SPA	UK	Breeding populations of European nightjar, Woodlark and Dartford warbler.
Thames Estuary & Marshes	SPA	UK	Wintering populations of Hen harrier, Pied avocet, Dunlin, Knot, Black-tailed godwit, Grey plover, Redshank, supports 75,019 waterfowl. Population of Ringed plover on passage.
Thanet Coast & Sandwich Bay	SPA	UK	Breeding population of Little tern. Wintering populations of Golden plover and Ruddy turnstone.
The Swale	SPA	UK	Wintering populations of Dark-bellied brent goose, Dunlin, Redshank, supports 65,588 waterfowl. Internationally important assemblage of breeding waterfowl.
Thursley, Hankley and Frensham Commons (Wealden Heaths Phase 1)	SPA	UK	Breeding populations of European nightjar, Woodlark and Dartford warbler.
Vallée de la Lys (Comines-Warneton)	SPA	Belgium	Breeding populations of Great reed warbler, Sedge warbler, Black-winged stilt, Little bittern, Savi's warbler, Bluethroat, Sand martin, Pairs of kingfisher, Wintering populations of Teal, Smew, Concentrations of Garganey, Purple heron, Black tern, White stork, Western marsh harrier, Hen harrier, Little egret, Great egret, Jack snipe, Black-crowned night heron, Honey buzzard, Ruff, Eurasian Spoonbill, Golden plover, Pied avocet and common tern.
Wealden Heaths Phase 2	SPA	UK	Breeding populations of European nightjar, Woodlark and Dartford warbler.
Westkust	SPA	Belgium	Concentrations of Grey heron, Ruddy turnstone, Short eared owl, Pochard, Tufted duck, Tundra swan, Mute swan, Coot, Mediterranean gull, Smew, Scoter, Curlew, Whimbrel, Red necked phalarope, great crested grebe, Pied avocet, Little tern, common tern, sandwich tern, Little grebe, Shelduck and Woodsandpiper. Wintering populations of Hen harrier, Breeding populations of Woodlark, Bluethroat.
Abberton Reservoir	Ramsar	UK	Ramsar Criterion 5 - site supports a winter population of 23,787 waterfowl. Ramsar Criterion 6 - Spring/autumn populations of Gadwall and Northern

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			shoveler and wintering population of Eurasian wigeon. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; overwintering populations of Mute swan and Common pochard.
Arun Valley	Ramsar	UK	Ramsar Criterion 2 - The site holds seven wetland invertebrate species listed in the British Red Data Book as threatened. One of these, <i>Pseudamnicola confusa</i> , is considered to be endangered. The site also supports four nationally rare and four nationally scarce plant species. Ramsar Criterion 3 - The ditches intersecting the site have a particularly diverse and rich flora. All five British duckweed Lemna species, all five water-cress Rorippa species, and all three British water milfoils (<i>Myriophyllum</i> species), all but one of the seven British water dropworts (<i>Oenanthe</i> species), and two-thirds of the British pondweeds (<i>Potamogeton</i> species) can be found on site. Ramsar Criterion 5 - 13,774 waterfowl in the winter. Ramsar Criterion 6 - Peak winter counts of Northern pintail.
Avon Valley	Ramsar	UK	Ramsar Criterion 1 - Greater range of habitats than any other chalk river in Britain. Ramsar Criterion 2 - Diverse range of assemblage of wetland flora and fauna including several nationally rare species. Ramsar Criterion 6 - Peak winter counts of Gadwall. Populations of species identified for possible future consideration over winter populations of Northern pintail and Black-tailed godwit.
Benfleet and Southend Marshes	Ramsar	UK	Ramsar Criterion 5 - Site supports a winter population of 32,867 waterfowl. Ramsar Criterion 6 - Site supports a spring/autumn population of Dark-bellied brent goose and overwintering populations of Grey plover and Knot. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; overwintering population of Dunlin.
Blackwater Estuary (Mid-Essex Coast Phase 4)	Ramsar	UK	Ramsar Criterion 1 - Qualifies by virtue of the extent and diversity of saltmarsh habitat present. Ramsar Criterion 2 - The invertebrate fauna is well represented and includes at least 16 British Red Data Book species. Ramsar Criterion 3 - This site supports a full and representative sequence

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			of saltmarsh plant communities covering the range of variation in Britain. Ramsar Criterion 5 - Site supports a winter population of 105,061 waterfowl. Ramsar criterion 6 – Site supports overwintering populations of Dark-bellied brent goose, Grey plover, Dunlin and Black-tailed godwit. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; overwintering populations of Common shelduck, European golden plover, and Common redshank.
Chesil and the Fleet	Ramsar	UK	Ramsar Criterion 1 - Rare lagoon and the largest of its kind in the UK. Supports rare saltmarsh habitats. Ramsar Criterion 2 - 15 specialist lagoonal species. One of the most important UK sites for Shingle habitats and species. Ramsar Criterion 3 - Largest barrier built saline lagoon in the UK and has the greatest diversity of habitats and biota. Ramsar Criterion 4 - Important site for species at a critical stage in their life cycle including post-larval and juvenile bass. Ramsar Criterion 6 - Peak winter counts of Dark-bellied brent goose, and possible consideration for Mute swan. Ramsar Criterion 8 - Important nursery for bass.
Chichester and Langstone Harbours	Ramsar	UK	Ramsar Criterion 1 - 2 large estuarine basins linked by the channel. Includes intertidal mudflats, saltmarsh, sand and shingle spits and sand dunes. Ramsar Criterion 5 - 76,480 waterfowl in the winter. Ramsar Criterion 6 - Peak spring/autumn counts of Ringed plover, Black-tailed godwit, Redshank. Peak winter counts of Dark-bellied brent goose, Shelduck, Grey plover and Dunlin. Identified as possible future consideration: During breeding season - Little tern.
Colne Estuary (Mid-Essex Coast Phase 2)	Ramsar	UK	Ramsar Criterion 1 - The site is important due to the extent and diversity of saltmarsh present. Ramsar Criterion 2 - Site supports 12 species of nationally scarce plants and at least 38 British Red Data Book invertebrate species. Ramsar Criterion 3 - This site supports a full and representative sequence of saltmarsh plant communities covering the range of variation in Britain. Ramsar Criterion 5 - Site supports a winter population of 32,041 waterfowl. Ramsar Criterion 6 - Site supports overwintering populations of Dark-bellied brent goose and Common redshank. Species/populations

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			identified subsequent to designation for possible future consideration under Criterion 6 include; overwintering population of Black-tailed godwit.
Crouch & Roach Estuaries (Mid-Essex Coast Phase 3)	Ramsar	UK	Ramsar Criterion 2 - Site supports an appreciable assemblage of rare, vulnerable or endangered species or subspecies of plant and animal including 13 nationally scarce plant species and several important invertebrate species. Ramsar Criterion 5 - Site supports a winter population of 16,970 waterfowl. Ramsar Criterion 6 - Site supports an overwintering population of Dark-bellied brent goose.
Deben Estuary	Ramsar	UK	Ramsar Criterion 2 – Site supports a population of the mollusc <i>Vertigo angustior</i> . Ramsar Criterion 6 - Site supports an overwintering population of Dark-bellied brent goose.
Dengie (Mid-Essex Coast Phase 1)	Ramsar	UK	Ramsar Criterion 1 - Qualifies by virtue of the extent and diversity of saltmarsh habitat present. Ramsar Criterion 2 - Site supports a number of rare plant and animal species including 11 species of nationally scarce plants (including the eelgrass <i>Zostera angustifolia</i> , <i>Z. marina</i> and <i>Z. noltei</i>) and Red Data Book invertebrate species. Ramsar Criterion 3 - This site supports a full and representative sequence of saltmarsh plant communities covering the range of variation in Britain. Ramsar Criterion 5 – Site supports a winter population of 43,828 waterfowl. Ramsar Criterion 6 - Site supports overwintering populations of Dark-bellied brent goose, Grey plover and Knot. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; overwintering populations of Bar-tailed godwit.
Dorset Heathlands	Ramsar	UK	Ramsar Criterion 1 - Contains particularly good examples of northern Atlantic wet heaths with cross - leaved heath <i>Erica tetralix</i> and acid mire with <i>Rhynchosporion</i> . Largest examples in Britain of southern Atlantic wet heaths with Dorset heaths <i>Erica ciliaris</i> and cross-leaved heath <i>Erica tetralix</i> . Ramsar Criterion 2 - Nationally rare and scarce wetland plant species and wetland invertebrates. Ramsar Criterion 3 - High species richness and ecological diversity of wetland habitat types and transitions.

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			Lies in one of the most biologically rich wetland areas of lowland Britain being between 3 other Ramsar sites.
Exe Estuary	Ramsar	UK	Ramsar Criterion 5 - 20,263 waterfowl in winter. Ramsar Criterion 6 - Peak winter counts of Dark-bellied brent goose. Species identified for possible future consideration: Black-tailed godwit.
Foulness (Mid-Essex Coast Phase 5)	Ramsar	UK	Ramsar Criterion 1 - This site qualifies by virtue of the extent and diversity of saltmarsh habitat present. Ramsar Criterion 2 - The site supports a number of nationally-rare and nationally-scarce plant species, and British Red Data Book invertebrates. Ramsar Criterion 3 - The site contains extensive saltmarsh habitat, with areas supporting full and representative sequences of saltmarsh plant communities covering the range of variation in Britain. Ramsar Criterion 5 – Site supports a winter population of 82,148 waterfowl. Ramsar criterion 6 - Site supports a spring/autumn population of Common redshank and winter populations of Dark-bellied brent goose, Eurasian oystercatcher, Grey plover, Knot and Bar-tailed godwit.
Hamford Water	Ramsar	UK	Ramsar Criterion 6 - Site supports spring/autumn populations of Red plover and Common redshank and overwintering populations of Dark-bellied brent goose and Black-tailed godwit. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; an overwintering population of Grey plover.
Lee Valley	Ramsar	UK	Ramsar Criterion 2 - Site supports the nationally scarce plant species whorled water-milfoil <i>Myriophyllum verticillatum</i> and the rare or vulnerable invertebrate <i>Micronecta minutissima</i> (a water-boatman). Ramsar Criterion 6 - Site supports spring/autumn populations of Northern shoveler and Gadwell.
Marais Audomarois	Ramsar	France	Ramsar criterion 1: Unique marsh habitat. Criterion 2: Supports high diversity of wetland bird species including Bittern, Little bittern, Garganey and Sedge warbler. Criterion 3: Aquatic marsh flora. Criterion 4: Important habitat for birds during migrations from the north of European to the Iberian peninsula and/or Africa. Criterion 7: Large diversity of fish species present

