Marine Management Organisation

East of England Marine Plans

Habitats Regulations Assessment

Screening Report

ABP Marine Environmental Research Ltd
Quayside Suite
Medina Chambers
Town Quay
Southampton
Hampshire SO12 2AQ
United Kingdom
Tel: +44(0)2380 711 840
Fax: +44(0)2380 711 841
www.abpmer.co.uk

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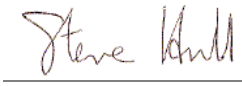
Author	Colin Scott, ABPmer	
Checker	Natalie Frost, ABPmer	
Approver	Stephen Hull, ABPmer	

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This report has been prepared for Marine Management Organisation in accordance with the terms and conditions of appointment for Habitats Regulations Assessment dated 24 March 2011.

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1 Introduction

1.1 Report Background

This annex has been prepared on behalf of the Marine Management Organisation (MMO) by ABP Marine Environmental Research (ABPmer) with Hartley Anderson and Hyder Consulting (UK) Limited. It presents the results of a screening review which was the second stage of an iterative Habitats Regulations Appraisal (HRA) process which is being carried out to accompany the development of the East Inshore and East Offshore Marine Plans. The locations of the East Inshore and East Offshore plan areas are shown in Figure 1 and a single HRA process is being undertaken to cover both Marine Plans together.

This screening report follows on from an initial pre-screening document that was originally issued on 24 February 2012 which set out, in very broad terms, the designated sites and interest features that may need to be considered during this HRA. For this second screening stage, the broad list of sites and features has been subject to more detailed review to select those for which there is a likely significant effect (LSE) from the Marine Plans on European/Ramsar sites (or where a LSE cannot be excluded). This work has been completed in keeping with the standard iterative process for undertaking Plan-level HRAs as indicated within available guidance (David Tyldesley Associates, 2009a and 2012).

To inform the screening process, the pre-screening report was circulated to stakeholders (including Natural England (NE), the Joint Nature Conservation Committee (JNCC) and Defra) to seek their views. A series of further meetings and consultations were then held with these stakeholders to agree the approach and scope of the next stages of the HRA process. This work has been done alongside the process of finalising the draft Marine Plan objectives and Policies. The key consultation elements were as follows:

- Meeting with the Stakeholder Group at the JNCC Offices in Peterborough to present the pre-screening results and outline the broad strategy for the HRA (12th June 2012);
- Initial e-mail consultations on the general principles of the HRA approach that were held between MMO, NE, JNCC, Defra and ABPmer (early August 2012);
- Circulation of a draft version of this screening report (prepared by ABPmer and MMO) to NE and JNCC for comment (20th August 2012);
- Meeting between MMO, NE, JNCC and ABPmer at the MMO offices in Newcastle to discuss the principles of the HRA approach and the results of the preliminary screening report (21st August 2012);
- Telecom meeting between the MMO, ABPmer and NE (24th August 2012) to clarify the HRA approach in light of the emerging Marine Plan policies;
- Telecom meeting between the MMO, ABPmer and JNCC (28th August 2012) to clarify the HRA approach in light of the emerging Marine Plan policies; and
- Meeting between MMO, NE, JNCC and ABPmer at the MMO offices in Newcastle to finalise actions for completing this screening report and identify a proposed assessment approach (13th September 2012).

Following this consultation process, and based on the feedback received, this screening report was originally issued in September 2012 (MMO 2012b). However, there was a continuing process of dialogue with the key stakeholders (especially NE and JNCC) during the following

assessment process which was underpinned by the information set out in this document. In response to these subsequent consultations and the work undertaken throughout the assessment, this report and the pre-screening document have been updated, where required, and finalised for issue together. These reports (and the stages of the standard HRA process that they cover) are as follows:

- **Report 1 Pre-screening Review** (HRA Stages 1 to 3) - (MMO 2013a);
- **Report 2 Screening Review** (HRA Stages 4 to 7) - (MMO 2013b) this report; and
- **Report 3 Appropriate Assessment Information Review** (AAIR) (HRA Stages 8 to 13) - (MMO 2013c).

In addition there is a final Appropriate Assessment (Stages 12 and 13) as prepared separately by the MMO (2013d). Collectively these reports which make up the full HRA record.

Prior to outlining the results of the formal screening process, this report presents an initial overview of the key issues that need to be addressed for undertaking the next Appropriate Assessment stage of the work. When considering the assessment approach it is recognised, particularly, that the manner in which the HRA is pursued is significantly influenced by the precise way in which the Marine Plan policies have been framed and how policy options have been developed contemporaneously with the HRA work. This issue is reviewed and the implications for the HRA approach are then considered.

Following this initial review of the HRA procedural and policy issues that are relevant for the Marine Plan, this report details the formal second-stage screening process for the HRA. The screening process has essentially been pursued in two phases as follows:

- Firstly, an **ecological screening process** was undertaken in which the original list of designated sites and interest features (as identified at pre-screening) were reviewed to select out those for which a potential impact pathway exists from any activities taking place within the Marine Plan areas. This resulted in a revised final list of designated sites and interest features for which there is the potential for a likely significant effect (LSE) from any activity under the Plan; and
- Secondly, a **policy screening process** was undertaken in which the 55 draft Marine Plan policies were reviewed to identify those that need to be assessed (based on agreed pre-determined criteria that are explained further below). This results in a final list of those policies which are not 'criteria-based' and which result in a material change to existing activities and for which there may be a LSE.

The ecological screening review has been applied based on the latest scientific understanding about the ecology and behaviour of the key interest feature species. It draws upon the scientific reviews and that have underpinned previous Plan-level HRAs[1] and on information collated by the MMO during the development of the Marine plan. It is also based on advice and key literature sources provided by the consultees.

[1] Including: The Crown Estate's (TCE's) Round 3 Offshore Wind Energy Plan HRA (Entec 2009), TCE's Pentland Firth Wave and Tidal Energy Plan HRA (ABPmer 2010); the Scottish Government's Offshore Wind Energy HRA (ABPmer 2011) and the Scottish Government's Wave and Tidal Energy HRA (ABPmer 2013).

Both the ecology and policy screening processes have been applied on the basis that no mitigation measures have yet been formally identified for the policies that have been screened in and therefore no impact pathways can be excluded. Any such measures will be identified within the subsequent assessment work that will follow.

1.2 Report Structure and Content

The methods and results of this screening review are set out within two key sections as follows:

- **Section 2** of this report sets the legal context for the screening process by reviewing the HRA policy and process considerations that are relevant; and

- **Section 3** presents the methods and results of the ecology and policy screening processes.

Section 2 has been prepared in view of the need to clearly link the Marine Plan policies with the adoption of a legally robust and appropriately framed HRA process. The principles that are set out within this section has been discussed and developed during the consultation process that was outlined in the preceding section. The resulting considerations that are relevant to this HRA are presented with three sub-sections as follows:

- **Section 2.1** presents a generic overview of the broad legal context for the HRA process (as also presented within the pre-screening report); and

- **Section 2.2** reviews the particular guidance and policy considerations that are relevant for undertaking an HRA of the Marine Plans, it summarises the feedback received from consultees on this aspect and identifies a proposed approach for this HRA.

Following this review, Section 3 sets out the results of the screening process by reviewing the results of the pre-screening process and presenting a more detailed and scientifically-informed list of the designated sites and interest features that need to be considered within the final assessment phase (along with a review of the marine policies that might affect these sites and features). This information is presented within three sections as follows:

- **Section 3.1** revisits and summarises the methods and results of the pre-screening process (updated versions of the pre-screening maps are also presented in Figures 2a to 2d[2]);

- **Section 3.2** presents a review of the Screening Methods by which the designated sites, interest features and Marine Plan policies are selected for taking forward into the Appropriate Assessment phase of the HRA; and

- **Section 3.3** presents a summary of the Screening process and an outline of the approach that is proposed for the Appropriate Assessment phase of the HRA.

The screening results are also presented within the following outputs:

- **Figures 3 to 7** show screening maps describing the results of the ecological screening process and illustrating the position of the designated sites that have been screened into the Appropriate Assessment;

[2] Figure 2a-c show the UK designated sites. Figure 2d shows the transnational sites.

- **Tables 1 to 3** present the results of the ecological screening process by showing an updated versions of the original pre-screening list of designated sites and interest features and indicating those that are screened in and out of the assessment phase;

- **Figure 8** shows the approach and criteria applied for the policy screening process (and indicates the decisions to be made for the assessment phase also); and

- **Table 4** presents a full list of the 55 Marine Plan policies highlighting those that have been screened in and are to be taken forward into the assessment phase.

In keeping with best practice adopted for other Plan-level HRAs (as listed above) no designated sites or features are removed/deleted from the screening tables (Tables 1 to 3). Instead, the sites which are screened in or out of the assessment process are highlighted. This ensures that the approach and conclusions of this impact assessment process are fully auditable in the future.

2 Marine Plans HRA Process

2.1 Legal Context and HRA Approach (General)

Under Article 6 of the Habitats Directive, an HRA is required where a plan or project is likely to have a significant effect upon a Natura 2000 site (also known as a 'European Site'). The 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, and/or present outstanding examples of typical characteristics of the biogeographic region and species that are rare, endangered, vulnerable or endemic within the European Community. This includes Special Areas of Conservation (SAC) designated under the Habitats Directive for their habitats and/or species of European importance and Special Protection Areas (SPA) classified under Directive 2009/147/EC on the Conservation of Wild Birds for rare, vulnerable and regularly occurring migratory birds species and internationally important wetlands. In addition, it is a matter of law that candidate SACs (cSACs) and Sites of Community Importance (SCI) are considered in the HRA process. Furthermore, it is UK Administration policy[3] that sites designated under the 1971 Ramsar Convention for their internationally important wetlands (Ramsar sites) and potential SPAs (pSPAs) are also considered in this process.

Guidance on the methods for undertaking Plan-level HRAs has been prepared for Natural England, Scottish Natural Heritage (SNH) and Countryside Council for Wales (CCW) (David Tyldesley Associates, 2009a, 2009b and 2012). Guidance has also been produced by the European Commission on the 'Assessment of plans and projects significantly affecting Natura 2000 sites' (EC, 2001). This guidance provides clear advice on the steps and process to be followed in undertaking plan-level HRA which is directly applicable to Marine Plan HRA. The iterative process that is recommended for Plan-level HRAs is shown in Diagram 1. This process has been effectively applied to a number of Sectoral Plan HRAs for Scottish waters (e.g. ABPmer, 2010, 2011, 2013) and is considered fit for purpose for use in the marine environment.

[3] Planning Policy Statement 9

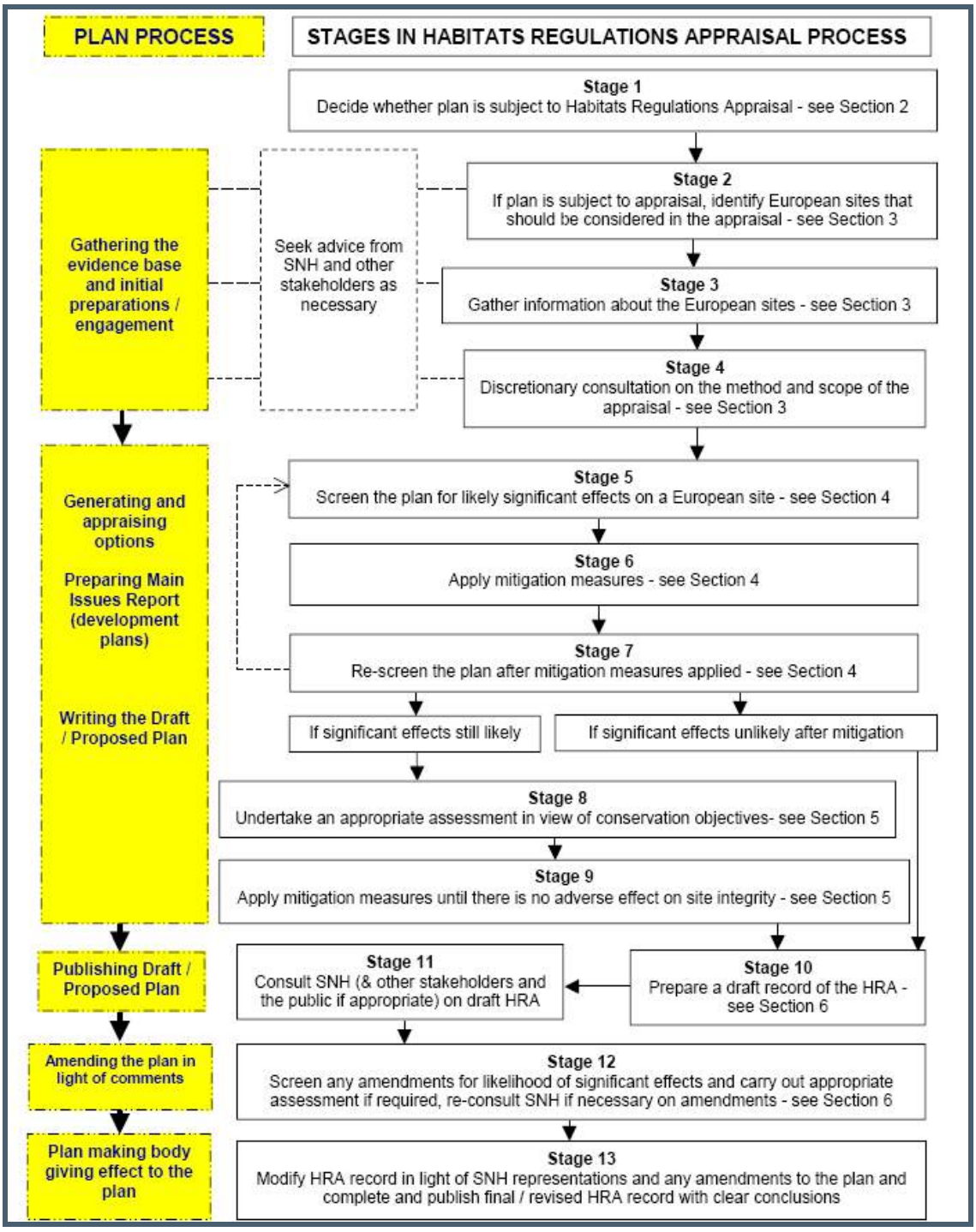

Diagram 1: Stages of the HRA process for plans (from David Tyldesley Associates 2012)

2.2 Legal Context and HRA Approach

While specific guidance exists for undertaking Plan-level HRA as described above, there is no specific guidance available on the process for undertaking HRAs for Marine Plans. The proposed approach has therefore drawn on existing broader plan-level HRA guidance (for example, David Tyldesley and Associates 2009a and 2012) as described in the preceding section.