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			during different stages of their life cycle. Criterion 8: Important network of channels which make it a favourable habitat for a diverse range of fish.
Medway Estuary & Marshes	Ramsar	UK	Ramsar Criterion 2 - The site supports a number of species of rare plants and animals, including at least twelve British Red Data Book species of wetland invertebrates. A significant number of non-wetland British Red Data Book species also occur. Ramsar Criterion 5 - Site supports a winter population of 47,637 waterfowl. Ramsar Criterion 6 - Site supports spring/autumn populations of Grey plover and Common redshank and wintering populations of Dark-bellied brent goose, Common shelduck, Northern pintail, Ringed plover, Knot and Dunlin. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; a spring/autumn population of Black-tailed godwit.
New Forest	Ramsar	UK	Ramsar Criterion 1 - Valley Mires and wet heaths are of outstanding scientific interest and the largest concentration of intact valley mires of their type in Britain. Ramsar Criterion 2 - Diverse assemblage of wetland plants and animals and nationally rare species. Ramsar Criterion 3 - Mire habitats of high ecological quality and diversity.
Pagham Harbour	Ramsar	UK	Ramsar Criterion 6 - Peak winter counts of Dark-bellied brent goose and Black-tailed godwit (possible future consideration).
Pevensy Levels	Ramsar	UK	Ramsar criterion 2 – Site supports an outstanding assemblage of wetland plants and invertebrates including many British Red Data Book species. Ramsar criterion 3 – site supports 68% of vascular plant species in Great Britain that can be described as aquatic. Probably the best site in Britain for freshwater molluscs, top five best sites for aquatic beetles and supports dragonflies.
Poole Harbour	Ramsar	UK	Ramsar Criterion 1 - Best and largest example of bar built estuary with lagoonal characteristics in Britain. Ramsar Criterion 2 - Two species of nationally rare plant and one nationally rare alga. At least 3 British Red Data Book Invertebrates. Ramsar Criterion 3 - Mediterranean and thermo Atlantic halophilous scrubs, Transitions from saltmarsh through to peatland mires

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			are of exceptional conservation importance as few such examples remain in Britain. Site supports breeding water fowl (Common tern, Mediterranean gull) and over winter Pied avocet. Ramsar Criterion 5 - 24,709 waterfowl in winter. Ramsar Criterion 6 - Peak winter counts of Shelduck, Black-tailed godwit. Future consideration of winter counts of Pied avocet.
Portsmouth Harbour	Ramsar	UK	Ramsar Criterion 3 - Intertidal mudflat with extensive bed of eelgrass which support grazing dark bellied brent geese. <i>Hydrilobia ulvae</i> , which supports wading birds. Common cord grass dominates saltmarsh and extensive areas of green algae and sea lettuce. Sea purslane. Number of saline lagoon hosting nationally important species. Ramsar Criterion 6 - Overwintering Dark-bellied brent goose.
Severn Estuary	Ramsar	UK	Ramsar Criterion 1 - immense tidal range with affects physical environment and biological communities. Ramsar Criterion 3 - Due to unusual estuarine communities, reduced diversity and high productivity. Ramsar Criterion 4 - Diverse estuary with over 110 species recorded including salmon, sea trout, sea lamprey, river lamprey, allis shad, twaite shad and eel who all use the estuary as a key migration route to their spawning grounds. Also important feeding and nursery ground for many fish species. Ramsar Criterion 5 - Peak winter counts of waterfowl - 70,919. Ramsar Criterion 6 - Peak winter counts of Tundra swan, Greater white-fronted goose, Common shelduck, Gadwall, Dunlin and Common redshank. During the breeding season identified for possible future consideration - Lesser black-backed gull. Peak spring/autumn counts of Ringed plover. Peak winter counts of Eurasian teal and Northern pintail. Ramsar Criterion 8 - Salmon, sea trout, sea lamprey, river lamprey, Allis shad, Twaite shad and eel use the Severn Estuary as a key migration route to their spawning grounds. The site is important as a feeding and nursery ground for many fish species particularly allis shad and twaite shad.
Somerset Levels and Moors	Ramsar	UK	Ramsar Criterion 2- 17 species of British Red Data Book Invertebrates. Ramsar Criterion 5 - Peak winter counts of 97,155 waterfowl. Ramsar Criterion 6 - Peak winter counts of Tundra swan, Eurasian teal, Northern

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
			lapwing. Species for possible future consideration are Mute swan, Eurasian wigeon, Northern pintail, Northern shoveler.
Solent and Southampton Water	Ramsar	UK	Ramsar Criterion 1 - Double tide which has long periods of slack water and high and low tide. Wetland habitats, saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal water, grazing marshes, reedbed, coastal woodland and rocky boulder reefs. Ramsar Criterion 2 - Important assemblage of rare plants and invertebrates. Ramsar Criterion 5 - 51,343 waterfowl in winter. Ramsar Criterion 6 - Peak spring/autumn populations of Ringed plover. Peak winter counts of Dark-bellied brent goose, Eurasian teal and Black-tailed godwit.
South West London Waterbodies	Ramsar	UK	Ramsar criterion 6 – peak counts of Northern shoveler. Winter counts of Gadwall.
Stodmarsh	Ramsar	UK	Ramsar Criterion 2 – Site supports six British Red Data Book wetland invertebrates, two nationally rare plants, and five nationally scarce species. A diverse assemblage of rare wetland birds including breeding population of Gadwall, spring/autumn populations of Gadwall and overwintering populations of Great bittern, Northern shoveler and Hen harrier.
Stour and Orwell Estuaries	Ramsar	UK	Ramsar Criterion 2 – Site contains seven nationally scarce plants: stiff saltmarsh-grass <i>Puccinellia rupestris</i> ; small cord-grass <i>Spartina maritima</i> ; perennial glasswort <i>Sarcocornia perennis</i> ; lax-flowered sea lavender <i>Limonium humile</i> ; and the eelgrasses <i>Zostera angustifolia</i> , <i>Z. marina</i> and <i>Z. noltei</i> . Contains five British Red Data Book invertebrates: the muscid fly <i>Phaonia fusca</i> ; the horsefly <i>Haematopota grandis</i> ; two spiders, <i>Arctosa fulvolineata</i> and <i>Baryphema duffeyi</i> ; and the Endangered swollen spire snail <i>Mercuria confusa</i> . Ramsar Criterion 5 – Site supports a winter population of 63,017 waterfowl. Ramsar Criterion 6 - Site supports a spring/autumn population of Common redshank and overwintering populations of Dark-bellied brent goose, Northern pintail, Grey plover, Knot, Dunlin, Black-tailed godwit and Common redshank.
Thames Estuary &	Ramsar	UK	Ramsar Criterion 2 - The site supports one endangered plant species and

South marine plans HRA pre-screening report

Site name	Designation	Country	Interest features for which there is a likely significant effect (LSE)
Marshes			at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates. Ramsar Criterion 5 – Site supports a winter population of 45,118 waterfowl. Ramsar Criterion 6 - Site supports spring/autumn populations of Ringed plover and Black-tailed godwit and overwintering populations of Grey plover, Knot, Dunlin and Common redshank.
Thanet Coast & Sandwich Bay	Ramsar	UK	Ramsar Criterion 2 – Site supports 15 British Red Data Book wetland invertebrates. Ramsar Criterion 6 - Site supports an overwintering population of Ruddy turnstone.
The Swale	Ramsar	UK	Ramsar Criterion 2 - The site supports nationally scarce plants and at least seven British Red data book invertebrates. Ramsar Criterion 5 – Site supports a winter population of 77,501 waterfowl. Ramsar Criterion 6 - Site supports a spring/autumn population of Common redshank and overwintering populations of Dark-bellied brent goose and Grey plover. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; a spring/autumn population of Ringed plover and overwintering populations of Eurasian wigeon, Northern pintail, Northern shoveler and Black-tailed godwit.
Thursley and Ockley Bog	Ramsar	UK	Ramsar criterion 2 – Supports a community of rare wetland invertebrate species including a notable number of dragonflies. Ramsar criterion 3 – One of few sites that supports all six native reptile species. Site also supports breeding populations of European Night Jar and Woodlark.

Annex 2: Screening methods

This section describes the proposed approach for undertaking the screening stages of the HRA process for the South marine plans (i.e. in fulfilment of Stages 5 to 7 of the plan-level HRA guidance, see Figure 2). This methodology draws upon the principles set out in past plan-level HRAs, whilst recognising the lessons learned and new techniques being developed over time.

It is proposed that the screening will comprise two key stages: a 'policy' screening followed by an 'ecological' screening process. These methods were outlined to Natural England and JNCC at an initial stakeholder meeting on 16 January 2014 and are presented in more detail in sections A2.1 and A2.2 below.

A2.1 Phase 1: Policy screening

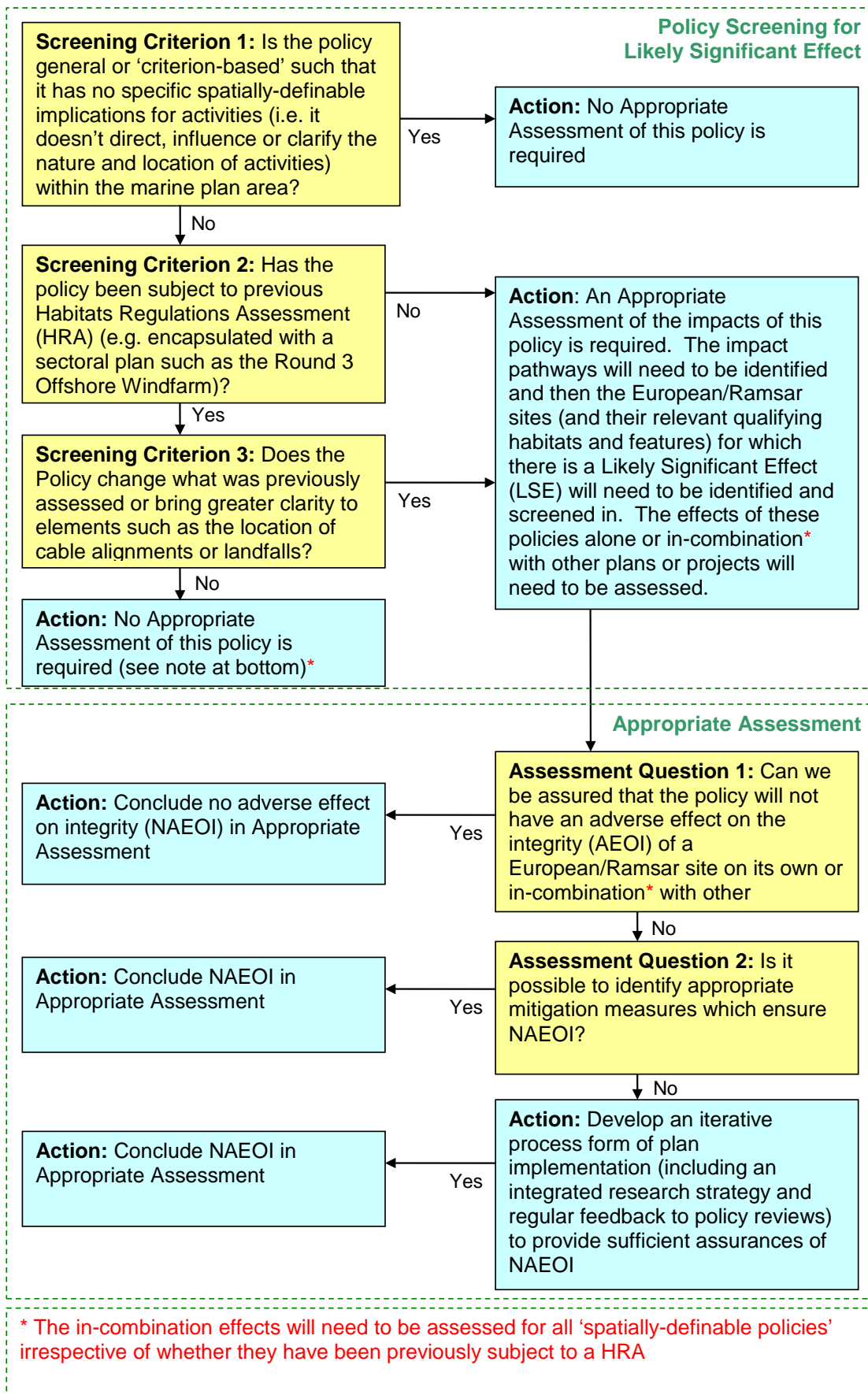
The policy review that was presented in section 2.3 sets out the considerations that are pertinent to this HRA as informed by available guidance and lessons learned particularly from the East marine plans HRA (MMO, 2013). Based on these considerations, a policy screening and assessment framework has been developed (Figure A.1).