However, a number of specific challenges arise when considering the application of plan-level HRA to multi-sectoral Marine Plans. In particular, there are issues relating to:

- The relationship between the Marine Plan HRA and pre-existing Sectoral Plan HRAs for marine activities (such as offshore wind and oil & gas licensing rounds);
- The limited level of detail that is available in relation to potential future marine activities covered by Marine Plans and therefore in dealing with the inherent uncertainty in the potential impacts of the plan; and
- The extent to which spatial policies for particular forms of development within a Marine Plan might be considered to create a presumption in favour of development and/or provide grounds for an 'IROPI' case (whereby imperative reasons of overriding public interest (IROPI) are required for projects having an adverse effect on the integrity of a designated site).

In seeking to develop a proposed approach for Marine Plan HRA, the project team has therefore sought to draw upon and adapt existing plan-level HRA guidance to address these issues. As part of this process, views were sought from JNCC, NE and Defra as described in Section 1.1. The feedback received from these consultees indicated that it is necessary to ensure that the HRA is 'appropriate' and also that the issues relating to in-combination effects warrant particular consideration. The consultees also pointed to the need to draw upon the lessons from previous and relevant case examples (such as those in Scotland) and also identified that the available Plan-level HRA guidance which David Tyldesley and Associates (2009b) prepared for Countryside Council for Wales (CCW) was particularly useful. In response to this feedback, and with particular regard to the David Tyldesley and Associates (2009b) review, the key issues are considered further below in Sections 2.2.1 to 2.2.5.

2.2.1 Relationship to Pre-existing Sectoral Plan HRAs

The David Tyldesley and Associates (2009b) guidance document provides advice on the role of an HRA for an overarching strategic plan and the existing Sectoral Plan HRAs which underlie it. In Paragraphs 2.18 to 2.20 of this review it states as follows:

> *'Appraisal should be confined to the changes proposed by the plan making authority in the subject plan. It is the difference which the plan and its implementation will make, compared to a scenario where the plan is not adopted, that is key to the appraisal process. Thus the appraisal will be concentrating on changes the plan seeks to implement, or the way that the plan would perpetuate, or make more likely, existing trends or proposals.*
>
> *The plan may contain reference to specific proposals for major projects which are part of national infrastructure and promoted by national government, or subject to consent directly by Welsh Ministers. These should be screened out. They will include, but may not be limited to: trunk road and motorway projects; some new bridges; major transmission lines; gas and oil pipelines etc. It would be inappropriate for sub-national level plans to attempt to appraise the effects of such projects and to do so would also result in unnecessary duplication.*
>
> *A useful 'test' as to whether a project should be screened out at an early stage is to ask the question "Is the project provided for / proposed as part of another plan, or by another plan making authority and would it be likely to proceed whether or not the subject plan is adopted." If the answer is "yes", it will normally be appropriate to screen the project out of the appraisal.'*

On this basis, it was agreed with the consultees that it is appropriate to screen out 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. For example, an HRA was conducted for the R3 offshore wind plan (R3OWF) (Entec, 2009) and HRAs have been conducted for potential developments associated with offshore oil & gas licensing rounds (DECC, 2011).

A caveat to this approach would be that, where further definition of R3OWF proposals (e.g. the alignment of proposed cable routes) has become available since completion of the R3OWF HRA, particularly if such routes are specifically identified and subject to policies within the Marine Plan, then this would need to be addressed. In other words, if the Marine Plan now includes more detail about the spatial location of cable routes than was available during the R3OWF HRA then these will need to be assessed within the Marine Plan HRA.

In contrast, there is no equivalent plan (and no HRA has been undertaken) for marine aggregate extraction in the Humber or Anglian Marine Aggregate Regions. Therefore, given that the Marine Plans include spatial policies relating to marine aggregate extraction (including both licence renewals for continued extraction from existing sites and potential future (new) areas), it would be appropriate to consider these within this HRA (see also Section 3.2.3).

At a more local level, HRAs have also been undertaken for flood defence strategies (for example on the Humber Estuary) and these therefore do not need to be revisited within the Marine Plan HRA (on the assumption that the Plan will not materially affect the projects under these strategies).

2.2.2 In-combination Assessment

Following on from the approach described in the preceding section, it is recognised that while this is appropriate for considering the impacts arising from individual sectors and the individual Marine Plan policies that relate to them, it is unlikely to apply to consideration of the in-combination effects overall. On the issue of in-combination assessment it is stated in Paragraph 2.23 of David Tyldesley and Associates (2009b) that:

> *However, when it is necessary to consider the effects of the subject plan in combination with the effects of other plans or projects, the residual effects of these other infrastructure projects may well be relevant and may need to be brought back into consideration. In this way all relevant combinations will be checked for significant effects.*

On this basis, it will therefore be desirable to consider those sectoral plans that already have pre-existing HRAs as part of the in-combination assessment to the extent that available information allows. It is recognised that in-combination assessment presents many challenges particularly at the scale of Marine Plan regions owing to the limits of scientific understanding of environmental capacity and the large uncertainties surrounding future marine developments and their impacts.

These issues of marrying the uncertainties of in-combination effects with the need for certainty under the Habitats Regulations in the marine environment (see also next section) has been considered and addressed within Scotland's Sectoral Plans for renewable energy generation (ABPmer, 2011 and 2012) through the adoption of an iterative plan process. A similar approach may need to be adopted for the Marine Plan given way in which the polices are framed (see Section 2.2.3 and Section 3.3).

2.2.3 Dealing with Uncertainty in the Impacts of the Plan

The issue of uncertainty is addressed in Paragraphs 2.64 to 2.66 of David Tyldesley and Associates (2009b):

> *The higher the level of a plan in the hierarchy the more general and strategic will be its provisions and therefore the more uncertain its effects will be. The protective regime of the Directive is intended to operate at differing levels. The EC has advised that, in contrast to land use and sectoral plans, which can have direct or indirect legal effects for the use of land and the regulation of projects, "a distinction needs to be made with 'plans' which are in the nature of policy statements i.e. policy documents which show the general political will or intention of the ministry or lower authority." Many aspects of plans are general statements of policy expressing a plan making authority's general policy framework, or political aspirations or general intentions. In the same way that whole plans which are general statements of policy could not have a significant effect on a European site, it follows that those parts of a plan which are general statements of policy cannot be regarded as likely to have a significant effect on a site. They can be screened out in the early stages.*
>
> *These general policy statements may include 'criteria based policies' because even though they 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. As with other general policy statements described in paragraph 2.64 above can be screened out at an early stage because they will not have a significant effect on a European site.*
>
> *However, a distinction needs to be drawn between general criteria based policies and more specific criteria based policies which are effectively allocating development or change of a particular type to a particular location, but set out further tests that the change will need to meet. This helps to keep the Habitats Regulations Appraisal focused and relevant on aspects of the plan which could affect a European site.*

On this basis, it is not necessary to appraise 'criteria-based' policies or other general policy statements and the appraisal can be focused on policies with a spatial component. In addition Paragraph 6.19 of David Tyldesley and Associates (2009b) states:

> *Options, policies or proposals in category C.4 , where a plan makes provision for a type change, generally, and perhaps its broad location or general scale, but not its particular magnitude or specific location, may be more appropriately appraised 'down the line', when selecting from more detailed options in a lower tier plan. However, reliance on the lower tier plan appraisal is only appropriate where the later appraisal and option selection will ensure that there would be no adverse effect on site integrity.*

While the Marine Plan includes policies such as those above, there is no lower tier plan in this case that might be relied upon to provide clarity. Therefore, the 'down-the-line' philosophy cannot be applied and so policies can only be appraised within the HRA to the extent that this is possible in light of the guidance.

2.2.4 Imperative Reasons of Overriding Public Interest (IROPI)

Paragraph 6.22 to 6.27 of David Tyldesley and Associates (2009b) set out a number of caveats that might be applied where there is uncertainty about the potential effects of plan policies. In essence these encourage the removal of the presumption in favour of development where there is uncertainty, in order to avoid any possibility that promoters/developers at project level might seek to argue that. In other words that it is made clear that developers cannot assume an IROPI case exists for any project that is identified in the Plan.

An LSE conclusion is likely to apply to the majority of significant developments in the marine environment, particularly when considered in-combination with other plans or projects. This is because of the generally higher level of uncertainty of effects, the high mobility of some of the designated features and the greater connectivity within marine environments.

This would mean that the presumption in favour of development would not be applicable to the majority if not all of the spatial allocations within the Marine Plans. However, such an approach would not necessarily undermine the strategic benefit of spatial policies in Marine Plans which primarily seek to rationalise and prioritise the use of sea space to deliver sustainable development.

2.2.5 Conclusions and Actions Relevant to Marine Plan HRA

Based on these interpretations of the available guidance it is recognised that the developing Marine Plan polices need to include the following in order to underpin the HRA process:

- **Requirement 1** Clarity on whether any and how, any existing sectoral plans or projects will be materially influenced so that
    - 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
    - the material changes only can be assessed;
- **Requirement 2** A clear distinction between general or criteria-based policies so that the assessment can focus on policies with a spatially definable component;
- **Requirement 3** Clarity on how the Sectoral plans will fit into the plan implementation hierarchy;
- **Requirement 4** Clarity on how the Marine Plan itself will be implemented to address in-combination issues; and
- **Requirement 5** Confirmation within the framing of any relevant Marine Plan policies that inclusion of within a plan is not a sufficient ground for an IROPI case.

To address Requirements 1 and 2, the Marine Plan polices were reviewed in consultation with NE and JNCC to clearly identify general or criteria-based policies (this applies to the majority of polices) and select out those which will materially influence existing Sectoral plans or projects (four such polices were identified). In respect of Requirement 3 it was also agreed with the consultees that the Marine Plan HRA does not need to assess those Sectoral Plans for which a

HRA already exists. Further details about the HRA implications and the results of the screening process are describes in Section 3.2.3 (and Figure 8).

To address Requirement 4, further details about the plan implementation process will be presented within the Appropriate Assessment Information report that will follow this screening study.

Finally, Requirement 5 has been addressed within the draft Marine Plan through the following text:

> *The East Area Marine Plans are not intended to be used as the sole justification for a licensable marine activity to be considered for IROPI. They may however form part of the case that is made to the decision making authority.*

3 Screening Review

3.1 Results of the Pre-Screening Approach

For the pre-screening review, a 100 kilometre (km) buffer zone was drawn around the East Inshore and East Offshore Marine Plan Areas, and the designated European and Ramsar sites within that buffer were identified and were initially screened in (MMO 2013a). This included all non-coastal terrestrial habitats and species interest features within that 100km area. This work addressed Stage 1 to 3 of the HRA process as set out in Diagram 1.

Subsequent to the pre-screening report originally being produced, it was agreed that the Inshore and Offshore Plan Areas are to be treated as a single East Coast Plan area. In light of this, and to ensure that there is a consistency and transparency of approach across all the HRA documentation, the original pre-screening report was revisited (MMO 2013a) and, this 100km buffer zone was redrawn as a single boundary and the designated sites within it were confirmed against the latest Natura 2000 data.

This process resulted to the addition of 16 SACs, 1SPA and 5 Ramsar sites and the original table of sites in the pre-screening report was updated. As a result a total of 177 UK designated sites and further 93 transnational designated sites (270 in total) were identified as requiring further consideration in the screening phase of the HRA (see Table 1). For each of the relevant European and Ramsar site designations, the following numbers of UK and transnational sites were identified and then screened in:

- Special Protection Area (SPAs): 75 Sites were screened in;
- Special Areas of Conservation (SACs), Candidate SACs, and Sites of Community Importance (SCIs): 158 Sites were screened in; and
- Ramsar Sites: 37 sites were screened in.

To summarise the results of the pre-screening update process, the position of the 100km buffer zones (relative to the Plan area) are reproduced in Figure 1. The identified UK-designated SAC, SPA and Ramsar sites are shown in Figure 2a to 2c respectively the pre-screened sites

from other EU Member States are shown in Figure 2d. The list of UK sites is also shown in Table 1 and the list of those within other EU Member states[4] are shown in Table 2.

This use of a 100km buffer is just the first step in the Plan-level HRA process and one that allows Stages 1 to 3 to be addressed before the screening methods in Stage 4 (see Diagram 1) are more formally considered. A 100km area has been used for previous HRA pre-screening work because it is deemed to be a quantifiable and objective area that is likely to encompass the areas used by many of the mobile species interest features (fish, seabirds and mammals) from designated sites that could be indirectly affected by activities associated with the Marine Plans. However, it remains an arbitrary area and it is not to be used to limit further review of more distant locations (for example, where very long-ranging species are amongst the qualifying features) or to presume that all relevant features within this area, for which impact pathways exist, are necessarily affected.

The role of this screening review work that is now to refine this list of sites and identify those within the area which can be 'screened out' of the Appropriate Assessment process because no ecological impact pathway from the Marine Plans exists. However it also identities extra sites outside of this 100km area which will need to be 'screened in' to the assessment. Sites outside of this arbitrary buffer area may include the Natura 2000 sites from both the UK and also from other EU Member states.

Given the need for a high level of certainty to meet Habitats Regulations requirements there was a presumption during this screening, and throughout the HRA process, that sites and their interest features, will be 'screened in' to the assessment unless a definitive judgement of no likely significant effects can be made, in which case they will be excluded from the process. Particular attention was paid to the manner in which migratory species such as marine mammals and birds are addressed.

This 'ecological screening process' identifies sites and feature for which there is a potential impact pathways from any activity that is influenced by the Marine Plan and the methods used to undertake this screening are described in greater details in Sections 3.2.1 and 3.2.2. As described above, there is also the need to screen out those Marine Plan polices which do not require assessment and this has been done in Section 3.2.3.

Compared against the iterative assessment tasks described in Diagram 1, Section 3.2 encompasses both the Stage 4 review of the screening methods that were applied for this HRA and the Stage 5 confirmation of a final list of sites that were screened into the assessment. Stages 6 and 7 have not been separately undertaken because at this stage there are no formal mitigation measures within the draft Plan. Such measures will be considered during the assessment phase (Stages 8 to 13). Section 3.3 then summarises the findings and presents the proposed approach for the next assessment phase of this HRA.

3.2 Screening Methods

The key stages of the screening process are reviewed below and the results are shown in Table 1 for UK sites and Table 2 for EU Member State sites. Importantly, within Table 1 there have been no deletions or removal of sites from the original pre-screening review. Instead, there is simply a clarification of those sites that are screened in and out. This ensures that there is full clarity and 'auditability' of the screening process both for the purposes of evaluating this HRA but also for informing future project level HRAs.

[4] Derived from the EU online resource at http://www.eea.europa.eu/data-and-maps/figures/distribution-of-natura-2000-sites-across-eu-member-states

3.2.1 Phase 1 – Remove Inland Habitats and Species

The first phase of the process of screening sites for which the Plan may have a LSE was to remove terrestrial and freshwater habitats and interest features for which there is definitely no impact pathway (i.e. no potential physical or ecological connectivity with any marine activities that might be influenced by the Plan).