The first part of this flow diagram describes the approach that will need to be taken to screen the draft marine plan policies and identify those which need to be assessed. In essence there is a three stage process in which the following three 'Screening Criteria' questions will be asked sequentially:

- **Screening Criterion 1:** Is the policy general or 'criteria-based' such that it has no specific spatially-definable implications for activities (i.e. it does not direct, influence or clarify the nature and location of activities) within the marine plan area?
- **Screening Criterion 2:** Has the policy been subject to previous HRA (for example, encapsulated within a sectoral plan such as the Round 3 Offshore Wind Plan) and is that HRA still valid (i.e. has there been a further change to proposals as originally assessed)?
- **Screening Criterion 3:** Does the policy change what was previously assessed or bring greater clarity to sectoral plan elements?

Each of the policies that identify discrete areas where distinct activities will, or may, take place as a consequence of the marine plan but for which no sectoral plan HRA has been undertaken will need to be screened into the assessment. Each of these 'areas under review' will need to be mapped and presented within the South marine plans. These areas will underpin the screening and assessment stages of the HRA. Further details about the approach that will be taken to assess the impacts of these policies on the relevant interest features and European/Ramsar sites are presented in section A2.2.

Figure A.1: Policy screening and assessment process.



A2.2 Phase 2: Ecological screening

The ecological screening will review and then screen in or out all the relevant European/Ramsar sites (and associated qualifying interest features) for which there could be LSE or the potential for LSE cannot be excluded as a result of the policies that have been screened into the assessment (see section A2.1). This will include reviewing sites that lie within the South marine plan areas and the 100km buffer zone that was identified at pre-screening, as well as sites beyond the 100km buffer that support highly mobile species which use or traverse across the South marine plan areas. This includes the following groups of habitat and species⁹ interest features:

- Habitats and associated non-mobile species;
- Birds;
- Marine mammals (cetaceans and seals);
- Migratory fish and freshwater pearl mussel;
- Otters; and
- Bats.

The proposed ecological screening methods for each interest feature group are outlined below (sections A2.2.1-A2.2.6).

It is important to note that following the policy screening work, these ecological screening methods will only need to be applied to those defined areas of the seabed where activities will occur from screened-in policies (see section A2.1). Therefore, these ecological screening methods do not necessarily need to be applied to the whole of the South marine plan areas unless there is a relevant policy that applies across the full extent of the area which needs to be assessed.

A2.2.1 Habitats and associated species

The screening methods for this interest feature group need to consider the potential LSE on habitats and associated non-mobile¹⁰ species from both direct and indirect sources of change. The first step will therefore be to screen out (i.e. remove from the pre-screening list, Annex 1) terrestrial/ freshwater habitats and associated species interest features for which there will be no LSE on the basis that there are no impact pathways (i.e. no potential physical or ecological connectivity with any marine activities that might be influenced by the plan).

⁹ This assessment will focus on addressing qualifying interest features of European/Ramsar sites but it should also be noted that it is also an offence to deliberately capture, injure, kill or disturb any wild animal of a European Protected Species (EPS) such as Harbour Porpoise and other cetaceans under Regulations 41(1)(a) and (b) in The Conservation of Habitats and Species Regulations 2010 and 39(1)(a) and (b) in The Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (amended in 2009 and 2010). Such offences are not considered within the HRA process but it is noted that guidance on the protection of marine EPS in their natural range from injury and disturbance has been developed by JNCC *et al.* (2010) as required by Article 12 of the Habitats Directive.

¹⁰ Some habitats will have 'typical' species associated with them that are mobile but not 'highly' mobile, (for example, certain fish or larvae).

South marine plans HRA pre-screening report

Terrestrial features screened out by this first step will include; woodland, peatlands, heaths and bogs, as well as species associated with such terrestrial habitats e.g. snail species. Freshwater habitats and species screened out by this step will include water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation; oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*, alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* and floating water-plantain.

Non-migratory freshwater species will also be screened out, including great crested newts, white-clawed (or Atlantic stream) crayfish, bullhead and brook lamprey. However, freshwater pearl mussel will be screened in because it has a life cycle connection with Atlantic salmon (see section A.2.2.4).

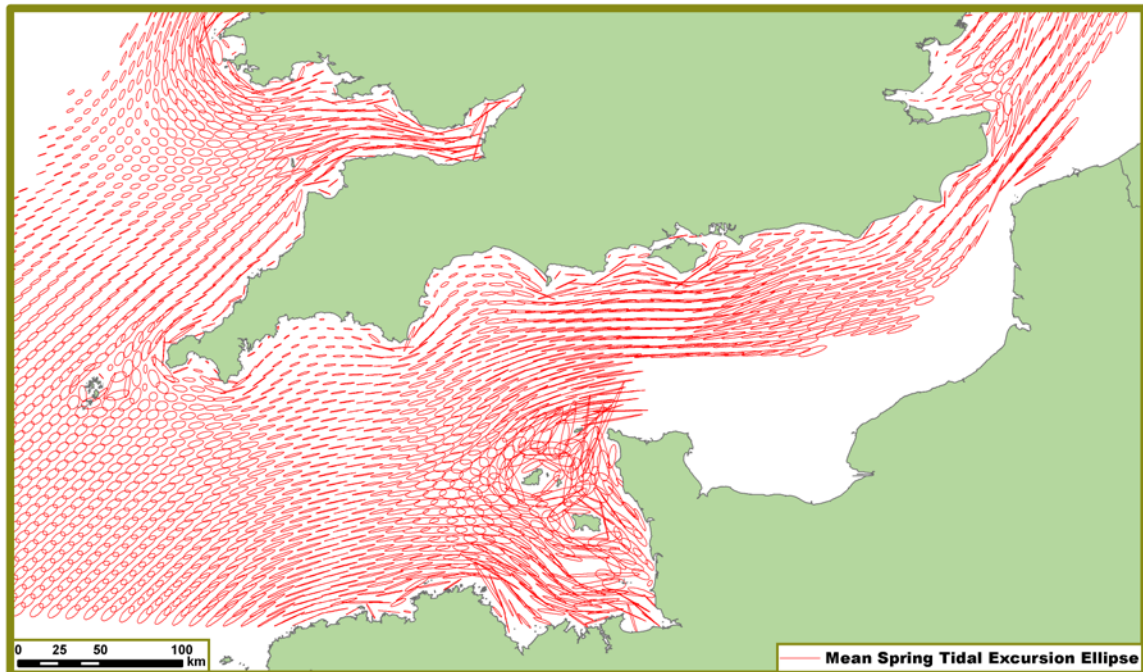
The next step will be to screen in (i.e. retain from the pre-screening list, Annex 1) all marine habitat features and associated species that lie within the areas under review because, clearly, they may be directly or indirectly affected by activities undertaken within the plan boundaries.

In addition, it is recognised that activities within the areas under review may have an indirect effect on habitat features and associated species just outside their boundaries (e.g. from hydrodynamic and/or sediment transport changes). To identify the European/Ramsar sites outside these areas for which there could be such a potential indirect effect, the results from a previously run UK-wide hydrodynamic model (as illustrated in Figure A.2) will be used to identify the area of sea located within one tidal excursion of the boundaries of the South marine plans.

This approach will be adopted because the nature of the tide is such that its movement is typically described as an almost closed ellipse. These ellipses can be viewed as a package of water that will move to and fro over one tidal cycle, typically along a dominant axis, returning to almost the same position. As such, they can also be used to identify the maximum likely distance that water, or any material suspensions or solutions it may contain, might be tidally transported from a given location or area. Evidence from plume studies indicates that even fine particles mobilised from the seabed settle out again to a large extent within the distance of one tidal excursion.

For the screening process, the ellipses will be mapped and those ellipses that lie closest to the boundary of the areas under review will be selected and will then be 'moved' on the map to touch the nearest boundary point of those areas under review. This will result in each discrete area under review having a series of ellipses around its boundary. To then determine how far, and in which direction, a parcel of water will move from this boundary edge and then return, a line will be drawn between the furthest limit of each of these tidal ellipses. This new line will define a zone for screening habitat features and associated species that could be potentially indirectly affected by policies within the South marine plans. The average distance over which there could be a potential indirect effect, as defined by an average tidal ellipse, is around 10-15km (Figure A.2).

Figure A.2: Tidal ellipse distances¹¹ for the English South Coast.



It is also recognised that there is potential for terrestrial and freshwater European/Ramsar sites located on the coast beyond the plan's mean high water spring tide boundary to be affected by developments and activities such as cable/pipeline landfall locations, landside infrastructure and activities linked to construction and maintenance. Effects on terrestrial and freshwater sites could also result from developments and activities which change sediment dynamics (e.g. affecting sand dunes) or implement coastal realignment. It will therefore be necessary to screen in (i.e. retain from the pre-screening list, Annex 1) any terrestrial or freshwater sites that have a feature in close proximity to the South marine plans coastal boundary. No further assessment can be made at this stage on peripheral terrestrial and freshwater sites given that policies have not yet been defined as part of the South marine plans. This aspect will need to be considered further in the following screening and assessment phases of the HRA.

To summarise the approach described above, the following iterative series of steps encompass the proposed screening methods for the habitat and associated species interest feature groups:

- **Step 1:** Identify possible developments or activities (including possible cable/pipeline landfall positions and landside infrastructure) that could be influenced by plan policies and define their locations within the extent of the South marine plans as discrete areas under review;

¹¹ This is the analysed outputs of a 3D tidal computer model previously used to inform the UK Atlas of Renewable Energy Resource (<http://www.renewables-atlas.info>). The underlying model is the 'High Resolution Continental Shelf' (HRCS) model, owned and operated by the Proudman Oceanographic Laboratory (POL, now part of the National Oceanography Centre). The model results describe flow speed and direction at a relatively high spatial resolution and over a long time period (ABPmer *et al.*, 2008). The same model has been applied for most previous marine plan HRAs (e.g. ABPmer, 2013a; b; MMO, 2013; ABPmer in prep.).

South marine plans HRA pre-screening report

- **Step 2:** Screen out (i.e. remove from the pre-screening list in Annex 1) all European/Ramsar sites supporting terrestrial/freshwater habitats and non-mobile species interest features for which there will be no LSE on the basis that there is no associated impact pathway;
- **Step 3:** Screen in (i.e. retain in the pre-screening list in Annex 1) all European/Ramsar sites supporting marine/coastal habitats and non-mobile species interest features, recognising that these will include prey species for mobile birds, fish and marine mammals, that overlap with the areas under review and will therefore be directly affected;
- **Step 4:** Undertake a review of tidal excursion patterns and draw a new boundary at a distance of one tidal excursion from the boundaries of the areas under review;
- **Step 5:** Screen in all European/Ramsar sites supporting marine/coastal habitats and non-mobile species interest features that could be indirectly affected because they lie at distances of less than one tidal ellipse from the areas under review;
- **Step 6:** Screen out all European/Ramsar sites supporting marine/coastal habitats and non-mobile species interest features that lie beyond one tidal ellipse boundary of the areas under review and will definitely not be affected indirectly by changes to the hydrodynamic and sediment regime;
- **Step 7:** Produce a screening table (i.e. update the pre-screening list in Annex 1 based on the previous steps) to indicate the European/Ramsar sites and supporting terrestrial, freshwater, coastal and marine habitat and non-mobile species interest features that have been screened in or out of the assessment. Produce accompanying maps of screened in European/Ramsar sites within and adjacent to the South marine plan areas and the individual areas under review;
- **Step 8:** Identify any plan-level mitigation measures that can be applied to ensure that there is no LSE on the screened in European/Ramsar sites and their qualifying interest features and, where possible, screen such features or sites out on this basis; and
- **Step 9:** Update the screening table and maps with the final list of screened in European/Ramsar sites and qualifying interest features.

A2.2.2 Birds

The screening methods for this interest feature group need to consider the potential LSE from both direct and indirect sources of change. The first step will therefore be to screen out a number of bird qualifying interests on the basis that there would be no impact pathway associated with policies in the South marine plans. These are birds which are entirely resident within inland terrestrial habitats, do not forage at sea and do not migrate internationally (e.g. Eurasian marsh harrier).

A number of bird species that are qualifying interest features of SPAs as breeding populations only will also be screened out (e.g. hen harrier, merlin, peregrine and short-eared owl). These species will however be screened in where they are roosting

and/or wintering qualifying interests of the relevant European/Ramsar sites because there could be a movement of birds outside the SPAs¹².

The next step will be to consider the foraging behaviour of coastal and offshore bird colonies, whether these are overwintering or breeding populations, to identify SPAs lying outside of the 100km buffer which might be affected and therefore need to be screened into the assessment. It is known that most birds typically forage within 100km of breeding sites and these will therefore already be included. However, there are species that forage over greater distances and could be affected even though they lie outside the 100km buffer zone.

To understand which birds forage over these greater distances and thus which additional European/Ramsar sites need to be screened in, the latest data and reviews on this subject will be considered. One valuable source of information is The Future of the Atlantic Marine Environment (FAME) project which is a large-scale tagging exercise being undertaken by the RSPB to identify the foraging behaviour, direction and distances of seabirds from breeding colonies. A study of the foraging ranges of 25 species of UK seabirds has also recently been published by the British Trust for Ornithology (BTO), RSPB and Birdlife International (Thaxter *et al.*, 2012).

From this information, the following species are confirmed as potentially having foraging distances of greater than 100km:

- Northern fulmar (400km);
- Northern gannet (229km);
- Lesser black-backed gull (141km);
- Atlantic puffin (105km); and
- Manx shearwater (330km).

In each case the 'mean maximum' foraging distances are provided in brackets. This distance is defined as the maximum range reported by individual studies averaged across studies (Thaxter *et al.*, 2012). For past plan-level HRAs, the maximum foraging distances by individual birds recorded from all studies was generally used (e.g. MMO, 2013). However, for a recent national plan-level HRA (ABPmer, in prep.), it was agreed with SNCBs from each of the four UK devolved administrations that the 'mean maximum' distances provide a more relevant but still sufficiently precautionary approach and for this reason this approach is proposed to be used for the South marine plans HRA. It should be noted that the HRA that is being undertaken for The Crown Estate's Offshore Floating Wind Plan (AMEC, in prep.) has proposed to use the mean maximum foraging range of Northern fulmar (400km) as a worst case screening buffer for all breeding bird populations. However, this plan-level HRA is only for a small number of development sites in Scotland and for this reason the advice that has been provided by all the UK SNCBs for The Crown Estate's Wave and Tidal Further Leasing Plan in ABPmer (in prep.) is considered more appropriate in this case.

¹² This screening principle was identified as part of the Scottish Draft OWE plan (ABPmer, 2011a) and has been retained within subsequent plan-level HRAs (ABPmer, 2013a; b; MMO, 2013; ABPmer, in prep.).

Although foraging distances are fairly well understood, less information is available to indicate foraging directions and it is known that they can be very variable. Based on evidence from unpublished FAME data, seabirds are unlikely to travel over large tracts of land when foraging. It is therefore assumed that seabirds will not travel across significant land masses (greater than 50km) when foraging over long distances. Any SPAs for long-distance foraging bird interest features occurring outside of the 100km buffer and beyond a minimum landmass distance of 50km will therefore be screened out of the assessment. Very few additional European/Ramsar sites are actually likely to be screened out of the assessment following the application of these criteria but it is considered important that these principles are clearly followed and adopted in the light of the latest information about bird foraging and European/Ramsar site locations. This follows the approach that was applied in the recent national plan-level HRA for The Crown Estate's Wave and Tidal Further Leasing plan (ABPmer, in prep.).

Following the approach applied in past plan-level HRAs, non-UK sites beyond the 100km buffer will not be screened into the assessment. This is on the basis that, having included all the bird qualifying features affected across the defined 100km area during the pre-screening (including non-UK sites), there is not expected to be any additional LSE to birds in sites from other Member States. It is recognised however that there are some qualifying bird species within Member State's sites which are not also a qualifying species for UK sites and which could forage and/or migrate internationally. These include the following Habitats Directive Annex I¹³ species:

- **Cory's shearwater** - This species' range includes the Mediterranean and outposts in the Atlantic such as the Canary Islands. However, its distribution does not cover the UK or English Channel (BirdLife, 2014a);
- **Smew** – The distribution of this species mainly covers central and eastern parts of Europe. It can be found in southern UK breeding and feeding on inland fresh waterbodies (BirdLife, 2014b). This species is on the 'Amber' list and is considered to be of 'Least Concern' (BirdLife, 2014b; RSPB, 2014a; b). It migrates overwinter in small numbers from Scandinavia and Russia and on occasion from Holland and Denmark to escape freezing weather there (RSPB, 2014a). Their flight paths are, therefore, unlikely to overlap with the boundaries of the South marine plans;
- **White-tailed eagle** – This rare breeding bird is on the 'Red' list and was made extinct in the UK during the early twentieth century. The present population is confined to the east coast of Scotland where a reintroduction programme is taking place (RSPB, 2014c); and
- **Common crane** - Small numbers of this species pass mainly through southern and eastern parts of Britain in spring and autumn, and there is a tiny breeding population in eastern England (RSPB, 2014d). It is mainly found on inland freshwater wetland habitats. This species is on the 'Amber' list and is considered to be of 'Least Concern' (BirdLife, 2014c; RSPB, 2014d).

While these species are not qualifying interest features in the UK, based on the above outline review of their distribution and behaviour there is not expected to be

¹³ <http://jncc.defra.gov.uk/page-1523>

any LSE on these species from policies within the South marine plans. Most of the species are unlikely to overlap with the effects brought about by the South marine plans and any 'outlier' species are anticipated to only be present in low numbers. It is also recognised that by adopting the established broad screening process described in this section, the HRA process will ensure that there are no adverse effects on a full range of bird species exhibiting a full range of at sea movements and foraging behaviours (i.e. surface feeders, divers, nocturnal, crepuscular¹⁴, long distance, coastal and offshore).

To summarise the approach described above, the following iterative series of steps encompass the proposed screening methods for the bird interest feature group:

- **Step 1:** Identify possible developments or activities (including possible cable/pipeline landfall positions and landside infrastructure) that could be influenced by plan policies and define their locations within the extent of the South marine plans as discrete areas under review;
- **Step 2:** Screen out any bird interest features for which there will be no LSE on the basis that there is definitely no impact pathway (e.g. where they are confined to inland terrestrial habitats and do not forage in coastal or offshore waters);
- **Step 3:** Screen in all European/Ramsar sites supporting bird interest features that have mean maximum foraging distances greater than 100km and could potentially feed within the areas under review. This may screen in some European/Ramsar sites that support these species but lie outside the 100km pre-screening boundary zone. Non-UK sites will not be considered in this case because there is not expected to be any additional effect to qualifying birds species from other Member States;
- **Step 4:** Screen out any European/Ramsar sites supporting long distance foraging qualifying bird interest features that have a landmass greater than 50km between them and the areas under review;
- **Step 5:** Update the screening table (see Step 7 for habitat interest features in section A2.2.1) to indicate the European/Ramsar sites and supporting bird interest features that have been screened in or out of the assessment. Update the accompanying maps of screened in European/Ramsar sites within and adjacent to the South marine plan areas and the individual areas under review;
- **Step 6:** Identify any plan-level mitigation measures that can be applied to ensure that there is no LSE on the screened in European/Ramsar sites and their qualifying interest features and, where possible, screen such features or sites out on this basis; and
- **Step 7:** Update the screening table and maps with the final list of screened in European/Ramsar sites and qualifying interest features.

A2.2.3 Marine mammals (cetaceans and seals)

The screening methods for this interest feature group need to consider the potential LSE from both direct and indirect sources of change. For this HRA it will be necessary to consider the effects on grey seal (*Halichoerus grypus*), common seal (*Phoca vitulina*), bottlenose dolphin (*Tursiops truncatus*) and harbour porpoise (*Phocoena phocoena*). These are the four species which are qualifying interest

¹⁴ A bird that is most active in low light conditions, typically at dusk and dawn.