At this first phase the terrestrial habitats that were screened out included: woodland, peatlands, heaths and bogs, as well as species associated with such terrestrial habitats e.g. snail species. Those freshwater habitats and species that were screened out included: water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-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. Also non-migratory freshwater species were also be screened out including: great crested newts, white-clawed (or Atlantic stream) crayfish, bullhead and brook lamprey. As discussed later (under the heading of Anadromous fish) freshwater pearl mussel have however been screened in because they have a life cycle connection with Atlantic Salmon.

A number of bird qualifying interests were also screened out on the basis that there would be no impact pathway with the Marine Plans. This included the Eurasian Marsh Harrier which is entirely resident within inland terrestrial habitats and does not forage at sea or migrate internationally. It also included a number of bird species that are qualifying interest features of SPAs as breeding populations. These birds species are Hen Harrier, Merlin, Peregrine and Short-eared Owl. These species were however 'screened in' where they are roosting and/or wintering qualifying interests of the relevant designated sites.

In keeping with the approach taken for previous plan level HRAs (ABPmer 2010, 2011 and 2013), those inland sites (>10km from the coast) with otter populations were also screened out. However it should be recognised that final confirmation will be needed at a project level that such sites will definitely not be affected once full details of individual development projects e.g., for offshore wind or wave and tidal projects whether/if any cable alignment and landfall locations are known[5].

It is also recognised that there will be potential for the terrestrial and freshwater sites located on the coast to be affected where they occur in the vicinity, for example, of any proposed cable/pipeline landfall locations, substations or any anticipated landside infrastructure. Effects on these terrestrial sites could also result from activities which change the sediment dynamics (that could affect sand dunes), increase levels of disturbance or affect bird foraging areas. Therefore where terrestrial sites have a coastal feature, and associated species then these sites and features, have been 'screened in' and will be taken forward into the next stage of the HRA. These are shown, with other screened in sites, in Table 1.

3.2.2 Phase 2 – Review Marine Habitats and Species

Once the selected terrestrial and freshwater habitats and species were screened out, the next phase was to review and screen in all the relevant sites, habitats and species for which there could be LSE[6]. This included sites that lie within the Plan area but also within the 100km buffer

[5] NB1. To ensure that appropriate consideration is given, none of the sites identified at pre-screening and later screened out have been deleted from screening Table 1.

[6] NB2. This assessment inherently focuses on addressing qualifying interest features of designated 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

zone that were identified at pre-screening but also now includes sites outside the 100km buffer that support mobile species which use or traverse across the marine environment. This second phase of the screening involved a further review of each of the following key interest feature groups in turn:

- Coastal, intertidal and subtidal habitats and associated species
- Seabird species;
- Marine mammal species (cetaceans, seals and otter);
- Migratory anadromous fish; and
- Bats.

For sites supporting 'Coastal, intertidal and subtidal habitats and associated species' or otter populations, then those that lie within the Plan areas and immediately surrounding it within one tidal ellipse distance (see text below for explanation) were screened in automatically because they could be directly or indirectly affected. There is no expectation that more distant sites across the wider 100km area will be affected either directly or indirectly and therefore these have been screened out.

Most of those designated sites supporting mobile seabirds, cetaceans, seals and fish which lie within the 100km buffer (as already been identified in pre-screening) were retained and screened in. However, additional judgements were also made on which designated sites supporting these features outside the 100km buffer should additionally be screened in. The screening methods for each interest feature group are outlined below.

Coastal, Intertidal and Subtidal Habitats and Associated Species

At this stage all marine sites (SAC, SPA and Ramsar) that lie within the Marine Plan areas were screened in because, clearly, their seabed habitats and the associated non-mobile interest feature species may be directly or indirectly affected by activities undertaken within the Plan boundaries. In addition, it is recognised that activities within the Plan boundaries may have an indirect effect on sites, and their features, just outside the boundaries (e.g. from water quality effects).

To identify the external sites for which there could be such potential indirect effect, it was concluded, following past Plan-level HRA examples (ABPmer 2011, 2013; Entec 2009,) that there would be no LSE arising from hydrodynamic changes (erosion), sediment disturbance and transport at any designated site that lies more than the distance of one tidal ellipse away from the Plan boundary. This was based on evidence from plume studies that even fine particles mobilised from the sea bed settle out again to a large extent within the distance of one tidal excursion. The average distance over which there could be a potential indirect effect, as defined by an average tidal ellipse, is around 10-15km (see Image 1 for an indicative map describing the tidal ellipse distances along the East Coast)[7]. The resulting map of screened in

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Protected Species (EPS) such as harbour porpoise and other cetaceans under regulation 39(1)(a) and (b) in the Conservation (Natural Habitats &c.) Regulations. Such offences under Regulation 39 are not considered within the HRA process but it is noted that guidance on disturbance is being developed separately.

[7] Impacts to more distant external sites could occur from cable/landfall development (depending upon their alignment) but for the purposes of this report it has been assumed that any cable routes or cable landfall positions will be entirely within the Plan area and along the Plan area coastline.

sites within and adjacent to the Plan areas is shown in Figure 3a to 3c of SAC, SPA and Ramsar sites respectively. This includes three transnational sites that abut the offshore East Coast Marine plan boundary (Doggerbank, Klaverbank and Bancs des Flandres).

Image 1: Tidal ellipse distances for the English East Coast (including the Marine Plan area)

Seabirds

For this HRA, one of the critical considerations is to understand whether birds have the potential to be adversely affected because they breed, forage or loaf on the coast or within coastal and offshore waters of the Plan area even if they are qualifying features of more distant SPA and Ramsar sites. For this HRA, it was assumed that all SPA sites their associated bird interest features within the inshore and offshore plan boundaries and within the 100km buffer could use the Plan area and therefore they were screened in.

The next stage was 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 which might be affected. It is known that most birds typically forage within 100km of breeding sites and these will therefore already be included. However, those species that forage over greater distances and could be affected even though they lie outside the 100km screening buffer zone were identified based on a recent detailed literature review (ABPmer 2013). This list of species (and the maximum recorded distances that they forage) are as follows:

- Atlantic Puffin (200km, Thaxter et al, 2012);
- Black-legged Kittiwake (200km, Birdlife International, 2010);
- Common Guillemot (200km, Birdlife International, 2010);
- Great Skua (219km, Thaxter et al, 2012);
- Leach's Storm Petrel (120km, Thaxter et al, 2012);
- Manx Shearwater (400km, Birdlife International, 2010);
- Northern Fulmar (400km, Birdlife International, 2010);
- Northern Gannet (400km, Birdlife International, 2010); and
- Razorbill (312 km FAME project; ABPmer, 2012).

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[8]. Therefore, it was agreed in consultation with NE and JNCC (and again adhering to approaches taken for past Plan-level HRA examples) that no judgement of foraging direction would be assumed and that all designated sites which support these qualifying species and lie within the distances of their respective maximum foraging range should be screened in irrespective of direction. This means that a number of sites further north along the east coast are screened in but it also means that Irish Sea sites are also included. It is recognised that there is low likelihood of birds foraging in large numbers across the country from the Irish Sea to the North Sea but in the absence of further information, and in keeping with the precautionary approach that must be adopted, it was agreed that these should be screened in. The seabird screening maps showing the relevant SPAs and Ramsar sites are presented in Figures 4a to 4f.

In this context, it is of note that a review of bird foraging distances around the east coast of England was undertaken by the MMO as part of the Marine Plan development process. This study considered the foraging ranges of interest feature bird species from SPAs within and around the Marine Plan area. The foraging ranges were then combined to produce a density map describing how many foraging ranges overlapped in each cell of a 5x5km base grid. The results of this work are illustrated in Image 2. This map indicates how the majority of bird feeding is occurring within the inshore waters. This is entirely to be expected but it is recognised that this is a theoretical review and further work would need to be carried out (and is being undertaken through initiatives such as the FAME project) to understand the interactions between inshore and offshore feeding areas and the bird populations within designated sites.

As part of this screening review, transnational sites were not included (based again of precedents from past marine HRAs). This is on the basis that, having included all the bird qualifying features affected across the defined 100km boundary, and beyond in some cases, there is not expected to be any additional effect to birds in sites in other Member States. The only exception would be where there are bird qualifying species within Member States sites that could migrate internationally through the 100km area but which would be also be a qualifying species for sites in the UK. There are not expected to be any such species that have not already been captured by the above process.

[8] The recent FAME (Future of the Atlantic Marine Environment) studies are providing a lot of new and useful data on this issue

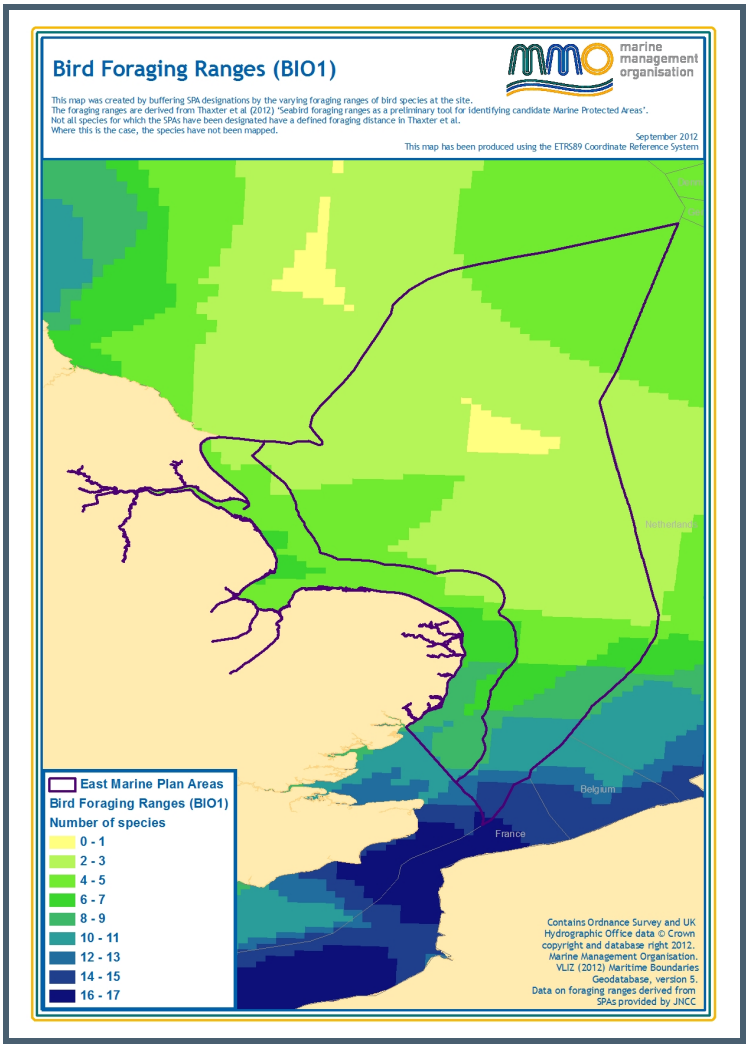


Image 2: Bird foraging radii dataset made by the MMO using a method agreed by the JNCC[9]

Marine Mammals (Cetaceans and Seals)

For this HRA it was necessary to consider the effects on grey seal (*Halichoerus grypus*), common seal (*Phoca vitulina)*, harbour porpoise (*Phocoena phocoena*) and bottlenose dolphin (*Tursiops truncatus*). These are the four species which are qualifying interest features of UK SACs and of SACs in other EU member states bordering the North Sea and English Channel.

These cetacean and seal species forage and migrate throughout much of the England's east coast waters and are susceptible to impacts from noise and collision risk. The initial approach taken for the screening of these marine mammal species was to base it on the 100km buffer zone used here for pre-screening and to retain all sites supporting these interest features that lie within that boundary. This results in two UK locations being screened in. These are the Humber Estuary SAC and Ramsar and the Wash and North Norfolk SAC and Ramsar which respectively have grey seal and common seal as qualifying species (see Figure 5a).

[9] Datasets used: Natura 2000 spatial and tabular data obtained from www.eea.europa.eu/dataand-maps/data/natura-2; Bird foraging ranges derived from seabird foraging ranges as a preliminary tool for identifying candidate marine protected areas (2012) Thaxter et al, provided by Joint Nature Conservation Committee (JNCC)/Natural England; 'SPA information including information from the SPA review', provided by JNCC; and A 5x5km grid generated using ET Geowizards based on the extent of the UK continental shelf buffered by 100 nautical miles.

No additional sites supporting seal populations were 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 (based on a range of satellite-tracking studies) and, while they can certainly move over distances of greater than 100km (especially grey seals) they generally stay close to the coast and within 75km (ABPmer 2011). Therefore, movements over 100km are not sufficiently frequent to warrant screening in the more distant locations.

There are no UK sites supporting cetacean species (bottlenose dolphin and harbour porpoise) within the 100km buffer area but 11 transnational sites that are present (in France, Belgium, the Netherlands and Germany). As these species migrate and forage over much larger distances and it was necessary to go beyond this buffer area to screen in the more distant designated sites. It was agreed, in consultation with NE and JNCC, that the sites around the North Sea and in the English Channel should be screened in. This excludes the west coast of the UK and therefore the one UK site (Skerries and Causeway SAC in Northern Ireland) that supports harbour porpoise is not screened in. Instead this process now includes more transnational sites that have bottlenose dolphin and harbour porpoise as interest features and also includes the one UK site on the east coast (the Moray Firth SAC) where bottlenose dolphin is a qualify species. This Moray Firth population is primarily confined to the 'NS' management unit area that is shown Image 3. This extends south as far as the Northumberland coast but does not reach the Marine Plan area. However, on a precautionary basis this site was 'screened in' in this case.

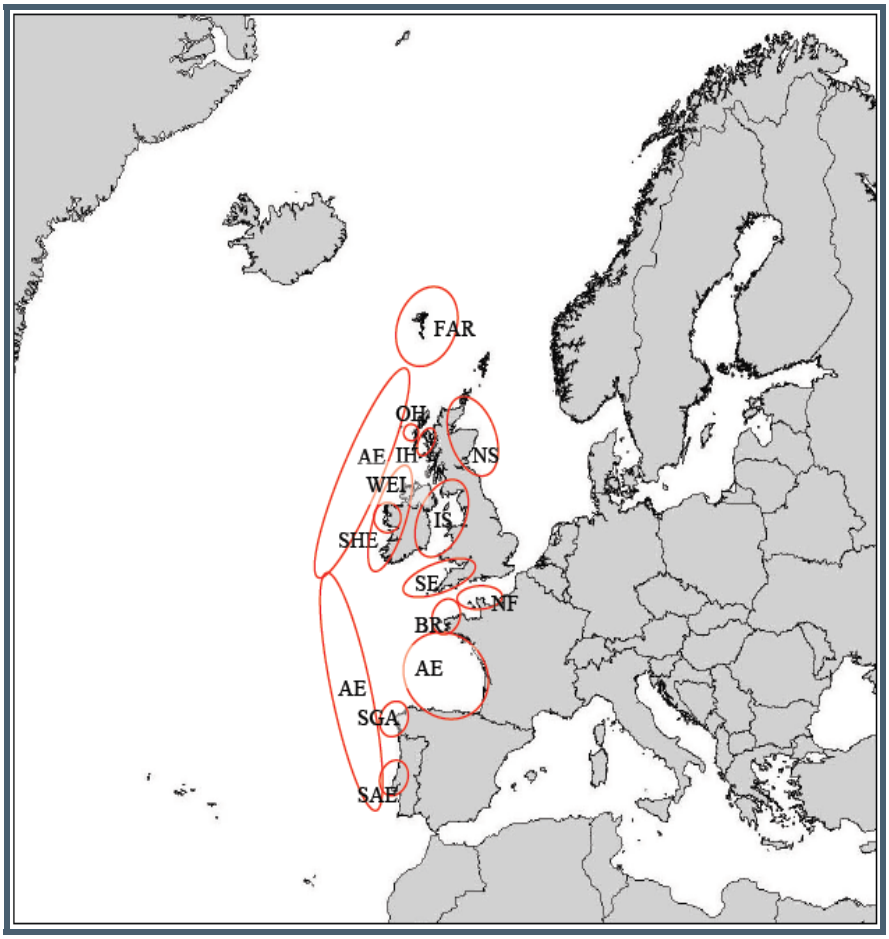


Image 3: Management units for Bottlenose Dolphin (in the ASCOBANS Agreement Area) (Source: Evans & Teilmann, 2009)

Based on this precautionary approach other sites supporting bottlenose dolphin were also screened in across the North Sea and English Channel area. The approach taken was to define a single 'management area' and include all designated sites within that zone for which either bottlenose dolphin or harbour porpoise are a feature. In general harbour porpoise is more wide ranging and it is known, for instance, from tagging work that individuals move from the Skagerrak across the North Sea (Teilmann et al., 2008). The MMO has also reviewed the harbour porpoise distributions in the Marine Plan area based on results of the JNCC's Joint Cetacean protocol project. These distributions are mapped in Image 4. These show how the Marine Plan area is used by this species but it is recognised that further strategic work would be required to understand the spatial distributions in greater detail (the areas of high density identified in Image 4 are likely to represent areas where specific investigations, and greater number of surveys, have been undertaken).

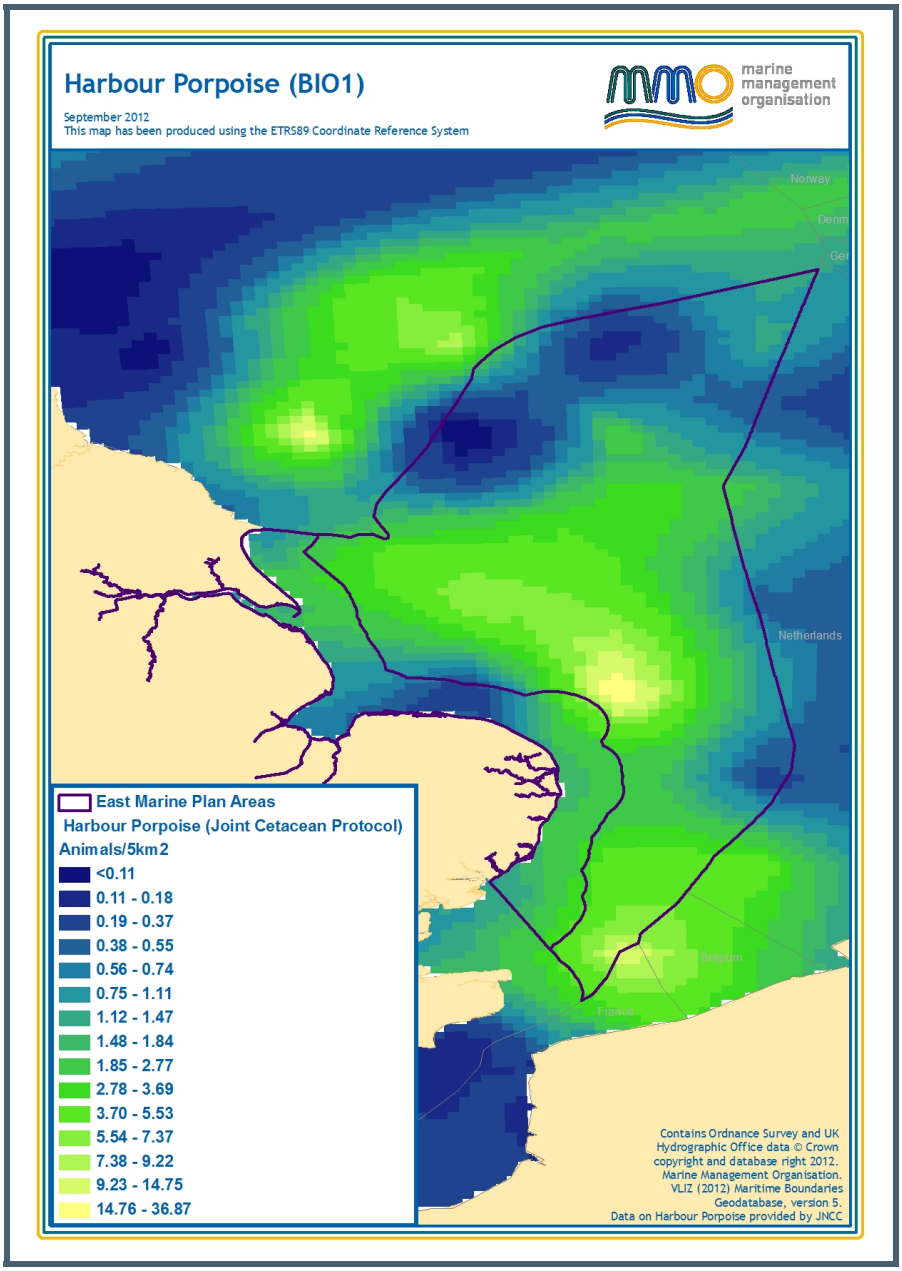


Image 4: Density of Harbour Porpoise in the Marine Plan area (from Joint Cetacean protocol)

On this evidence, and advice from JNCC, it was concluded that any designated sites surrounding the North Sea (including Skagerrak, North Sea, Channel) within approximately 600km of the Marine Plan boundaries[10] needed to be screened in. The precise area was defined based on the SCANS-II survey areas labelled B, H, J, L, P, S, T, U, V and Y (SCANS-II, 2008). These survey areas and the sites that were screened in within these zones (including the UK's Moray Firth Site which has Bottlenose Dolphin as a qualifying feature) are illustrated in Figure 5b. Within this area there are 39 relevant designated sites for which harbour porpoise is a qualifying interest feature species and 15 designated sites for which bottlenose dolphin is a feature. The screening results are also shown in Table 1 and 2 for UK and transnational sites respectively. The transnational sites have been screened in are also separately shown in Table 3.

Marine Mammals (Otter)

Otters will be vulnerable to the loss of their shelters (including those on the shoreline) and to loss of habitat which, in turn, can leave them more exposed to disturbance effects. Therefore, habitat damage and disturbance are interlinked factors, and both the impacts from visual disturbance (from vessels and other activities during survey work, construction, maintenance and decommissioning) and the presence of operational structures or visiting vessels (which could result in collision and/or mortality) need to be considered.

At the pre-screening stage, all SACs were included that support otter populations as interest features and which were located within the East of England Marine Plans areas and the 100km buffer zone surrounding them. At Phase 1 of the screening those SACs that lie inland were screened out because they are not going to be affected by the Plan policies. No further revisions were made to this list during Phase 2 because of the uncertainties associated with the location of potential developments, devices and cabling which means that a LSE cannot be ruled out for any site. Therefore all coastal sites identified at pre-screening must be included in the assessment.

The distances offshore that foraging occurs are unclear but are unlikely to be beyond water depths of greater than 10m (the depth at which they are identified as being at risk of entanglement in pots/creels). Also while otter 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, 2010) suggests that distances of 200-250m are appropriate.

Based on past advice and previous HRA approaches (for OWE and PFSA, ABPmer, 2010 and 2011) a 10km boundary was used to represent an appropriate buffer distances beyond which a plan or project would be unlikely to have a significant effect.

This results in the inclusion of the Wash and North Norfolk SAC and Ramsar, the Broadland Ramsar and the Braids SAC and Ramsar sites. These sites are indicated in the screening Table 1 and the otter screening maps are presented in Figure 5c.

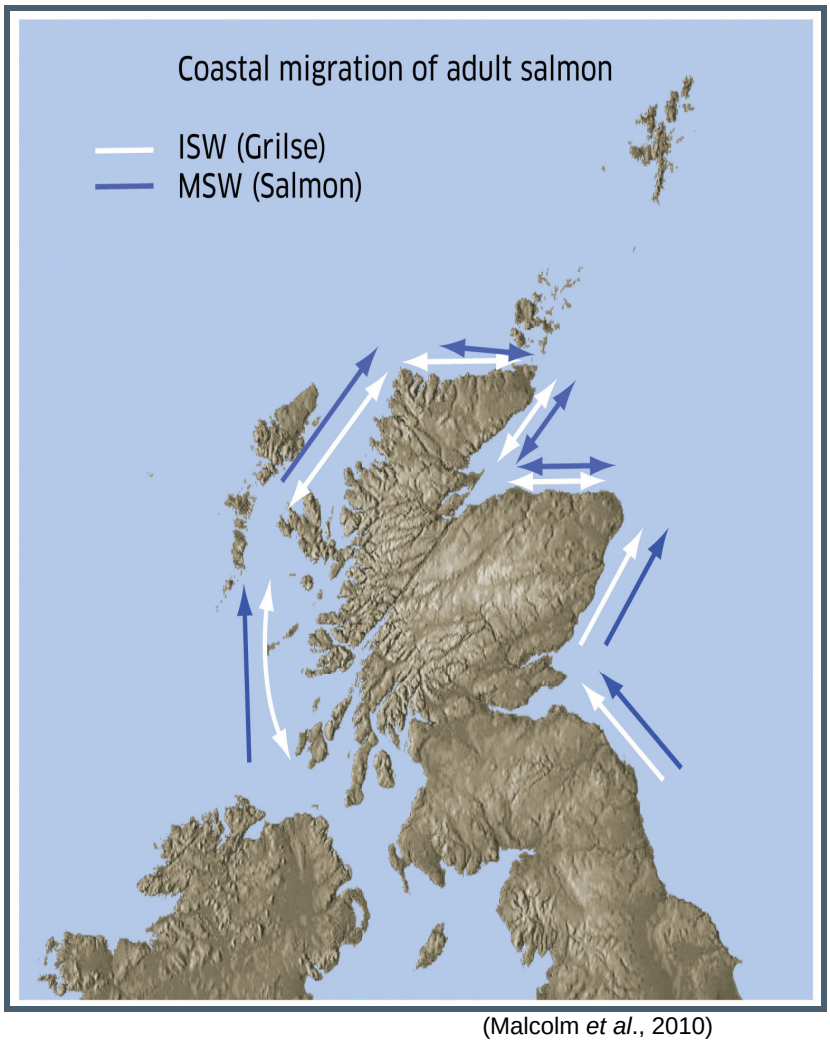
[10] For the R3OWF HRA (Entec 2009) a much broader extent was identified which extended down to northern Portugal but the boundary encompassing the North Sea and English Channel is considered to be more appropriate and likely to encompass all of the populations that are likely to migrate and forage through the Marine Plan areas

Anadromous Fish (and Freshwater Pearl Mussel)

Anadromous fish (i.e. those which live mainly at sea but spawn in freshwater) will be susceptible to impacts from construction noise during coastal and offshore migrations. They may also be susceptible to underwater collision risk from any wave and tidal energy developments.

For the initial pre-screening, all sites supporting Anadromous fish as an interest feature were screened in across the 100km area surrounding the onshore and offshore plans. Based on the latest understanding about fish migration patterns around the east coast of Scotland (Malcolm 2010) it is clear that fish can migrate up the east coast through the Marine Plan area into Scottish waters up to the Aberdeenshire area (see Image 5). On this evidence the SACs for anadromous fish in south east Scotland (which lie outside of the 100km buffer zone) have been screened in.

In addition, those designated sites with freshwater pearl mussel as a qualifying feature were also added. This is because, while this is a sessile freshwater species, it relies on the anadromous Atlantic Salmon for dispersion during its larval phases and, therefore, any major declines in Atlantic Salmon populations (the impact pathways for anadromous fish being relevant) could translate to an indirect effect on this species also. The screening map showing these sites is presented in Figure 6 and these designated sites are included in the screening list in Table 1.



(Malcolm *et al*., 2010)

Image 5: Dominant directions of travel for Atlantic salmon in Scottish coastal waters

Bats

Bats are considered vulnerable to some marine activities if they move from designated sites over the sea, as this could bring individuals into possible wind farm areas and thus put them at risk of collision with turbine blades and the air pressure flows around them.

There are five species of bat listed in Annex I of the Habitats Directive, of which four are present in the UK and only one species is an interest feature of sites within the 100km boundary of the East of England Marine Plans. This is the Barbastelle bat (*Barbastella barbastellus*) and is present at two designated sites (see Table 1) within the pre-screening list.

Barbastelle bat is a fairly sedentary species with its foraging area typically around 8.8ha and a single individual will hunt in up to 10 core sites in a single night. 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). On this basis any sites further than 50km from the coast will have been screened out of the HRA.

There is one coastal site within 50km of the coast (Paston Great Barn SAC) and therefore this site been screened in (no sites beyond the 100km area have been added). The bat species screening maps for the assessment showing the one relevant SAC and Ramsar sites is presented in Figure 7.

3.2.3 Phase 3 – Review Activities Influenced by the Plans

The policy review that was presented in Section 2 sets out the key principles and issues that are pertinent to this HRA as informed by available guidance and developed through consultation. Based on these principles, a policy screening and assessment framework was developed and is shown in flow diagram form in Figure 8. This first part of this flow diagram describes the approach that was taken to screen the 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 are asked sequentially:

- **Screening Criteria 1**: Is the policy general or 'criteria-based' such that it has no specific spatially-definable implications for activities (i.e. it doesn't direct, influence or clarify the nature and location of activities) within the Marine Plan area?

- **Screening Criteria 2**: Has the policy been subject to previous Habitats Regulations Appraisal (e.g. encapsulated with a Sectoral Plan such as the Round 3 Offshore Windfarm)?

- **Screening Criteria 3**: Does the Policy change what was previously assessed or bring greater clarity to elements such as the location of cable alignments or landfalls?

The results of this process are shown in Table 3 which presents the full list of 55 Marine Plan Polices, and highlights those that have been screened in and out. The majority of the policies have been screened out and do not require assessment, because they are 'criteria-based' polices for which there is no specific and spatially-definable understanding of the activities that will arise at this time. A number of other policies identify a clear spatially-definable preference for distinct sectoral activities that already have HRAs in place (e.g. the Round 3 Offshore Windfarms).