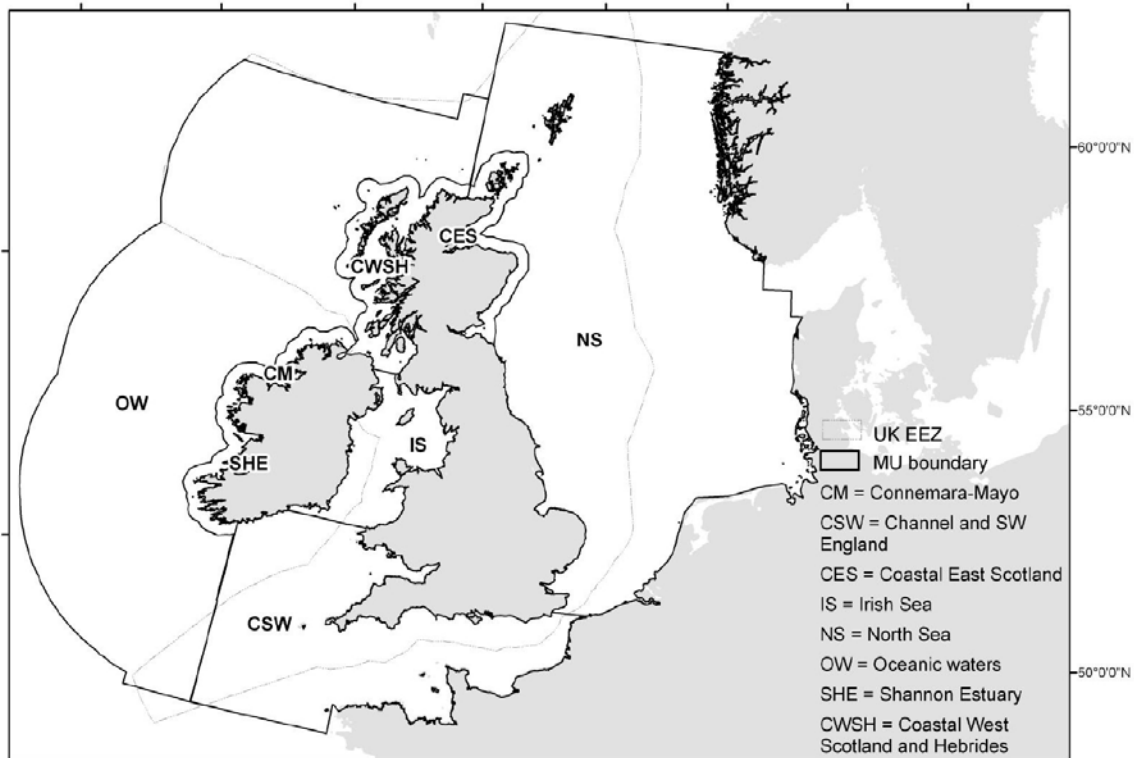
South marine plans HRA pre-screening report

features of UK SACs and of SACs in other EU Member States bordering the North Sea and English Channel.

A 100km buffer has been used for pinnipeds in the majority of past plan-level HRAs (e.g. ABPmer, 2013a; b; MMO, 2013; ABPmer, in prep.). The HRA for The Crown Estate's Offshore Floating Wind Plan (AMEC, in prep.), on the other hand, agreed in consultation with Scottish Natural Heritage (SNH) to use a 50km screening buffer for common seal and a 100km buffer for grey seal. For the South marine plans HRA, a 100km buffer for both seal species is considered the most objective and auditable screening approach because it defines the main foraging areas of both species. No additional sites supporting seal populations will be screened in beyond the 100km buffer area. The distances over which these species move from their breeding and haul out sites is better understood than for cetacean species. Tracking of individual seals has shown that they can feed up to several hundred kilometres offshore, with foraging trips lasting between 1-30 days, although most foraging probably occurs within 100km of a haul out site (SCOS, 2013). Therefore, movements over 100km are not sufficiently frequent to warrant screening in more distant locations.

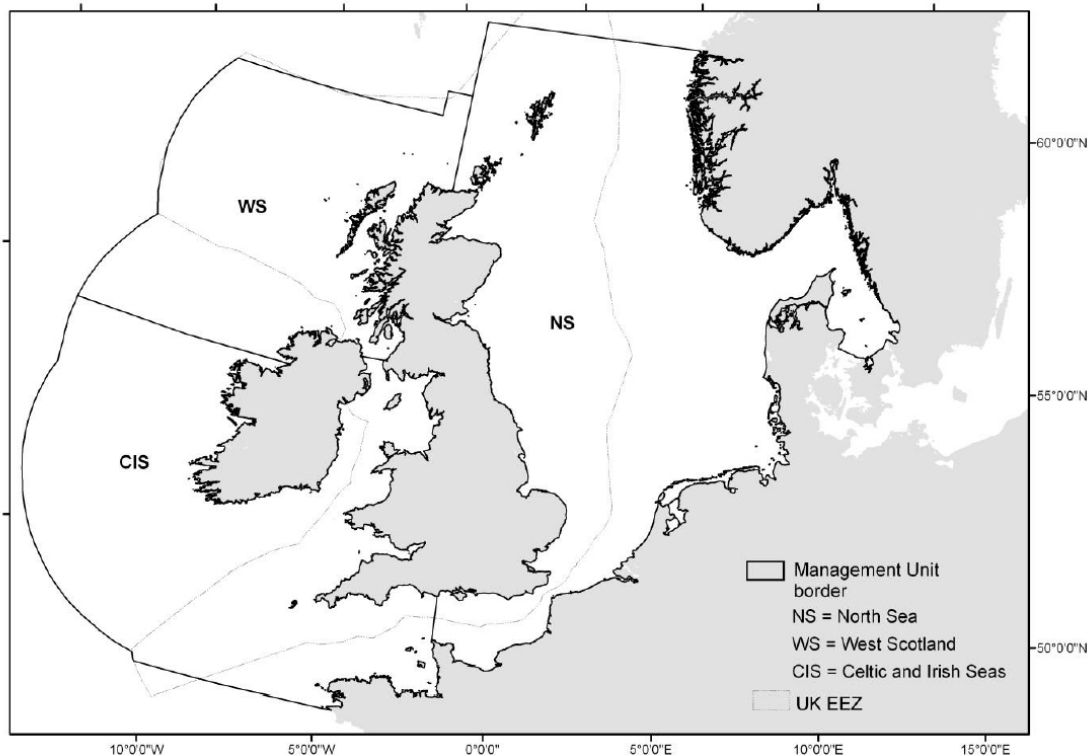
Bottlenose dolphins migrate and forage over much larger distances than seals and it will be necessary to extend the assessment beyond the 100km buffer to screen in more distant European/Ramsar sites. There is potential connectivity between bottlenose dolphins on the south and west coasts of England, and possibly also with French populations (Victoria Copley, Natural England pers. comm.). All European/Ramsar sites that have qualifying features of this species within the Irish Sea (IS) and Channel and Southwest England (CSW) management units proposed by the UK Inter-Agency Marine Mammal Working Group (2013, Figure A.3) will therefore be screened into the assessment. Non-UK sites will also be screened in where they lie within these relevant management units. This follows the approach that was applied in the recent national plan-level HRA for The Crown Estate's Wave and Tidal Further Leasing plan that includes the area covered by the South marine plans (ABPmer, in prep.).

Figure A.3: Bottlenose dolphin management units proposed by the UK Inter-Agency Marine Mammal Working Group (2013).



In general harbour porpoise is wide ranging and it is known, for instance, from tagging work that individuals move several hundred kilometres from the Skagerrak across the North Sea (Teilmann *et al.*, 2008). European/Ramsar sites that have qualifying harbour porpoise interest features that lie within the Celtic and Irish Seas (CIS) and North Sea (NS) management units defined for this species by the UK Inter-Agency Marine Mammal Working Group (2013, Figure A.4) will be screened into the assessment on the basis that the South marine plan areas overlap with both these management units. This will include non-UK sites because of the long foraging and migratory distances covered by this species and, also, because the argument applied in respect of long-distance foraging seabird species in non-UK sites (see section A2.2.2) may not apply for harbour porpoise; until recently this species was not a qualifying species for any European/Ramsar UK sites and is currently only a qualifying species at one SAC site (Skerries and Causeway cSAC). This follows the approach that was applied in the recent plan-level HRA for The Crown Estate's Wave and Tidal Further Leasing plan that includes the area covered by the South marine plans (ABPmer, in prep.).

Figure A.4: Harbour porpoise management units proposed by the UK Inter-Agency Marine Mammal Working Group (2013).



To summarise the approach described above, the following iterative series of steps encompass the proposed screening methods for the marine mammal interest feature group:

- **Step 1:** Identify possible developments or activities (including possible cable/pipeline landfall positions and landside infrastructure) that could be influenced by plan policies and define their locations within the extent of the South marine plans as discrete areas under review. In this case for highly mobile marine mammals it may be expedient, depending upon the policies and relevant activity locations, to base the screening on the full extent of the South marine plan areas;
- **Step 2:** Screen in all European/Ramsar sites that have qualifying common or grey seal interest features that lie within 100km of the areas under review as this zone encompasses the main area of potential foraging by seals;
- **Step 3:** Screen in all UK and non-UK European/Ramsar sites that have qualifying bottlenose dolphin interest features within the relevant management units proposed for this species by the UK Inter-Agency Marine Mammal Working Group (see above);
- **Step 4:** Screen in all UK and non-UK European/Ramsar sites that have qualifying harbour porpoise interest features within the relevant management units proposed for this species by the UK Inter-Agency Marine Mammal Working Group (see above);
- **Step 5:** Update the screening table (see Step 7 for habitat interest features in section A2.2.1) to indicate the European/Ramsar sites and supporting marine mammal interest features that have been screened in or out of the assessment.

Update the accompanying maps of screened in European/Ramsar sites within and adjacent to the South marine plan areas and the individual areas under review;

- **Step 6:** Identify any plan-level mitigation measures that can be applied to ensure that there is no LSE on the screened in European/Ramsar sites and their qualifying interest features and, where possible, screen such features or sites out on this basis; and
- **Step 7:** Update the screening table and maps with the final list of screened in European/Ramsar sites and qualifying interest features.

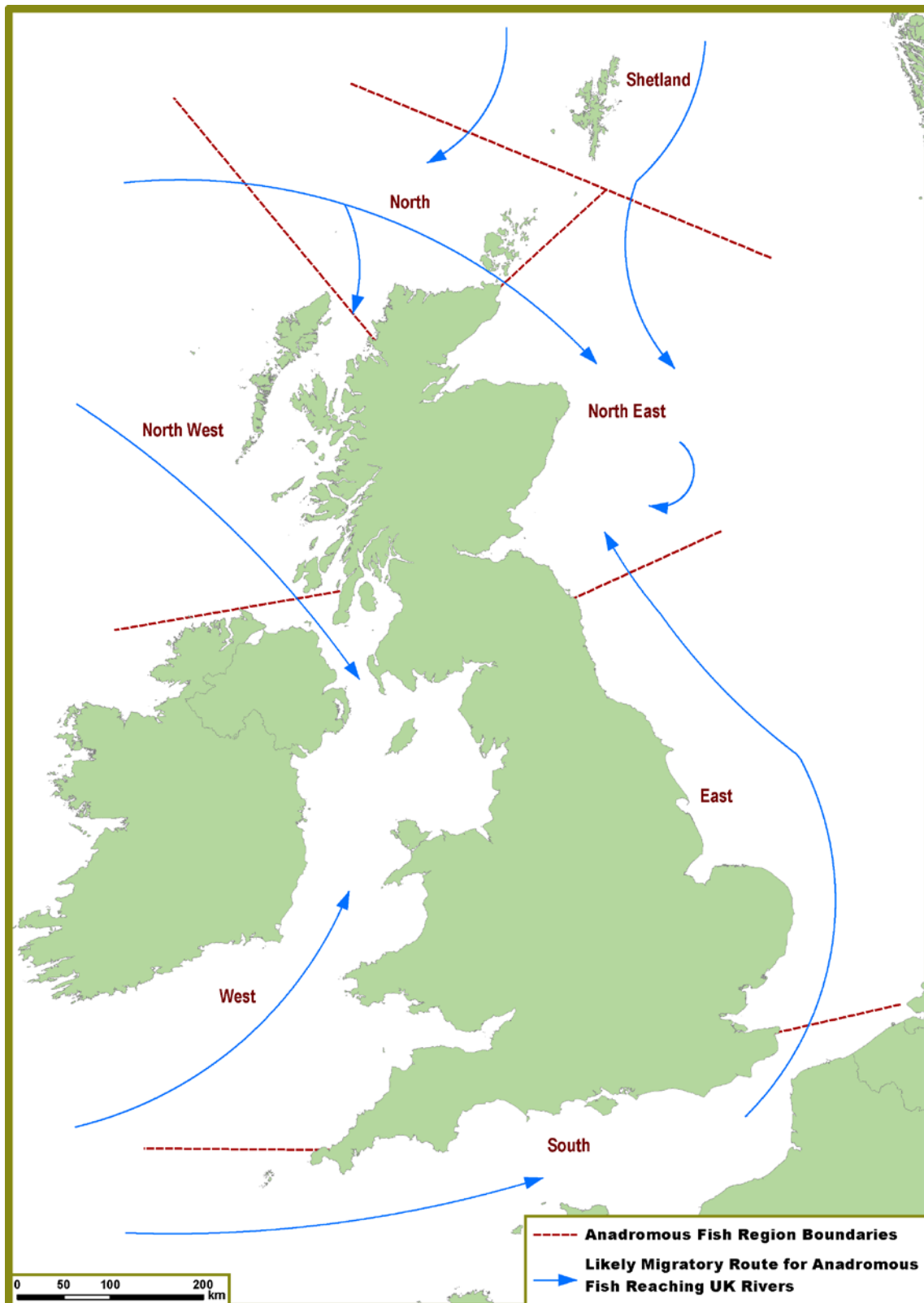
A2.2.4 Migratory fish and freshwater pearl mussel

The screening methods for this interest feature group need to consider the potential LSE from both direct and indirect sources of change. Anadromous fish species (i.e. those which live mainly at sea but spawn in freshwater) that could be affected by the South marine plans include Atlantic salmon, allis shad, twaite shad, sea lampreys and river lamprey. In addition freshwater pearl mussel will be susceptible indirectly because, while they are sessile species living in rivers, they share a life-history stage with migratory salmonids (Atlantic salmon and sea trout). Other migratory fish species that are not listed in Annex I of the Habitats Directive but form part of the qualifying criteria of Ramsar sites include the European eel, the European smelt and sea trout. Consideration should also be given to components (i.e. sub-features) of individual qualifying interest features within marine SACs.

While there is a recognition that gaps in understanding clearly remain about how fish migrate around UK waters, based on the latest evidence, the coastal regions of the UK were divided into seven regions by ABPmer (in prep.) (Figure A.5).

According to these seven regions and the expected primary directions of fish migration, European/Ramsar sites along the UK coast, including estuaries and rivers, within the 'South', 'East' and 'North East' regions that support migratory fish and freshwater pearl mussel interest features will be screened into the assessment. This is because migratory fish are likely to enter the English Channel from the Southwestern Approaches and may pass through the South marine plan areas to get to other regions.

Figure A.5: Location and extent of coastal regions proposed to be used for screening fish qualifying interests (ABPmer, in prep.).



South marine plans HRA pre-screening report

To summarise the approach described above, the following iterative series of steps encompass the proposed screening methods for the migratory fish and freshwater pearl mussel interest feature group:

- **Step 1:** Identify possible developments or activities (including possible cable/pipeline landfall positions and landside infrastructure) that could be influenced by plan policies and define their locations within the extent of the South marine plans as discrete areas under review. In this case for highly mobile migratory fish it may be expedient, depending upon the policies and relevant activity locations, to base the screening on the full extent of the South marine plan areas;
- **Step 2:** Screen in all European/Ramsar sites supporting migratory fish and/or freshwater pearl mussel interest features along the UK coast, including estuaries and rivers, within the 'South', 'East' and 'North East' regions (see above);
- **Step 3:** Update the screening table (see Step 7 for habitat interest features in section A2.2.1) to indicate the European/Ramsar sites and supporting migratory fish and/or freshwater pearl mussel interest features that have been screened in or out of the assessment. Update the accompanying maps of screened in European/Ramsar sites within and adjacent to the South marine plan areas and the individual areas under review;
- **Step 4:** Identify any plan-level mitigation measures that can be applied to ensure that there is no LSE on the screened in European/Ramsar sites and their qualifying interest features and, where possible, screen such features or sites out on this basis; and
- **Step 5:** Update the screening table and maps with the final list of screened in European/Ramsar sites and qualifying interest features.

A2.2.5 Otters

The screening methods for this interest feature group need to consider the potential LSE from both direct and indirect sources of change. The distances offshore that foraging occurs are unclear but are unlikely to be beyond water depths of greater than 10m. This is the depth at which they are identified as being at risk of entanglement in pots/creels. Also, while otters can move large distances along riverine habitats (some are known to use 20km or more of river habitat), they also tend to be very territorial. The guidance on undertaking surveys to assess impacts upon this species (SNH, 2014) suggests that distances of 200-250m are appropriate.

Based on past advice and previous HRA approaches which have included consideration of otters (e.g. ABPmer, 2010 a; b; 2011; 2013a; b; MMO; 2013; ABPmer, in prep.), 10km represents an appropriate distance beyond which a plan or project would be unlikely to have a significant effect. This 10km buffer will be applied around the boundary of the areas under review and any European/Ramsar sites, either coastal or inland, that support otter beyond this buffer will be screened out of the assessment (i.e. removed from the pre-screening table).

It is recognised that there is potential for inland European/Ramsar sites supporting otter interest features located on the coast beyond the South marine plan's mean high water spring tide boundary to be affected by developments and activities such as cable/pipeline landfall locations and landside infrastructure and activities linked to construction and maintenance. It will therefore be necessary to screen in any European/Ramsar sites which support the otter interest feature and which are in close proximity to the South marine plans coastal boundary. No further judgement can be made at this stage about the overlap and interaction of landside activities with further inland European/Ramsar sites that support otter interest features given that policies have not yet been defined as part of the South marine plans. This aspect will need to be considered further in the following screening and assessment phases of the HRA.

To summarise the approach described above, the following iterative series of steps encompass the proposed screening methods for the otter interest feature group:

- **Step 1:** Identify possible developments or activities (including possible cable/pipeline landfall positions and landside infrastructure) that could be influenced by plan policies and define their locations within the extent of the South marine plans as discrete areas under review;
- **Step 2:** Screen in any European/Ramsar sites and supporting otter interest features that lie within a distance of less than 10km from the areas under review, including cable/pipeline landfall positions, landside infrastructure and activities where known;
- **Step 3:** Screen out all European/Ramsar sites that lie beyond 10km from areas under review including cable/pipeline landfall positions, landside infrastructure and activities where known;
- **Step 4:** Update the screening table (see Step 7 for habitat interest features in section A2.2.1) to indicate the European/Ramsar sites and supporting otter interest features that have been screened in or out of the assessment. Update

the accompanying maps of screened in European/Ramsar sites within and adjacent to the South marine plan areas and the individual areas under review;

- **Step 5:** Identify any plan-level mitigation measures that can be applied to ensure that there is no LSE on the screened in European/Ramsar sites and their qualifying interest features and, where possible, screen such features or sites out on this basis; and
- **Step 6:** Update the screening table and maps with the final list of screened in European/Ramsar sites and qualifying interest features.

A2.2.6 Bats

The screening methods for this interest feature group need to consider the potential LSE from both direct and indirect sources of change. There are 15 species of bat listed in Annex I of the Habitats Directive, of which seven species are an interest feature of sites within the 100km boundary of the South marine plans. These are present at 33 European/Ramsar sites within the pre-screening list (see Annex 1 of this report). Of these species, only four are identified as interest features within European/Ramsar sites that have been screened in from the UK. These are the barbastelle bat (*Barbastella barbastellus*), greater horseshoe bat (*Rhinolophus ferrumequinum*), lesser horseshoe bat (*Rhinolophus hipposideros*) and Bechsteins bat (*Myotis bechsteinii*). Bats are terrestrial species that are unlikely to migrate across the English Channel and therefore only the ecology and behaviour of the four UK bat interest features has been reviewed below in order to develop an appropriate screening strategy.

Barbastelle bat is a fairly sedentary species with its foraging area typically around 8.8ha. In addition, their summer and winter roosts are typically less than 40km apart (Dietz *et al.*, 2009). This species is associated with structurally diverse woodlands, riverine sites and areas supporting high hedgerows. Their diet consists of moths, Diptera, small beetles and other flying insects (Entec, 2009).

Greater horseshoe bats forage in pastures, deciduous temperate woodland, Mediterranean and sub-Mediterranean shrubland and woodland. They feed on beetles, moths and other insects. Summer roosts are located in warm underground sites such as caves and attics. During the winter Greater horseshoe bats will hibernate in underground sites, usually large caves. They are sedentary species with distances of 20 to 30km between winter and summer roosts (Aulagnier *et al.*, 2008).

Lesser horseshoe bats forage close to the ground along the edges of woodland. They feed primarily on midges, moths and craneflies. During the summer their roosts are underground sites, attic and buildings. During the winter they hibernate in underground sites such as small caves, cellars and burrows. They are a sedentary species as the distance between winter and summer roosts are within 5 to 10km (Jacobs *et al.*, 2008).

Bechsteins bat are very dependent on mature natural forest habitat with a high proportion of old trees, feeding on insects. During the summer they roost in tree-holes and occasionally within buildings. During the winter they hibernate in underground habitats and are a sedentary species (Hutson *et al.*, 2008).

South marine plans HRA pre-screening report

Based on the above review of each of the four UK bat interest features that occur within 100km of the South marine plan areas, a 50km screening buffer is proposed for bats. In other words, any European/Ramsar sites with bat interest features occurring within 50km of an area under review will be screened into the HRA (i.e. retained in the pre-screening list) and any sites occurring beyond 50km will be screened out.