Of the remaining polices, the following four are screened in because they identify discrete areas where distinct activities will, or may take place as a consequence of the Marine Plan (but for which no Sectoral HRA has been undertaken). These are as follows (see Table 3 for full policy text):

- Carbon Capture and Storage Sector 'CCS1';
- Tidal Energy Generation Sector Policy 'TIDE1';
- Aggregates Extraction Sector Policy 'AGG1'; and
- Aggregates Extraction Sector Policy 'AGG2'.

Each of these areas have been mapped and presented within the Draft Plans. These mapped areas will be presented within the Appropriate Assessment Information document and will underpin the impact evaluation. Further details about the approach that will be taken to assess the impacts of these policies (on the relevant interest features and designated sites that are listed in Table 2) are presented in the following section.

3.3 Summary and Proposed Next Stage (Assessment)

Following this screening process, a long list of national and transnational[11] designated sites and their accompanying interest features have been screened into the AA process. From the original list of 270 sites identified pre-screening, a revised total of 182 sites were screened in for consideration at the AA stage. These include: 59 SPAs (14 of which lay beyond the 100km buffer), 92 SACs, cSACs and SCIs (55 of which lay beyond the 100km buffer) and 31 Ramsar sites.

The impacts to these features from the four relevant Marine Plan policies will need to be assessed. The impacts of these policies will need to be assessed both on their own and in-combination with each other and with all spatially-definable policies irrespective of whether they have been previously subject to a Habitats Regulations Appraisal.

It is important to note that, at this stage no specific mitigation measures have been identified and applied as part of this screening process (see Stages 6 and 7 of the HRA process as shown in Diagram 1). Such measures will be identified and reviewed for the assessment work and, in particular, any mitigation measures that are needed to ensure that the Plan will not have an adverse effect on the integrity of any designated sites will be identified.

Even at this pre-assessment stage it is recognised that there will be inherent uncertainties about the project details and the impacts arising from the four screened in policies that will not be resolved fully at the assessment stage. This uncertainty applies especially to the in-combination effects of all 'spatially-definable policies'. 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 the Marine Plans (including an integrated research strategy and regular feedback to policy reviews). Stages 8 to 13 of the HRA process (as shown in Diagram 1) 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 8.

[11] Only for sites where for harbour porpoise and bottlenose dolphin is a qualifying feature.

For the preparation of the Appropriate Assessment information report (which is the next stage of the process) a series of impact matrices and maps will be prepared alongside explanatory impact assessment text. This process will be pursued in five discrete steps as follows:

- **Step 1: Impact Pathways Review** - Identification of the impact pathways that are relevant for each of the three relevant 'screened in' sectors (i.e. tidal energy generation, carbon capture storage, and aggregates extraction);

- **Step 2: Identify activities to which features are sensitive** - A review of the activities undertaken in each of the three sectors, and the environmental changes arising, which could have an impact of designated 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 effects on European/Ramsar sites** - Assessment of impacts via each of the activities across the three sectors that are influenced by the 'screened in' East Marine Plan policies 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 NAEOI.

These outputs will be designed to both inform the assessment of the Plan polices but also to provide a product that developers can draw upon for project-level HRA screening and assessment work.

During the assessment process there will be ongoing consultations with the key stakeholders regarding the appropriateness of the methodology being adopted, the value of the outputs being produced and the validity of the conclusion reached.

Table 1: The UK designated sites considered during the Screening Phase of the HRA (Screened in sites highlighted in green)

Please Note - this table was reviewed and updated during the subsequent Appropriate Assessment Information Review (AAIR) phase of the HRA process. See Appendix A of the final AAIR report (MMO 2012c) for the final versions of the screening and assessment tables which audit the full HRA process.

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
UK0030076	Alde, Ore and Butley Estuaries	SAC	Estuaries, mudflats and sandflats not covered by seawater at low tide, Atlantic salt meadows.	
UK0030142	Arnecliff and Park Hole Woods	SAC		Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles, Killarney fern *Trichomanes speciosum.*
UK0014778	Asby Complex	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*), Petrifying springs with tufa formation (*Cratoneurion*), Alkaline fens, Limestone pavements , Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp., European dry heaths, Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*, Geyer`s whorl snail *Vertigo geyeri*, Slender green feather-moss *Drepanocladus* (*Hamatocaulis*) *vernicosus.*
UK0030082	Aston Rowant	SAC		*Juniperus communis* formations on heaths or calcareous grasslands.
UK0030031	Barnack Hills and Holes	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).
UK0030085	Baston Fen	SAC		Spined loach *Cobitis taenia.*
UK0030086	Beast Cliff – Whitby (Robin Hood's Bay)	SAC	Vegetated sea cliffs of the Atlantic and Baltic coasts.	
UK0030087	Bee`s Nest and Green Clay Pits	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) and Great crested newt *Triturus cristatus*.
UK0013104	Benacre to Easton Bavents Lagoons	SAC	Coastal lagoons.	
UK0012740	Birklands and Bilhaugh	SAC		Old acidophilous oak woods with *Quercus robur* on sandy plains.
UK0013697	Blean Complex	SAC		Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betuli*.

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
UK0019865	Breckland	SAC		Inland dunes with open *Corynephorus* and *Agrostis* grasslands, Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation, European dry heaths, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, *Alnion incanae*, *Salicion albae*), Great crested newt *Triturus cristatus*.
UK0030034	Burnham Beeches	SAC		Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*).
UK0030106	Calf Hill and Cragg Woods	SAC		Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles and Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*).
UK0030107	Cannock Chase	SAC		European dry heaths and Northern Atlantic wet heaths with *Erica tetralix.*
UK0012672	Cannock Extension Canal	SAC		Floating water- plantain *Luronium natans.*
UK0012768	Castle Eden Dene	SAC		*Taxus baccata* woods of the British Isles.
UK0012724	Chilterns Beechwoods	SAC		*Asperulo-Fagetum* beech forests, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), Stag beetle *Lucanus cervus*.
UK0014776	Craven Limestone Complex	SAC		Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp., Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*), Active raised bogs, Petrifying springs with tufa formation (*Cratoneurion*), Alkaline fens, Limestone pavements, Calaminarian grasslands of the *Violetalia calaminariae*, *Tilio-Acerion* forests of slopes, screes and ravines, White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*, Bullhead *Cottus gobio*, Lady`s-slipper orchid *Cypripedium calceolus*.

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UK0030036	Denby Grange Colliery Ponds	SAC		Great crested newt *Triturus cristatus*.
UK0030037	Devil`s Dyke	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).
UK0030133	Dew's Ponds	SAC		Great crested newt *Triturus cristatus*.
UK0030330	Dover to Kingsdown Cliffs	SAC	Vegetated sea cliffs of the Atlantic and Baltic coasts.	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).
UK0013059	Dungeness	SAC	Annual vegetation of drift lines, Perennial vegetation of stony banks.	Great crested newt *Triturus cristatus*.
UK0030140	Durham Coast	SAC	Vegetated sea cliffs of the Atlantic and Baltic coasts.	
UK0030039	Eller's Wood and Sand Dale	SAC		Petrifying springs with tufa formation (*Cratoneurion*), Geyer's whorl snail *Vertigo geyeri*.
UK0012646	Ensor's Pool	SAC		White Clawed crayfish.
UK0012720	Epping Forest	SAC		Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*), Northern Atlantic wet heaths with *Erica tetralix*, European dry heaths, Stag beetle *Lucanus cervus*.
UK0013690	Essex Estuaries	SAC	Estuaries, mudflats and sandflats not covered by seawater at low tide, *Salicornia* and other annuals colonising mud and sand, *Spartina* swards (*Spartinion maritimae*), Atlantic salt meadows, Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*), Sandbanks which are slightly covered by sea water all the time.	
UK0030331	Eversden and Wimpole Woods	SAC		Barbastelle *Barbastella barbastellus*.
UK0030332	Fen Bog	SAC		Transition mires and quaking bogs.
UK0014782	Fenland	SAC		*Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*), Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*, Spined loach *Cobitis taenia*, Great crested newt *Triturus cristatus*.
UK0013036	Flamborough Head	SAC	Reefs, Vegetated sea cliffs of the Atlantic and Baltic coasts, Submerged or partially submerged sea caves.	
UK0012835	Folkestone to Etchinghill Escarpment	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).

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UK0012817	Gang Mine	SAC		Calaminarian grasslands of the *Violetalia calaminariae*.
UK0030043	Grimsthorpe	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), Early gentian *Gentianella anglica*.
UK0030165	Hastings Cliffs	SAC	Vegetated sea cliffs of the Atlantic and Baltic coasts.	
UK0030166	Hatfield Moor	SAC		Degraded raised bogs still capable of natural regeneration.
UK0030170	Humber Estuary	SAC	Estuaries, mudflats and sandflats not covered by seawater at low tide, sandbanks which are slightly covered by seawater all the time, coastal lagoons, *Salicornia* and other annuals colonising mud and sand, Atlantic salt meadows, Embryonic shifting dunes, Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"), fixed dunes with herbaceous vegetation ("grey dunes"), dunes with *Hippophae rhamnoides*, Sea lamprey *Petromyzon marinus*, River lamprey *Lampetra fluviatilis*, Grey seal *Halichoerus grypus*.	
UK0012782	Ingleborough Complex	SAC		*Juniperus communis* formations on heaths or calcareous grasslands, Alkaline fens, Calcareous rocky slopes with chasmophytic vegetation, Limestone pavements, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*), Blanket bogs, Petrifying springs with tufa formation (*Cratoneurion*), *Tilio-Acerion* forests of slopes, screes and ravines.
UK0030178	Kirk Deighton	SAC		Great crested newt *Triturus cristatus*.
UK0012844	Lower Derwent Valley	SAC		Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*), Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, *Alnion incanae*, *Salicion albae*), Otter *Lutra lutra*.
UK0012834	Lydden and Temple Ewell Downs	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).

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UK0030200	Manchester Mosses	SAC		Degraded raised bogs still capable of natural regeneration.
UK0012809	Minsmere to Walberswick Heaths and Marshes	SAC	Annual vegetation of drift lines.	European dry heaths, Perennial vegetation of stony banks.
UK0030222	Nene Washes	SAC		Spined loach *Cobitis taenia*.
UK0012892	Norfolk Valley Fens	SAC		Alkaline fens, Northern Atlantic wet heaths with *Erica tetralix*, European dry heaths, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*), Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*, Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*), Narrow-mouthed whorl snail *Vertigo angustior*, Desmoulin's whorl snail *Vertigo moulinsiana*.
UK0030225	North Downs Woodlands	SAC		*Asperulo-Fagetum* beech forests, *Taxus baccata* woods of the British Isles, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).
UK0019838	North Norfolk Coast	SAC	Coastal lagoons, Perennial vegetation of stony banks, Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*), Embryonic shifting dunes, Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”), Fixed dunes with herbaceous vegetation (“grey dunes”), Humid dune slacks, Otter *Lutra lutra.*	Petalwort *Petalophyllum ralfsii*.
UK0014775	North Pennine Dales Meadows	SAC		Mountain hay meadows, *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*).
UK0030033	North Pennine Moors	SAC		European dry heaths, *Juniperus communis* formations on heaths or calcareous grasslands, Blanket bogs, Petrifying springs with tufa formation (*Cratoneurion*), Siliceous rocky slopes with chasmophytic vegetation, Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles, Northern Atlantic wet heaths with *Erica*

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				tetralix, Calaminarian grasslands of the *Violetalia calaminariae*, Siliceous alpine and boreal grasslands, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), Alkaline fens, Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsietalia ladani*), Calcareous rocky slopes with chasmophytic vegetation, Marsh saxifrage *Saxifraga hirculus*.
UK0030228	North York Moors	SAC		Northern Atlantic wet heaths with *Erica tetralix*, European dry heaths, Blanket bogs.
UK0014780	Orfordness – Shingle Street	SAC	Coastal lagoons, Annual vegetation of drift lines, Perennial vegetation of stony banks.	
UK0030053	Orton Pit	SAC		Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp., Great crested newt *Triturus cristatus*.
UK0013011	Ouse Washes	SAC		Spined loach *Cobitis taenia*.
UK0030232	Overstrand Cliffs	SAC	Vegetated sea cliffs of the Atlantic and Baltic coasts.	
UK0030234	Ox Close	SAC		Calaminarian grasslands of the *Violetalia calaminariae*, Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), *Tilio-Acerion* forests of slopes, screes and ravines.
UK0030338	Parkgate Down	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).
UK0030235	Paston Great Barn	SAC	Barbastelle *Barbastella barbastellus*.	
UK0019859	Peak District Dales	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*), *Tilio-Acerion* forests of slopes, screes and ravines, European dry heaths, Calaminarian grasslands of the *Violetalia calaminariae*, Alkaline fens, Calcareous and calcshist screes of the montane to alpine levels (*Thlaspietea rotundifolii*), Calcareous rocky slopes with chasmophytic vegetation, White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*, Bullhead *Cottus gobio*, Brook lamprey *Lampetra planeri.*

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UK0012789	Pasturefields Saltmarsh	SAC		Inland salt meadows.
UK0030237	Peter's Pit	SAC		Great crested newt *Triturus cristatus*.
UK0030054	Portholme	SAC		Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*).
UK0012833	Queendown Warren	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).
UK0019866	Rex Graham Reserve	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).
UK0030246	Richmond Park	SAC		Stag beetle *Lucanus cervus.*
UK0030253	River Derwent	SAC	River lamprey *Lampetra fluviatilis*, Sea lamprey *Petromyzon marinus*.	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation, Bullhead *Cottus gobio*, Otter *Lutra lutra*.
UK0012643	River Eden	SAC		River lamprey *Lampetra fluviatilis*, Sea lamprey *Petromyzon marinus*, Atlantic salmon *Salmo salar*, Otter *Lutra lutra*, Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*, Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation, Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*), White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*, Bullhead *Cottus gobio*, Brook lamprey *Lampetra planeri*.
UK0030258	River Mease	SAC		Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation, Spined loach *Cobitis taenia*, Bullhead *Cottus gobio*, White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*, Otter *Lutra lutra*.
UK0012647	River Wensum	SAC		Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation, White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*, Desmoulin's whorl snail *Vertigo moulinsiana*, Bullhead *Cottus gobio*, Brook lamprey *Lampetra planeri.*

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UK0030264	Rixton Clay Pits	SAC		Great crested newt *Triturus cristatus.*
UK0030266	Rochdale Canal	SAC		Floating water-plantain *Luronium natans.*
UK0012801	Roydon Common and Dersingham Bog	SAC		Northern Atlantic wet heaths with *Erica tetralix*, Depressions on peat substrates of the *Rhynchosporion*, European dry heaths.
UK0030270	Saltfleetby–Theddlethorpe Dunes and Gibraltar Point	SAC	Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”), Fixed dunes with herbaceous vegetation (“grey dunes”), Dunes with *Hippophae rhamnoides*, Humid dune slacks, Embryonic shifting dunes.	
UK0013077	Sandwich Bay	SAC	Embryonic shifting dunes, Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”), Fixed dunes with herbaceous vegetation (“grey dunes”), Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*), Humid dune slacks.	
UK0030276	Skipwith Common	SAC		Northern Atlantic wet heaths with *Erica tetralix*, European dry heaths.
UK0030280	South Pennine Moors	SAC		European dry heaths, Blanket bogs, Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles, Northern Atlantic wet heaths with *Erica tetralix*, Transition mires and quaking bogs.
UK0012741	Staverton Park and The Thicks, Wantisden	SAC		Old acidophilous oak woods with *Quercus robur* on sandy plains.
UK0030283	Stodmarsh	SAC		Desmoulin's whorl snail *Vertigo moulinsiana*.
UK0030284	Strensall Common	SAC		Northern Atlantic wet heaths with *Erica tetralix*, European dry heaths.
UK0013107	Thanet Coast	SAC	Reefs, Submerged or partially submerged sea caves.	
UK0013577	The Broads	SAC		Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp., Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation, Transition mires and quaking bogs, Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*, Alkaline fens, Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*), *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion*

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				caeruleae), Desmoulin's whorl snail *Vertigo moulinsiana*, Fen orchid *Liparis loeselii*, Ramshorn snail *Anisus vorticulus*, Otter *Lutra lutra*.
UK0017075	The Wash and North Norfolk Coast	SAC	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, Reefs, *Salicornia* and other annuals colonising mud and sand, Atlantic salt meadows *(Glauco-Puccinellietalia maritimae*), Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*), Coastal lagoons, Common seal *Phoca vitulina*, Otter *Lutra lutra*.	
UK0012915	Thorne Moor	SAC		Degraded raised bogs still capable of natural regeneration.
UK0012838	Thrislington	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).
UK0012882	Waveney and Little Ouse Valley Fens	SAC		*Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*), Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*, Desmoulin's whorl snail *Vertigo moulinsiana*.
UK0013595	West midland Mosses	SAC		Natural dystrophic lakes and ponds and transition mires and quaking bogs.
UK0013043	Winterton – Horsey Dunes	SAC	Atlantic decalcified fixed dunes (*Calluno-Ulicetea*), Humid dune slacks, Embryonic shifting dunes, Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”).	
UK0013696	Wormley Hoddesdonpark Woods	SAC		Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betuli*.
UK0012831	Wye and Crundale Downs	SAC		Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*).
UK0030352	Dogger Bank	cSAC	Sandbanks which are slightly covered by sea water all the time.	
UK0030369	Haisborough, Hammond and Winterton	cSAC	Sandbanks which are slightly covered by sea water all the time, Reefs.	
UK0030370	Inner Dowsing, Race Bank and North Ridge	cSAC	Sandbanks which are slightly covered by sea water all the time, Reefs.	

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UK0030371	Margate and Long Sands	cSAC	Sandbanks which are slightly covered by sea water all the time.	
UK0030358	North Norfolk Sandbanks and Saturn Reef	cSAC	Sandbanks which are slightly covered by sea water all the time, Reefs.	
UK9009141	Abberton Reservoir	SPA	Wintering populations of Northen Shoveler, Eurasian Teal, Eurasian Wigeon, Gadwall, Pochard, Tufted Duck, Common Goldeneye, Mute Swan, Coot and Great Crested Grebe, supports 39,763 waterfowl. Breeding population of Great Cormorant.	
UK9009112	Alde-Ore Estuary	SPA	Breeding populations of Pied Avocet, Little Tern, Sandwich Tern and Lesser Black-backed Gull. Wintering populations of Ruff, Pied Avocet and Redshank.	Breeding Marsh Harrier.
UK9009291	Benacre to Easton Bavents	SPA	Breeding populations of Bittern and Little Tern.	Breeding Marsh Harrier.
UK9009171	Benfleet and Southend Marshes	SPA	Wintering populations of Dark-bellied Brent Goose, Dunlin, Knot, Ringed Plover and Grey Plover, supports 34,789 waterfowl.	
UK9009245	Blackwater Estuary (Mid-Essex Coast Phase 4)	SPA	Breeding populations of Common Pochard, Ringed Plover and Little Tern. Wintering populations of Dark-bellied Brent Goose, Ringed Plover, Dunlin, Black-tailed Godwit and Grey Plover, supports 109,964 waterfowl. Wintering populations of Hen Harrier.	
UK9005151	Bowland Fells	SPA	Breeding populations of Lesser black-backed gull.	Breeding populations of Hen Harrier and Marlin.
UK9009201	Breckland	SPA		Breeding populations of Stone Curlew, European Nightjar and Woodlark.
UK9009181	Breydon Water	SPA	Wintering populations of Bewick's Swan, Golden Plover, Pied Avocet and Northen Lapwing, supports 43,225 waterfowl. Breeding population of Common Tern. Populations of Ruff on passage.	
UK9009253	Broadland	SPA	Wintering populations of Bewick's Swan, Whooper Swan, Hen harrier and Gadwall. Breeding populations of Eurasian Bittern.	Breeding populations of Marsh Harrier.
UK9009243	Colne Estuary (Mid-Essex Coast Phase 2)	SPA	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.	

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UK9009244	Crouch & Roach Estuaries (Mid-Essex Coast Phase 3)	SPA	Wintering populations of Dark-bellied Brent Goose and Hen Harrier, supports 18,607 waterfowl.	
UK9009261	Deben Estuary	SPA	Wintering populations of Dark-bellied Brent Goose and Pied Avocet.	
UK9009242	Dengie (Mid-Essex Coast Phase 1)	SPA	Wintering populations of Dark-bellied Brent Goose, Grey Plover, Hen Harrier and Knot, supports 31,454 waterfowl.	
UK9012091	Dungeness to Pett Level	SPA	Wintering population of Northern Shoveler and Bewick's Swan. Breeding population of Mediterranean Gull, Little Tern and Common Tern.	
UK9006101	Flamborough Head & Bempton Cliffs	SPA	Breeding population of Black Legged Kittiwake.	
UK9009246	Foulness (Mid-Essex Coast Phase 5)	SPA	Wintering populations of Bar-tailed Godwit, Pied Avocet, Dark-bellied Brent Goose, Knot, Eurasian Oystercatcher, Grey Plover, Hen Harrier and Redshank, supports 107,999 waterfowl. Breeding populations of Ringed Plover, Pied Avocet, Little Tern, Common Tern and Sandwich Tern.	
UK9008022	Gibraltar Point	SPA	Wintering population of Sanderling, Bar-tailed Godwit and Grey Plover. Breeding population of Little Tern.	
UK9009271	Great Yarmouth North Denes	SPA	Breeding population of Little Tern.	
UK9009131	Hamford Water	SPA	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.	
UK9006171	Hornsea Mere	SPA	Wintering population of Gadwall. Breeding population of Mute Swan.	
UK9006111	Humber Estuary	SPA	Wintering populations of Eurasian Bittern, Hen Harrier, Bar-tailed Godwit, Golden Plover, Pied Avocet, Dunlin, Black-tailed Godwit, Shelduck, and Redshank. Breeding populations of Eurasian Bittern, Pied Avocet and Little Tern. Migrating populations of Ruff, Dunlin, Knot, Black-tailed Godwit, and Redshank. Non-breeding assemblage of 153,934 waterfowl.	Breeding populations of Marsh Harrier.
UK9012111	Lee Valley	SPA	Wintering populations of Eurasian Bittern, Northern Shoveler and Gadwell.	

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UK9006092	Lower Derwent Valley	SPA	Wintering populations of Bewick's Swan, Ruff, Eurasian Teal, Eurasian Wigeon and Golden Plover, supports 40,616 waterfowl. Breeding population of Northern Shoveler.	
UK9012031	Medway Estuary & Marshes	SPA	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.	
UK9009101	Minsmere-Walberswick	SPA	Breeding populations of Eurasian Bittern, Pied Avocet, Little Tern, Northern Shoveler, Eurasian Teal, and Gadwall.Wintering populations of Northern Shoveler, Gadwall, Hen Harrier and Greater White-fronted Goose.	Breeding populations of European Nightjar and Marsh Harrier.
UK9008031	Nene Washes	SPA	Wintering populations of Bewick's Swan, Northern Pintail, Northern Shoveler, Eurasian Teal, Eurasian Wigeon and Gadwall. Breeding populations of Northern Shoveler, Garganey, Gadwall, and Black-tailed Godwit.	
UK9009031	North Norfolk Coast	SPA	Breeding populations of Eurasian Bittern, Pied Avocet, Little Tern, Common tern and Sandwich Tern. Wintering populations of Pied Avocet, Eurasian Wigeon, Pink-footed Goose, Dark-bellied Brent Goose, Knot, supports 91,536 waterfowl.	Breeding populations of Marsh Harrier.
UK9006272	North Pennine Moors	SPA	Breeding population of European Golden Plover.	Breeding populations of Northern Harrier, Merlin and Peregrine Falcon.
UK9006161	North York Moors	SPA	Breeding population of European Golden Plover.	Breeding populations of Merlin.
UK9006131	Northumbria Coast	SPA	Wintering populations of Ruddy Turnstone and Purple Sandpiper. Breeding populations of Little Tern.	
UK9008041	Ouse Washes	SPA	Wintering populations of Bewick's Swan, Whooper Swan, Ruff, Northern Pintail, Northern Shoveler, Eurasian Teal, Eurasian Wigeon, Gadwall, Common Pochard, Tufted Duck, Mute Swan, Hen Harrier, Coot,	

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			Great Cormorant, supports 64,428 waterfowl. Breeding populations of Northern Shoveler, Mallard, Garganey, Gadwall and Black-tailed Godwit, and an internationally important assemblage of breeding waterfowl.	
UK9020309	Outer Thames Estuary	SPA	Wintering population of Red-throated Diver.	
UK9007021	Peak District Moors (South Pennine Moors Phase 1)	SPA	Breeding population of European Golden Plover.	Breeding populations of Short-eared Owl and Merlin
UK9008051	Rutland Water	SPA	Wintering populations of Northern Shoveller, Eurasian Teal, Eurasian Wigeon, Gadwell, Tufted Duck, Common Goldeneye, Mute Swan, Eurasian Coot, Goosander and Great Crested Grebe, supports 25,037 waterfowl.	
UK9020286	Sandlings	SPA		Breeding populations of European Nightjar and Woodlark.
UK9007022	South Pennine Moors Phase 2	SPA	Supports an internationally important overwintering assemblage of waterfowl. Breeding population of European Golden Plover.	Breeding populations of Short-eared Owl and Merlin.
UK9012121	Stodmarsh	SPA	Wintering populations of Eurasian Bittern, Northern Shoveler, Hen Harrier and Gadwall. Breeding populations of Gadwall, and an internationally important assemblage of breeding waterfowl.	
UK9009121	Stour and Orwell Estuaries	SPA	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.	
UK9006061	Teesmouth & Cleveland Coast	SPA	Breeding population of Little Tern.Populations of Sandwich Tern and Redshank on passage. Wintering population of Knot, supports 21,312 waterfowl.	
UK9012021	Thames Estuary & Marshes	SPA	Wintering populations of Pied Avocet, Dunlin, Knot, Black-tailed Godwit, Grey Plover, Redshank and Hen Harrier, supports 75,019 waterfowl. Population of Ringed Plover on passage.	
UK9012071	Thanet Coast & Sandwich Bay	SPA	Breeding population of Little Tern. Wintering populations of Ruddy Turnstone. Wintering populations of Golden Plover	

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UK9012011	The Swale	SPA	Wintering populations of Dark-bellied Brent Goose, Dunlin, Redshank, supports 65,588 waterfowl. Internationally important assemblage of breeding waterfowl.	
UK9008021	The Wash	SPA	Breeding populations of Little Tern and Common Tern. Wintering populations of Bewick's Swan, Bar-tailed Godwit, Northern Pintail, Eurasian Wigeon, Gadwall, Pink-footed Goose, Ruddy Turnstone, Dark-bellied Brent Goose, Common Goldeneye, Sanderling, Dunlin, Knot, Oystercatcher, Black-tailed Godwit, Common Scoter, Eurasian Curlew, Grey Plover, Common Shelduck, Redshank, supports 400,367 waterfowl.	
UK9005171	Thorne & Hatfield Moors	SPA		Breeding population of European Nightjar.
UK9020296	Upper Nene Valley Gravel Pits	SPA	Breeding populations of Eurasian Bittern, Gadwell and Golden Plover, supports 23,821 waterfowl.	
UK11001	Abberton Reservoir	Ramsar	Ramsar Criterion 5 - site supports a winter population of 23,787 waterfowl. Ramsar Criterion 6 - Spring/autumn populations of Gadwall and Northern 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.	
UK11002	Alde-Ore Estuary	Ramsar	Ramsar Criterion 3 - Site supports a notable assemblage of breeding and wintering wetland birds. Ramsar Criterion 6 - Site supports a breeding population of Lesser Black-backed Gull and wintering populations of Pied Avocet and Common Redshank.	Ramsar Criterion 2 - Site supports nationally scare plants and invertebrates.
UK11006	Benfleet and Southend Marshes	Ramsar	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.	

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
UK11007	Blackwater Estuary (Mid-Essex Coast Phase 4)	Ramsar	Ramsar Criterion 1 - Qualifies by virtue of the extent and diversity of saltmarsh habitat present. 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 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.	Ramsar Criterion 2 - The invertebrate fauna is well represented and includes at least 16 British Red Data Book species.
UK11008	Breydon Water	Ramsar	Ramsar Criterion 5 - Site supports a winter population of 68,175 waterfowl. Ramsar Criterion 6 - Site supports overwintering populations of Tundra Swan and Northern Lapwing. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; overwintering populations of Pink-footed Goose, Eurasian Wigeon, Northern Shoveler and Black-tailed Godwit. Winerting populations of Golden Plover.	
UK11010	Broadland	Ramsar	Ramsar Criterion 2 - The site supports a number of rare species and habitats within the biogeographical zone context, including the following Habitats Directive Annex I features: Otter *Lutra lutra*. Ramsar Criterion 6 - Site supports overwintering populations of Tundra Swan, Eurasian Wigeon, Gadwall and Northern Shoveler. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; overwintering populations of Pink-footed Goose and Greylag Goose.	Ramsar Criterion 2 - The site supports a number of rare species and habitats within the biogeographical zone context, including the following Habitats Directive Annex I features: Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*, Alkaline fens, Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*), Desmoulin's whorl snail *Vertigo moulinsiana* and Fen Orchid *Liparis loeselii*. The site supports an outstanding assemblage of rare plants and invertebrates including 9 British Red Data Book plants and 136 British Red Data Book

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
				invertebrates.
UK11014	Chippenham Fen	Ramsar		Ramsar Criterion 1 - Site supports a spring-fed calcareous basin mire, with diverse flora. Ramsar Ramsar Criterion 2 - Site supports a rich invertebrate fauna, including many rare and scarce invertebrates characteristic of ancient fenland sites in Britain. Ramsar Criterion 3 - Site supports diverse vegetation types, rare and scarce plants. The site is the stronghold of Cambridge milk parsley *Selinum carvifolia*.
UK11015	Colne Estuary (Mid-Essex Coast Phase 2)	Ramsar	Ramsar Criterion 1 - The site is important due to the extent and diversity of saltmarsh present. 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 identified subsequent to designation for possible future consideration under Criterion 6 include; overwintering population of Black-tailed Godwit.	Ramsar Criterion 2 - Site supports 12 species of nationally scare plants and at least 38 British Red Data Book invertebrates species.
UK11058	Crouch & Roach Estuaries (Mid-Essex Coast Phase 3)	Ramsar	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.	Ramsar Criterion 2 - Site supports an appreciable assemblage of rare, vulnerable or endangered species or subspecies of plants and animals including 13 nationally scare plant species and several important invertebrate species.
UK11017	Deben Estuary	Ramsar	Ramsar Criterion 6 - Site supports an overwintering population of Dark-bellied Brent Goose.	Ramsar Criterion 2 - Site supports a population of the mollusc *Vertigo angustior*.
UK11018	Dengie (Mid-Essex Coast Phase 1)	Ramsar	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 *Zostera angustifolia*, *Z. marina* and *Z. noltei*).	Ramsar Criterion 2 - Site supports a number of rare plant and animal species including 11 species of nationally scarce plants and Red Data Book invertebrate species.