To summarise the approach described above, the following iterative series of steps encompass the proposed screening methods for the bat interest feature group:

- **Step 1:** Identify possible developments or activities (including possible cable/pipeline landfall positions and landside infrastructure) that could be influenced by plan policies and define their locations within the extent of the South marine plans as discrete areas under review;
- **Step 2:** Screen in any European/Ramsar sites and supporting bat interest features that lie within a distance of less than 50km the areas under review areas, including cable/pipeline landfall positions, landside infrastructure and activities where known;
- **Step 3:** Screen out all European/Ramsar sites and supporting bat interest features that lie beyond 50km from the areas under review, including cable/pipeline landfall positions, landside infrastructure and activities where known;
- **Step 4:** Update the screening table (see Step 7 for habitat interest features in section A2.2.1) to indicate the European/Ramsar sites and supporting bat interest features that have been screened in or out of the assessment. Update the accompanying maps of screened in European/Ramsar sites within and adjacent to the South marine plan areas and the individual areas under review;
- **Step 5:** Identify any plan-level mitigation measures that can be applied to ensure that there is no LSE on the screened in European/Ramsar sites and their qualifying interest features and, where possible, screen such features or sites out on this basis; and
- **Step 6:** Update the screening table and maps with the final list of screened in European/Ramsar sites and qualifying interest features.

Annex 3. Assessment Methods

This section describes the proposed approach for undertaking the assessment stages of the HRA process for the South marine plans (Stages 8 to 10 of the plan-level HRA guidance, see Figure 2). This methodology draws upon the approach used in past plan-level HRAs.

A3.1 Key stages of the assessment process

The assessment will build on the screening process by considering the particular environmental pressures and changes that give rise to a LSE of an interest feature and then providing a generic assessment of the impact on European/Ramsar site integrity having regard to the site's conservation objectives.

A standardised iterative assessment process is proposed to assess the impact on each of the key habitat and species interest features groups identified in section A2.2. The individual steps in this process are as follows:

- **Step 1: Impact pathways review** - Identification of the impact pathways that are relevant for each of the relevant 'screened in' sectors;
- **Step 2: Identify activities to which features are sensitive** - A review of the activities undertaken in each of the relevant sectors, and the environmental changes arising, which could have an impact on European/Ramsar sites or interest features via the identified impact pathways;
- **Step 3: Activity-based screening of European/Ramsar Sites** - Identification (screening) of those European/Ramsar sites and their relevant interest features for which there is a LSE, or for which a LSE cannot be excluded, from the relevant sector activities and impact pathways;
- **Step 4: Detailed pathway-feature sensitivity review** - A review of the sensitivities of the relevant interest features to the identified impact pathways and sector activities;
- **Step 5: Assessment of the potential effects on European/Ramsar sites** - Assessment of impacts via each of the activities across the relevant sectors that are influenced by the 'screened in' draft policies in the South marine plans both alone and in-combination with other extant plans or projects. This is followed by the identification of available mitigation measures for each identified impact pathway and the identification, where required, of additional mitigation measures which ensure that these activities have no AEIOI.

Based on the approaches adopted for previous plan-level HRA work, the results of this phased assessment work will be mainly presented in a series of tables/matrices.

In keeping with the approach adopted for past plan-level HRAs, no European/Ramsar sites or features will be deleted from the screening tables. Instead, distinction will be made between the sites which are screened in or out of the assessment process by the use of colour. This will ensure that the approach and conclusions of this impact assessment process are fully auditable in the future. It is recommended that consultation, especially with Natural England and JNCC, is

included prior to the assessment work and then after the completion of the Appropriate Assessment Information Report (see Figure 2 for key process stages).

A3.1.1 Step 1: Impact pathways review

Typically the first stage of any HRA involves identifying and understanding the pathways by which a proposed activity might have an effect on European/Ramsar sites and their associated interest features. This applies to project-level and single sector plan-level HRAs. In the case of marine planning, however, it is the potential impacts of the plan's policies that need to be considered first before the potential activities can be identified. The screening approach that is proposed for these policies is provided in section A2.1.

Having identified the relevant sectors that are screened into the assessment, a necessary first step in the assessment will be to determine the specific activity-based impact pathways that are relevant.

A tabulated list of relevant generic impact pathways will be produced which follows the format, and where relevant the content, of the plan-level impact matrices which were created for previous plan-level HRAs (for example, ABPmer, 2013a; MMO, 2013). According to these previously applied methods, the pathways will be separated into the standard 'categories of operations which may cause deterioration or disturbance'. These categories are derived from the list identified by the UK Marine SAC Project (2001) and are based on those applied within 'Regulation 35' advice documents:

- **Physical Loss of habitats** from removal or smothering;
- **Physical Damage of habitats and species** from siltation, erosion or physical injury/death;
- **Non-Physical (indirect)** disturbance from noise or visual presence and reduced availability or displacement of species, including prey;
- **Toxic Contamination** from the introduction of synthetic compounds, introduction of non-synthetic contaminants;
- **Non-Toxic Contamination** from nutrient enrichment, organic enrichment, changes in suspended sediment and turbidity, changes in salinity or changes to the thermal regime; and
- **Biological Disturbance** from introduction of microbial pathogens, the introduction of invasive non-native species and translocation, or from selective extraction of selected species.

A3.1.2 Step 2: Identify activities to which features are sensitive

Having identified the relevant generic impact pathways in Step 1, the next stage in the analysis will be to review the individual activities that might affect European/Ramsar sites and their interest features. The activities and the relevant environmental changes arising from these across each of the sectors that are screened into the assessment will be reviewed, and relevant interest feature groups that are sensitive to these changes will be identified. The results will be presented again in a single tabular/matrix format in which the generic pathways will be

highlighted and grouped under the relevant standard 'categories of operations which may cause deterioration or disturbance' listed in section A3.1.1.

A3.1.3 Step 3: Activity-based screening of European/Ramsar sites

The preceding screening stage of the HRA described in Annex 2 will have identified the full list of European/Ramsar sites that could potentially be affected by the South marine plans in advance of a review of the specific activities that need to be assessed. For Step 3 of the assessment, there will be a need to consider which of the European/Ramsar sites will be affected by activities that are materially influenced by the South marine plans across the relevant sectors identified during the policy screening process.

As a first stage of this analysis, an updated review of the status of European/Ramsar sites will be undertaken to identify any new sites that have been identified since the completion of the screening. Once a full final list of sites has been produced, an updated list of 'screened in' sites and features will be created to identify those for which there was a LSE from the activities within each relevant sector.

As mentioned above, no European/Ramsar sites or features will be removed from these tables because it is important that they continue to provide a full and transparent audit of the assessment process. In addition to presenting these comprehensive lists of all the sites and their features, a final overall summary screening schedule will be created which only includes those European/Ramsar sites, and their relevant interest features, which could potentially be affected (i.e. subject to a possible LSE) by the South marine plans.

For this work, as with all other elements of the assessment, a precautionary approach will be adopted and European/Ramsar sites will only be screened out where there is certainty that there will be no LSE.

A3.1.4 Step 4: Detailed pathway-feature sensitivity review

A detailed review of the sensitivities of the qualifying interest features (i.e. their intolerance from damage or death from an external factor) will then be undertaken. This sensitivity review will relate to the relevant project-level activities associated with the policies (and sectors) that have been screened into the assessment. The results will be presented in a series of 'pathway-sensitivity' tables for each key interest feature group as described below.

These tables will include a judgment about the interest feature's level of sensitivity (low, medium or high) to each impact pathway. It should be emphasised that only sensitivity can be considered and not the level of risk (i.e. a high sensitivity does not equate to a high risk). The level of risk is based on an understanding about the degree of exposure (e.g. there would be a high degree of exposure for designated habitats were an activity to occur within or near a European/Ramsar site). However, based on previous plan-level HRAs there is likely to be little information available on exposure for the South marine plans. Taking a precautionary approach, it is therefore considered appropriate for the assessment to base its impact consideration on sensitivities only and assume that an exposure will occur.

The judgments that are made here about sensitivity will be based on the ecology of qualifying interest features as well as on details about the activities and changes arising from each of the relevant sectors screened into the assessment. For many of the more common impact pathways (e.g. direct impacts to the seabed or water quality effects from contaminant release) the levels of sensitivity are well understood based on past studies and available literature.

The sensitivities of some species to other pathways (e.g. underwater noise impacts on marine mammals or underwater collision impacts on birds foraging at sea) are less well supported by available information but can be derived based on an understanding of species' behavioural ecology. While there are variations in sensitivity, and differences in the level of scientific certainty associated with determining these levels, a precautionary approach will be followed for this assessment, as required under the Habitats Regulations, and all potential impact pathways will be addressed irrespective of the varying levels of sensitivity. Ongoing research work will help to inform future judgements about these sensitivities and also where individual projects are undertaken as part of the South marine plans then the exposure levels and hence the risks rather than just the sensitivities will be understood.

The 'pathway-sensitivity' tables will be structured according to the standard Natura 2000 sensitivity categories (as listed in section A3.1.1). The tables will indicate the phases in the implementation process for individual projects at which the impact pathways are relevant (i.e. survey, construction, operation or decommissioning) and the sensitivity levels associated with each of these phases. An impact pathway reference number will also be included in the table that relates to the generic impact pathways that will have been identified in Step 1 of the assessment (section A3.1.1). This number will facilitate comparisons within and between tables and enable any party interrogating these details (e.g. regulator, stakeholder or developer) to readily cross-refer between tabular outputs.

A3.1.5 Step 5: Assessment of effects on European/Ramsar sites

The final step will be to assess the impacts that will or could occur via each of the identified pathways against the European/Ramsar site's conservation objectives. The conservation objectives will be identified from online sources such as the JNCC, Natural England and EU websites, and through consultation with both Natural England and JNCC.

It will not be possible to identify and review the individual and specific objectives for each European/Ramsar site given the large number of sites that will be screened into the assessment. Therefore, a series of typical and generic objectives will be identified for each of the key interest feature groups which could be applied across all European/Ramsar sites.

Based on these generic objectives, the potential effects on the European/Ramsar sites via each of the relevant impact pathways will be reviewed. An initial view will then be taken about the effect on site integrity of the South marine plans both alone and in-combination with other extant plans or projects, in advance of the formal

judgment that is to be made by the MMO, in consultation with the statutory stakeholders for the AA in Stage 12 of the HRA (see Figure 2). The views on the effects on site integrity will be based on current scientific understanding and the proposed manner in which the South marine plans are to be implemented. Typically, this judgement usually needs to be made in the context of the available (called 'initial') mitigation measures that exist to avoid or reduce impacts. However, whether these mitigation measures exist for the South marine plans will depend on whether there are any strategic environmental assessments which frame such measures for the sectors that have been screened into the assessment.

The assessment of impacts will therefore need to be made based on the availability of any such statutory mitigation measures. However, it is recognised that non-statutory mitigation measures may exist and will need to be identified for previous projects and associated licensing. It is considered to be important that such measures are identified not least because collating such information will assist with future project developments in the South marine plan areas and will provide an initial framework for further developing these measures over time.

Where the information indicates that there could be an AEOI, or where the possibility of such effects cannot be excluded, then additional mitigation measures will need to be applied to avoid such an effect (Stage 9 of the HRA, see Figure 2). The plan will then be re-assessed to seek to further avoid any AEOI.

The outputs of this assessment stage, including proposed mitigation measures, will be documented in an Appropriate Assessment Information Report. This report will provide a draft record of the HRA (Stage 10 of the HRA) to inform subsequent consultations and the preparation of a final AA (Stages 11-13 of the HRA).

A3.2 In-combination Assessment

The Habitats Regulations require that, in determining whether a plan or project is likely to have a significant effect on a European/Ramsar site, the plan or project should be considered both alone and in-combination with other plans or projects. In this case, this applies not just to the in-combination effects arising from projects across sectors that are materially influenced by the South marine plans but to their effects in tandem with all other sectoral activities within the marine plan areas.

For some of these sectors, a plan-level HRA already exists (e.g. offshore windfarms) and for some there are no such regional scale HRA although individual developments have undertaken detailed assessments under the HRA process (e.g. ports and shipping, navigation dredging and disposal, tourism and recreation). The fishing sector poses particular challenges both for any future assessments within this sector alone and for assessments of effects made for all other sectors in-combination with fishing. This is because of the uncertainties associated with the effects arising from fishing, as well as the uncertainties about how these will be dealt with in planning terms in the future.

The in-combination assessment is a challenging element of plan-level HRA work. There is need to undertake a full review of extant and relevant plans and projects

and to ensure that the assessment findings fully consider in-combination effects or at least the uncertainties associated with assessing such effects. It is also advisable that the approaches and solutions identified in past marine plan HRAs are reviewed. It is likely that the process of plan implementation will need to be framed (e.g. using the Iterative Plan Review (IPR) process as identified in Figure A.1) to ensure no in-combination effects in the future.

A3.3 Assessment scope key considerations

Where strategic plans are prepared for the marine environment there is often limited information on the precise location and scale of development or about the relevant construction methods and associated activities. This is likely to apply across the policies that are developed for the South marine plans given their broad spatial extent and multi-sectoral nature.

The assessment will therefore need to take account of the likely range of development options and activities and recognise the broad spatial scope of optional activities and the long-term ongoing nature of the marine planning process. It is also recognised that for any 'new' sectors that are screened into the assessment (for example, tidal energy generation) there are likely to be technological advances that occur over time which may not be foreseen at the time of undertaking the assessment.

In addition to the inherent uncertainties about the project details and the impacts arising from screened in policies, there will be a high level of uncertainty associated with the future impacts which apply to other plans and projects. Such uncertainty about in-combination effects is typically a characteristic in all strategic coastal and offshore plans where the full extent of future developments cannot be anticipated.

These uncertainties will need to be mitigated through both the application of project level HRAs for all future activities and through the application of an iterative process for implementation and monitoring of the marine plans, including an integrated research strategy and regular feedback to policy reviews. Stages 8 to 13 of the plan-level HRA guidance (see Figure 2) and the sequential decision making process that will be followed when undertaking these stages is shown in the bottom half of the flow diagram in Figure A.1.

References

ABPmer (in prep.). Wave and Tidal Further Leasing: HRA Principles Document, Screening Report and Appropriate Assessment Information Report. Reports for The Crown Estate. In prep.; ABP Marine Environmental Research Ltd. Report numbers R.2160a-c.

ABPmer (2010a). Screening and Scoping Review for the Pentland Firth Strategic Area (PFSA) Leasing Round Habitats Regulations Assessment. Report for The Crown Estate January 2010; ABP Marine Environmental Research Ltd, Report No. R.1601.

ABPmer (2010b). Report to Inform Appropriate Assessment for the Pentland Firth Strategic Area (PFSA) Leasing Round. Report for The Crown Estate February 2010; ABP Marine Environmental Research Ltd, Report No. R.1602.

ABPmer (2011a). Habitats Regulations Appraisal of Draft Plan for Offshore Wind Energy in Scottish Territorial Waters: Information for Appropriate Assessment Report for the Scottish Government January 2011; ABP Marine Environmental Research Ltd. Report No. R. 1722 (overall summary) and R1772a-c (pre-screening, screening and assessment information reports).

ABPmer (2011b). Habitats Regulations Appraisal of National Infrastructure Renewables Plan (N-RIP): Information for Appropriate Assessment. Report for the Scottish Government January 2011; ABP Marine Environmental Research Ltd. Report No. R.1740 (overall summary) and R1772a & b. (pre-screening, screening and assessment information reports).

ABPmer (2013a). Habitats Regulations Appraisal of the Draft Sectoral Plans for Wind, Wave and Tidal Energy Generation in Scottish Waters. Report for Marine Scotland 2013; ABP Marine Environmental Research Ltd, Draft Final Report Nos: R.2121a (Pre-Screening); R.2121b (Screening); and R2121c (Report to Inform Appropriate Assessment).

ABPmer (2013b). Habitats Regulations Appraisal of Draft Plan for Wave and Tidal Energy in Scottish Waters: Appropriate Assessment Information Review. Report for Marine Scotland 2013; ABP Marine Environmental Research Ltd, Final Report January 2013 Report No. R.1863c.

ABPmer, Met Office and Proudman Oceanographic Laboratory (2008). Atlas of UK Marine Renewable Energy Resources. ABPmer Report R4132. Available from <http://www.renewables-atlas.info>

AMEC (2013). Habitats Regulations Appraisal of The Crown Estate's Offshore Floating Wind Plan. Screening Report. Final Report, November 2013.

AMEC (in prep.). Habitats Regulations Appraisal of The Crown Estate's Offshore Floating Wind Plan. Information to Inform Appropriate Assessment. Draft Report, February 2014.

South marine plans HRA pre-screening report

Aulagnier, S., Hutson, A.M., Spitzenberger, F., Juste, J., Karataş, A., Palmeirim, J. & Paunovic, M. (2008). *Rhinolophus ferrumequinum*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. <www.iucnredlist.org>.

BirdLife (2014a). Cory's Shearwater Factsheet. Available online at <http://www.birdlife.org/datazone/speciesfactsheet.php?id=3926>, accessed on 19 March 2014.

BirdLife (2014b). Smew Factsheet. Available online at <http://www.birdlife.org/datazone/speciesfactsheet.php?id=497>, accessed on 19 March 2014.

BirdLife (2014c). Common Crane Factsheet. Available online at <http://www.birdlife.org/datazone/speciesfactsheet.php?id=2794>, accessed on 19 March 2014.

David Tyldesley and Associates (2009a). Revised Draft Guidance, The Habitats Regulations Assessment of Local Development Documents. Report for Natural England, February 2009.

David Tyldesley and Associates (2009b). Guidance for Plan Making Authorities in Wales. The appraisal of plans under the Habitats Directive. Report for Countryside Council for Wales, November 2009.

David Tyldesley and Associates (2012). Habitats Regulations Appraisal of Plans. Guidance for Plan-making Bodies in Scotland Version 2.0, August 2012 SNH Ref 1739.

DCLG, Department for Communities and Local Government (2012). National Planning Policy Framework. Available online at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf, accessed on 31 January 2014.

Dietz, C., Von Helversen O., and Nill D. (2009). Bats of Britain, Europe and Northwest Africa. A&C Black. London.

Entec UK Ltd (2009a). Habitats Regulations Assessment of the Round 3 Plan. Screening Report, Report for The Crown Estate October 2009.

Entec UK Ltd (2009b). Habitats Regulations Assessment of the Round 3 Plan. Information to Inform an Appropriate Assessment, Report for The Crown Estate December 2009.

Entec (2011). Department of Enterprise, Trade and Investment Offshore Renewable Energy Strategic Action Plan 2009-2020 Habitats Regulations Assessment - Screening Report and Appropriate Assessment (Final Report) June 2011.

EC, European Commission (2001). Assessment of plans and projects significantly affecting Natura 2000 sites.

South marine plans HRA pre-screening report

http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf

Hutson, A.M., Spitzenberger, F., Tsytsulina, K., Aulagnier, S., Juste, J., Karataş, A., Palmeirim, J. & Paunović, M. (2008). *Myotis bechsteinii*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. <www.iucnredlist.org>.

Jacobs, D., Cotterill, F.P.D., Taylor, P.J., Aulagnier, S., Juste, J., Spitzenberger, F. & Hutson, A.M. (2008). *Rhinolophus hipposideros*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2.

Joint Nature Conservation Committee (JNCC), Natural England and Countryside Council for Wales (2010). The protection of marine European Protected Species from injury and disturbance. Guidance for the marine area in England and Wales and the UK offshore marine area. October 2010.

Marine Management Organisation (2013). East of England Marine Plans Habitats Regulations Assessment - Pre-Screening, Screening and Appropriate Assessment Information Review. Reports Prepared by ABP Marine Environmental Research, Hartley Anderson and Hyder Consulting (UK) Ltd ABPmer Report No.R.2020a-c. March 2013.

<http://www.marinemanagement.org.uk/marineplanning/areas/documents/east-plan-hra-letter.pdf>

RSPB (2014a). Smew Factsheet. Available online at <https://www.rspb.org.uk/wildlife/birdguide/name/s/smew/>, accessed on 19 March 2014.

RSPB (2014b). Red, amber and green explained. Available online at http://www.rspb.org.uk/wildlife/birdguide/status_explained.aspx, accessed on 19 March 2014.

RSPB (2014c). White-tailed Eagle Factsheet. Available online at <http://www.rspb.org.uk/wildlife/birdguide/name/w/whitetailedeagle/index.aspx>, accessed on 19 March 2014.

RSPB (2014d). Common Crane Factsheet. Available online at <http://www.rspb.org.uk/wildlife/birdguide/name/c/crane/>, accessed on 19 March 2014.

SCOS (2013). Scientific Advice on Matters Related to the Management of Seal Populations: 2012. Report by SMRU, St. Andrew's University

SNH (2013). Assessing the impacts of developments: Otters and the planning system. Available online at <http://www.snh.gov.uk/about-scotlands-nature/wildlife-and-you/otters/assessing/>, accessed on 19 February 2014.

Teilmann, J., Sveegaard, S., Dietz, R., Petersen, I.K., Berggren, P. & Desportes, G. (2008). High density areas for harbour porpoises in Danish waters. National

South marine plans HRA pre-screening report

Environmental Research Institute, University of Aarhus. 84 pp. - NERI Technical Report No. 657.

Thaxter, C.B., Lascelles, B., Sugar, K., Cook, A.S.C.P., Roos, S., Bolton, M., Langston, R.H.W., and Burton, N.H.K. (2012). Seabird foraging Ranges as a Preliminary Tool for Identifying Candidate Marine Protected Areas. *Biological Conservation*. doi: 10.1016/j.biocon.2011.12.009.

UK Inter-Agency Marine Mammal Working Group (2013). Management Units for marine mammals in UK waters (June 2013) and cover note prepared by the UK Statutory Nature Conservation Bodies (SNCBs).

UK Marine SAC Project (2001). Proposed list of categories of operations which may cause deterioration or disturbance to interest features. Available online at http://www.ukmarinesac.org.uk/activities/ports/ph2_2_4_1.htm, accessed on 19 February 2014.