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
			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.	
UK11019	Dersingham Bog	Ramsar		Ramsar Criterion 2 - Site supports an important assemblage of invertebrates, including nine British Red Data Book species.
UK11026	Foulness (Mid-Essex Coast Phase 5)	Ramsar	Ramsar Criterion 1 - This site qualifies by virtue of the extent and diversity of saltmarsh habitat present. 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.	Ramsar Criterion 2 - The site supports a number of nationally-rare and nationally-scarce plant species, and British Red Data Book invertebrates.
UK11027	Gibraltar Point	Ramsar	Ramsar Criterion 1 - The dune and saltmarsh habitats present on the site are representative of all the stages of colonisation and stabilisation. Also most northerly example of nationally rare saltmarsh/dune communities containing sea heath *Frankenia laevis*, rock sea lavender *Limonium binervosum* and shrubby seablite *Suaeda vera*. Ramsar Criterion 2 - Site supports a diverse assemblage of wetland invertebrate species of which eight species are listed as rare in the British Red Data Book and a	Ramsar Criterion 1 - There is a fine example of freshwater marsh containing sedges *Carex* spp., rushes *Juncus* spp., and ferns, including adder's-tongue fern *Ophioglossum vulgatum.*

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
			further four species listed as vulnerable. Ramsar Criterion 5 - Site supports a winter population of 53,072 waterfowl. Ramsar Criterion 6 - Site supports spring/autumn populations of Grey Plover, Sanderling and Bar-tailed Godwit and an overwintering population of Dark-bellied Brent Goose. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; a spring/autumn population of Knot.	
UK11028	Hamford Water	Ramsar	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.	
UK11031	Humber Estuary	Ramsar	Ramsar Criterion 1 - The site is a representative example of a near-natural estuary with the following component habitats: dune systems and humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, and coastal brackish/saline lagoons. Ramsar Criterion 3 - The Humber Estuary Ramsar site supports a breeding colony of grey seals Halichoerus grypus at Donna Nook. Ramsar Criterion 5 – Site supports a winter population of 153,934 waterfowl. Ramsar Criterion 6 - Site supports passage populations of Knot, Dunlin, Black-tailed Godwit and Common Redshank, wintering populations of Common Shelduck, Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit and Common Redshank. Site supports a wintering and passage population of Golden Plover. Ramsar Criterion 8 - The Humber Estuary acts as an important migration route for both river lamprey *Lampetra fluviatilis* and sea lamprey *Petromyzon marinus* between coastal waters and their spawning	Ramsar Criterion 1 - The dune slacks at Saltfleetby-Theddlethorpe are the most north-easterly breeding site in Great Britain of the natterjack toad *Bufo calamita*.

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
			areas.	
UK11034	Lee Valley	Ramsar	Ramsar Criterion 6 - Site supports spring/autumn populations of Northern Shoveler and Gadwell.	Ramsar Criterion 2 - Site supports the nationally scarce plant species whorled water-milfoil *Myriophyllum verticillatum* and the rare or vulnerable invertebrate *Micronecta minutissima* (a water-boatman).
UK11037	Lower Derwent Valley	Ramsar	Ramsar Criterion 4 - The site qualifies as a staging post for passage birds in spring. Of particular note are the nationally important numbers of Ruff and Whimbrel. Ramsar Criterion 5 - Site supports a winter population of 31,942 waterfowl. Ramsar Criterion 6 - Site supports wintering populations of Eurasian Wigeon and Eurasian Teal.	Ramsar Criterion 1 - The site represents one of the most important examples of traditionally managed species-rich alluvial flood meadow habitat remaining in the UK. The river and flood meadows play a substantial role in the hydrological and ecological functioning of the Humber Basin. Ramsar Criterion 2 - The site has a rich assemblage of wetland invertebrates including 16 species of dragonfly and damselfly, 15 British Red Data Book wetland invertebrates as well as a leafhopper, *Cicadula ornata* for which Lower Derwent Valley is the only known site in Great Britain.
UK11040	Medway Estuary & Marshes	Ramsar	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.	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.
UK11044	Minsmere-Walberswick	Ramsar	Ramsar Criterion 1 - The site contains a mosaic of marine, freshwater, marshland and associated habitats, complete with transition areas in between. Contains the largest continuous stand of reedbeds in England and Wales and rare transition in grazing marsh ditch plants from brackish to fresh water. Ramsar Criterion 2 - This site supports nine nationally scarce plants and at least 26 red data book	Ramsar Criterion 2 - Supports a population of the mollusc *Vertigo angustior*.

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
			invertebrates. . An important assemblage of rare breeding birds associated with marshland and reedbeds including: Eurasian Bittern, Gadwell, Eurasian Teal, Northern Shoveller, Avocet and Bearded Tit. An important assemblage of Marsh Harrier	
UK11046	Nene Washes	Ramsar	Ramsar Criterion 2 - The site supports an important assemblage of nationally rare breeding birds. In addition, a wide range of raptors occur through the year. The site also supports several nationally scarce plants, and two vulnerable and two rare British Red Data Book invertebrate species have been recorded. Ramsar Criterion 6 - Site supports an overwintering population of Bewick's Swan. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; a spring/autumn population of Black-tailed Godwit and a winter population of Northern Pintail.	
UK11048	North Norfolk Coast	Ramsar	Ramsar Criterion 1 - The site is one of the largest expanses of undeveloped coastal habitat of its type in Europe. It is a particularly good example of a marshland coast with intertidal sand and mud, saltmarshes, shingle banks and sand dunes. There are a series of brackish-water lagoons and extensive areas of freshwater grazing marsh and reed beds. Ramsar Criterion 5 - Site supports a winter population of 98,462 waterfowl. Ramsar Criterion 6 - Site supports breeding populations of Sandwich Tern, Common Tern and Little Tern, spring/autumn populations of Knot, overwintering populations of Pink-footed Goose, Dark-bellied Brent Goose, Eurasian Wigeon and Northern Pintail. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; spring/autumn populations of Ringed Plover, Sanderling, and Bar-tailed Godwit.	Ramsar Criterion 2 - Supports at least three British Red Data Book and nine nationally scarce vascular plants, one British Red Data Book lichen and 38 British Red Data Book invertebrates.

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
UK11049	Northumbria Coast	Ramsar	Ramsar Criterion 6 - Site supports breeding populations of Litter Tern, Purple Sandpiper and Ruddy Turnstone.	
UK11051	Ouse Washes	Ramsar	Ramsar Criterion 1 - The site is one of the most extensive areas of seasonally-flooding washland of its type in Britain. Ramsar Criterion 2 - The site supports several nationally scarce plants and invertebrates. The site also supports a diverse assemblage of nationally rare breeding waterfowl associated with seasonally-flooding wet grassland. Ramsar Criterion 5 - Site supports a winter population of 59,133 waterfowl. Ramsar Criterion 6 - Site supports overwintering populations of Bewick's Swan, Whooper Swan, Eurasian Wigeon, Gadwall, Eurasian Teal, Northern Pintail and Northern Shoveler. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; overwintering populations of Mute Swan, Common Pochard and Black-tailed Godwit.	
UK11056	Redgrave & South Lopham Fens	Ramsar		Ramsar Criterion 1 - The site is an extensive example of spring-fed lowland base-rich valley, remarkable for its lack of fragmentation. Ramsar Criterion 2 and 3 - The site supports many rare and scarce invertebrates, including a population of the fen raft spider *Dolomedes plantarius*.
UK11061	Roydon Common	Ramsar		Ramsar Criterion 1 - The site is the most extensive example of valley mire-heathland biotope within East Anglia; it is a mixed valley mire holding vegetation communities which reflect the influence of both base-poor and base-rich water. Ramsar Criterion 3 - The vegetation communities have a restricted distribution within Britain - it also supports a number of acidophilic invertebrates outside their normal geographic range and six British Red Data Book invertebrates.

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
UK11062	Rutland Water	Ramsar	Ramsar Criterion 5 - Site supports an international important assemblage of waterfowl species. Ramsar Criterion 6 - Site supports spring/autumn populations of Gadwell and Northern shoveler. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; a spring/autumn population of Mute Swan.	
UK11066	Stodmarsh	Ramsar	Ramsar Criterion 2 - A diverse assemblage of rare wetland birds including breeding population of Gadwall, spring/autumn populations of Gadwall and overwintering populations of Great Bittern Hen Harrier and Northern Shoveler.	Ramsar Criterion 2 - Site supports six British Red Data Book wetland invertebrates, two nationally rare plants, and five nationally scarce species.
UK11067	Stour and Orwell Estuaries	Ramsar	Ramsar Criterion 2 - Site contains seven nationally scarce plants: stiff saltmarsh-grass *Puccinellia rupestris*; small cord-grass *Spartina maritima*; perennial glasswort *Sarcocornia perennis*; lax-flowered sea lavender *Limonium humile*; and the eelgrasses *Zostera angustifolia*, *Z. marina* and *Z. noltei*. 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.	Ramsar Criterion 2 - Contains five British Red Data Book invertebrates: the muscid fly *Phaonia fusca*; the horsefly *Haematopota grandis*; two spiders, *Arctosa fulvolineata* and *Baryphema duffeyi*; and the Endangered swollen spire snail *Mercuria confusa*.
UK11068	Teesmouth & Cleveland Coast	Ramsar	Ramsar Criterion 5 - Site supports an internationally important assemblage for waterfowl species during the winter. Ramsar Criterion 6 - Site support a spring/autumn population of Common Redshank and an overwintering population of Knot.	
UK11069	Thames Estuary & Marshes	Ramsar	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	Ramsar Criterion 2 - The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
			and overwintering populations of Grey Plover, Knot, Dunlin and Common Redshank.	invertebrates.
UK11070	Thanet Coast & Sandwich Bay	Ramsar	Ramsar Criterion 6 - Site supports an overwintering population of Ruddy Turnstone.	Ramsar Criterion 2 - Site supports 15 British Red Data Book wetland invertebrates.
UK11071	The Swale	Ramsar	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.	Ramsar Criterion 2 - The site supports nationally scarce plants and at least seven British Red data book invertebrates.
UK11072	The Wash	Ramsar	Ramsar Criterion 1 - The Wash is a large shallow bay comprising very extensive saltmarshes, major intertidal banks of sand and mud, shallow water and deep channels. Ramsar Criterion 3 - Qualifies because of the inter-relationship between its various components including saltmarshes, intertidal sand and mud flats and the estuarine waters. Ramsar Criterion 5 - Site supports a winter population of 292,541 waterfowl. Ramsar Criterion 6 - Site supports spring/autumn populations of Eurasian Oystercatcher, Grey Plover, Knot, Sanderling, Eurasian Curlew, Common Redshank, and Ruddy Turnstone and overwintering populations of Pink-footed Goose, Dark-bellied Brent Goose, Common Shelduck, Northern Pintail, Dunlin and Bar-tailed Godwit. Species/populations identified subsequent to designation for possible future consideration under Criterion 6 include; spring/autumn populations of Ringed Plover and Black-tailed Godwit and overwintering populations of European Golden Plover and Northern	

Site Reference	Site Name	Designation	Interest Features for Which There is a Likely Significantly Effect (LSE)	Interest Features for Which There is No Likely Significantly Effect (LSE)
			Lapwing.	
UK11077	Wicken Fen	Ramsar		Ramsar Criterion 1 - Site contains one of the most outstanding remnants of the East Anglian peat fens. Ramsar Criterion 2 - The site supports one species of British Red Data Book plant, fen violet *Viola persicifolia*, which survives at only two other sites in Britain. It also contains eight nationally scarce plants and 121 British Red Data Book invertebrates.
UK11078	Woodwalton Fen	Ramsar		Ramsar Criterion 1 - The site is within an area that is one of the remaining parts of East Anglia which has not been drained. The fen is near natural and supports several types of open fen and swamp communities. Ramsar Criterion 2 - The site supports two species of British Red Data Book plants, fen violet *Viola persicifolia* and fen wood-rush *Luzula pallidula*. Woodwalton also supports a large number of wetland invertebrates including 20 British Red Data Book species. Aquatic beetles, flies and moths are particularly well represented.
UK11083	Upper Nene Valley Gravel Pits	Ramsar	Ramsar Criterion 5 - Regularly supports over 20,000 waterbirds. Ramsar Criterion 6 - Wintering population of Mute Swan and Gadwall.	

Table 2: Other member states' (non UK) designated sites considered during the Screening Phase of the HRA (Screened in sites highlighted in green)

Site Reference	Site Name	Country	Type	Natura 2000 Site	Interest Features for Which There is a LSE**
BE2500831	Ijzervallei	Belgium	A	SPA	
BEMNZ0004	Sbz 3 / Zps 3	Belgium	A	SPA	✓
BE2300005	Bossen En Heiden Van Zandig Vlaanderen: Oostelijk Deel	Belgium	B	SAC	
BE2500004	Bossen, Heiden En Valleigebieden Van Zandig Vlaanderen: Westelijk Deel	Belgium	B	SAC	
BEMNZ0005	Vlakte Van De Raan	Belgium	B	SAC	✓
BE2500003	Westvlaams Heuvelland	Belgium	B	SAC	
BE32001A0	Vallée De La Lys (Comines-Warneton)	Belgium	H	SPA	
BE32001B0	Vallée De La Lys (Comines-Warneton)	Belgium	I	SAC	
BE2501033	Het Zwin	Belgium	J	SPA	
BE2301134	Krekengebied	Belgium	J	SPA	
BE2524317	Kustbroedvogels Te Zeebrugge-Heist	Belgium	J	SPA	
BE2500932	Poldercomplex	Belgium	J	SPA	
BEMNZ0002	Sbz 1 / Zps 1	Belgium	J	SPA	✓
BEMNZ0003	Sbz 2 / Zps 2	Belgium	J	SPA	✓
BE2500121	Westkust	Belgium	J	SPA	
BE2500001	Duingebieden Inclusief Ijzermonding En Zwin.	Belgium	K	SAC	
BE2500002	Polders	Belgium	K	SAC	
BEMNZ0001	Uitbreiding Trapegeer-Stroombank	Belgium	K	SAC	
DE1003301	Doggerbank	Germany	B	SAC	✓
FR3110038	Estuaire De La Canche	France	A	SPA	
FR3110083	Marais De Balançon	France	A	SPA	
FR3110039	Platier D'oye	France	A	SPA	
FR3100483	Coteau De Dannes Et De Camiers	France	B	SAC	
FR3100488	Coteau De La Montagne D'acquin Et Pelouses Du Val De Lumbres	France	B	SAC	
FR3100474	Dunes De La Plaine Maritime Flamande	France	B	SAC	
FR3100482	Dunes De L'authie Et Mollieres De Berck	France	B	SAC	
FR3100481	Dunes Et Marais Arriere-Littoraux De La Plaine Maritime Picarde	France	B	SAC	
FR3100475	Dunes Flandriennes Decalcifiees De Ghyvelde	France	B	SAC	
FR3100479	Falaises Et Dunes De Wimereux, Estuaire De La Slack, Garennes Et Communaux D'ambleteuse-Audresselles	France	B	SAC	
FR3100477	Falaises Et Pelouses Du Cap Blanc Nez, Du Mont D'hubert, Des Noires Mottes, Du Fond De La Forge Et Du Mont De Couple	France	B	SAC	
FR3100498	Foret De Tournehem Et Pelouses De La Cuesta Du Pays De Licques	France	B	SAC	
FR3100499	Forets De Desvres Et De Boulogne Et Bocage Prairial Humide Du Bas-Boulonnais	France	B	SAC	
FR3100491	Landes, Mares Et Bois Acides Du Plateau De Sorrus Saint Josse, Prairies Alluviales Et Bois Tourbeux En Aval De Montreuil	France	B	SAC	
FR2200347	Marais Arriere-Littoraux Picards	France	B	SAC	
FR3102001	Marais De La Grenouillère	France	B	SAC	

Site Reference	Site Name	Country	Type	Natura 2000 Site	Interest Features for Which There is a LSE**
FR3100484	Pelouses Et Bois Neutrocalcicoles De La Cuesta Sud Du Boulonnais	France	B	SAC	
FR3100485	Pelouses Et Bois Neutrocalcicoles Des Cuestas Du Boulonnais Et Du Pays De Licques Et Foret De Guines	France	B	SAC	
FR3100487	Pelouses, Bois Acides A Neutrocalcicoles, Landes Nord-Atlantiques Du Plateau D'helfaut Et Systeme Alluvial De La Moyenne Vallee De L'aa	France	B	SAC	
FR3100489	Pelouses, Bois, Forets Neutrocalcicoles Et Systeme Alluvial De La Moyenne Vallee De L'authie	France	B	SAC	
FR3100494	Prairies Et Marais Tourbeux De Guines	France	B	SAC	
FR3100492	Prairies Et Marais Tourbeux De La Basse Vallee De L'authie	France	B	SAC	
FR3102004	Ridens Et Dunes Hydrauliques Du Detroit Du Pas-De-Calais	France	B	SAC	✓
FR3112006	Bancs Des Flandres*	France	F	SPA	
FR3110085	Cap Gris-Nez	France	F	SPA	
FR3102002	Bancs Des Flandres*	France	G	SAC	✓
FR3100495	Prairies, Marais Tourbeux, Forets Et Bois De La Cuvette Audomaroise Et De Ses Versants	France	G	SAC	
FR3102003	Recifs Gris-Nez Blanc-Nez	France	G	SAC	✓
FR3112004	Dunes De Merlimont	France	J	SPA	
FR2210068	Estuaires Picards : Baie De Somme Et D'authie	France	J	SPA	
FR2212003	Marais Arrière-Littoraux Picards	France	J	SPA	
FR3112003	Marais Audomarois	France	J	SPA	
FR3102005	Baie De Canche Et Couloir Des Trois Estuaires	France	K	SAC	✓
FR3100480	Estuaire De La Canche, Dunes Picardes Plaquees Sur L'ancienne Falaise, Foret D'hardelot Et Falaise D'equihen	France	K	SAC	
FR2200346	Estuaires Et Littoral Picards (Baies De Somme Et D'authie)	France	K	SAC	
FR3100478	Falaises Du Cran Aux Oeufs Et Du Cap Gris-Nez, Dunes Du Chatelet, Marais De Tardinghen Et Dunes De Wissant	France	K	SAC	✓
FR2200348	Vallee De L'authie	France	K	SAC	
NL2009162	Abtskolk & De Putten	Netherlands	A	SPA	
NL1000030	Coepelduynen	Netherlands	B	SAC	
NL2008001	Doggersbank	Netherlands	B	SAC	✓
NL2003019	Groote Gat	Netherlands	B	SAC	
NL1000012	Kennemerland-Zuid	Netherlands	B	SAC	
NL2008002	Klaverbank	Netherlands	B	SAC	✓
NL1000013	Meijendel En Berkheide	Netherlands	B	SAC	
NL9802025	Veerse Meer	Netherlands	D	SAC & Ramsar	
NL1000009	Duinen Den Helder - Callantsoog	Netherlands	E	SAC	
NL1000010	Duinen Schoorl	Netherlands	E	SAC	
NL9801080	Noordhollands Duinreservaat	Netherlands	E	SAC	
NL1000016	Solleveld	Netherlands	E	SAC	
NL2008003	Vlakte Van De Raan	Netherlands	E	SAC	✓
NL1000014	Westduinpark En Wapendal	Netherlands	E	SAC	

Site Reference	Site Name	Country	Type	Natura 2000 Site	Interest Features for Which There is a LSE**
NL3009018	Zwin	Netherlands	F	SPA	
NL2003062	Noordzeekustzone	Netherlands	G	SAC	✓
NL3000027	Zwin	Netherlands	G	SAC	
NL9802021	Grevelingen	Netherlands	H	SPA & Ramsar	
NL9802018	Haringvliet	Netherlands	H	SPA & Ramsar	
NL3009016	Oosterschelde	Netherlands	H	SPA & Ramsar	
NL9802017	Voordelta	Netherlands	H	SPA & Ramsar	
NL2002017	Voornes Duin	Netherlands	H	SPA & Ramsar	
NL9802026	Westerschelde & Saeftinghe	Netherlands	H	SPA & Ramsar	
NL9910002	Zwanenwater	Netherlands	H	SPA & Ramsar	
NL3000016	Duinen Zwanenwater En Pettemerduinen	Netherlands	I	SAC	
NL4000021	Grevelingen	Netherlands	I	SAC	
NL1000015	Haringvliet	Netherlands	I	SAC	
NL1000018	Oosterschelde	Netherlands	I	SAC	
NL4000017	Voordelta	Netherlands	I	SAC	
NL9803077	Voornes Duin	Netherlands	I	SAC	
NL9803061	Westerschelde	Netherlands	I	SAC	
NL2000006	Kwade Hoek	Netherlands	J	SPA	
NL9802001	Noordzeekustzone	Netherlands	J	SPA	
NL9801079	Duinen Goeree	Netherlands	K	SAC	
NL1000017	Kop Van Schouwen	Netherlands	K	SAC	
NL1000020	Manteling Van Walcheren	Netherlands	K	SAC	
NL2008004	Noordzeekustzone Ii	Netherlands	K	SAC	

* These sites were not found on the Natura 2000 website (http://www.eea.europa.eu/) but we have assumed the designated conservation sites using the type codes.

** By virtue of having harbour porpoise and or bottlenose dolphin as a qualifying feature

Table 3: Screened in sites that lie outside the 100km buffer area which are designated for Anadromous Fish, Seabirds, Harbour Porpoise and/or Bottlenose Dolphin

Site	Species							
	Anadromous Fish	Black - legged Kittiwake	Manx Shearwater	Northern Fulmar	Northern Gannet	Razorbill	Harbour Porpoise	Bottlenose Dolphin
Aberdaron Coast and Bardsey Island SPA			✓	✓		✓		
Abers - Côtes Des Legendes SAC (French)							✓	✓
Æbelø, Havet Syd For Og Nærå SAC (Danish)							✓	
Ailsa Craig SPA					✓	✓		
Anse de Vauville SAC (French)								✓
Baie de Lancieux, Baie de L'arguenon, Archipel de Saint Malo et Dinard SAC (French)								✓
Baie de Seine occidentale SAC (French)								✓
Baie Du Mont Saint-Michel SAC (French)								✓
Banc et rucifs de Surtainville SAC (French)								✓
Borkum-Riffgrund SAC (German)							✓	
Bray Head SPA				✓	✓	✓		
Buchan Ness to Collieston Coast SPA				✓				
Cap d'Erquy-Cap Frúhel SAC (French)								✓
Centrale Storebælt Og Vresen SAC (Danish)							✓	
Chausey SAC (French)								✓
Chaussée De Sein SAC (French)							✓	✓
Copeland Island SPA			✓	✓	✓	✓		
Cote De Cancale A Parame SAC (French)								✓
Darßer Schwelle SAC (German)							✓	
Farne Islands SPA		✓						
Fehmarnbelt SAC (German)							✓	
Flensborg Fjord, Bredgrund Og Farvandet Omkring Als SAC (Danish)							✓	
Forth Islands				✓	✓	✓		
Fowlsheugh SPA				✓		✓		
Fyns Hoved, Lillegrund Og Lillestrand SAC (Danish)							✓	
Gilleleje Flak Og Tragten SAC (Danish)							✓	
Grassholm SPA					✓			
Hamburgisches Wattenmeer SAC (German)							✓	
Havet Mellem Romsø Og Hindsholm Samt Romsø SAC (Danish)							✓	
Helgoland Mit Helgoländer Felssockel SAC (German)							✓	
Howth Head Coast SPA				✓	✓			
Howth Head SPA				✓	✓	✓		
Irelands Eye SPA			✓	✓	✓			
Kadetrinne SAC (German)							✓	
Kosterfjorden-Väderöfjorden SAC (German)							✓	
Küstenbereiche Flensburger Förde Von Flensburg Bis Geltinger Birk SAC (German)							✓	
Küstenlandschaft Bottsand - Marzkamp U. Vorgelagerte Flachgründe SAC (German)							✓	
Küstenlandschaft Vor Großenbrode Und							✓	

Site	Species							
	Anadromous Fish	Black - legged Kittiwake	Manx Shearwater	Northern Fulmar	Northern Gannet	Razorbill	Harbour Porpoise	Bottlenose Dolphin
Vorgelagerte Meeresbereiche SAC (German)								
Lambay Island SPA			✓	✓	✓			
Lillebælt SAC (Danish)							✓	
Maden På Helnæs Og Havet Vest For SAC (Danish)							✓	
Meeresgebiet Der Östlichen Kieler Bucht SAC (German)							✓	
Moray Firth SAC (UK)								✓
Nationalpark Niedersächsisches Wattenmeer SAC (German)							✓	
Northumbria Coast SPA		✓						
NTP S-H Wattenmeer Und Angrenzende Küstengebiete SAC (German)							✓	
Outer Ards SPA			✓	✓	✓	✓		
River Dee SAC	✓							
River South Esk SAC	✓							
River Tay SAC	✓							
River Tweed SAC	✓							
Røsnæs, Røsnæs Rev Og Kalundborg Fjord SAC (Danish)							✓	
Sagas-Bank SAC (German)							✓	
Saltee Islands SPA					✓			
Schlei Incl. Schleimünde Und Vorgelagerter Flachgründe SAC (German)							✓	
Skagens Gren Og Skagerrak SAC (Danish)							✓	
Skerries Islands SPA				✓	✓			
Skokholm and Skomer SPA			✓	✓	✓			
Spa Östliche Deutsche Bucht SAC (German)							✓	
St Abb's Head to Fast Castle SPA						✓		
Staberhuk SAC (German)							✓	
Steingrund SAC (German)							✓	
Stora Middelgrund Och Röde Bank SAC (Swedish)							✓	
Store Middelgrund SAC (Danish)							✓	
Südküste Der Eckernförder Bucht Und Vorgelagerte Flachgründe SAC (German)							✓	
Sydlige Nordsø SAC (Danish)							✓	
Sylter Außenriff SAC (Danish)							✓	
Tregor Goëlo SAC (French)							✓	✓
Tweed Estuary SAC	✓							
Unterelbe SAC (German)							✓	
Vadehavet Med Ribe Å, Tved Å Og Varde Å Vest For Varde SAC (Danish)							✓	
Voordelta SAC (Dutch)								✓
Vrångöskärgården SAC (Swedish)							✓	
Waddenzee SAC (Dutch)								✓
Wicklow Head SPA				✓	✓			

Table 4: The non-UK designated sites to be considered in relation to HRA Screening

Policy	Description	Screening View	Screening Criteria No. (See Figure 8)
EC1	Decision making authorities will consider favourably licensable marine activities that provide economic productivity benefits that are additional to GVA generated by existing activities, and that are delivered sustainably.	Should be screened out because it is not spatially explicit	1
EC2	Decision making authorities will consider favourably, licensable marine activities that provide employment benefits, particularly where the benefits have the potential to meet employment needs in localities close to the plan area.	Should be screened out because it is not spatially explicit	1
EC3	Licensing authorities will consider favourably, subject to meeting other requirements outlined in the plan, proposals that will help to achieve the Plan's vision for the East Plan Areas to be at the forefront of the rapidly developing industry of offshore wind generation.	Should be screened out because it is not spatially explicit. Wind energy already assessed through HRA.	1 (& 2)
SOC1	Licence applicants should demonstrate that where possible access to the coast for recreational activities will not be compromised and ideally should be enhanced.	Should be screened out because it is not spatially explicit	1
SOC2	Applications for licensable marine activities to diversify tourism in communities in the plan area, including expanding the season through new forms of tourism, will be encouraged when in compliance with other relevant policies in the marine plan.	Should be screened out because it is not spatially explicit	1
SOC3	Decision making authorities will consider heritage assets when assessing proposals, respecting the culture and character of the area, ensuring that they are conserved in a manner appropriate to their significance. Decision making authorities will have a presumption against licensable marine activities that would substantially harm a heritage asset unless there is a clear and convincing justification for the activity to proceed.	Should be screened out because it is not spatially explicit	1
SOC4	Decision making authorities will compare the impacts of proposals against the seascape character area assessment for the East Inshore and Offshore areas to take account of mitigation of impacts on existing character.	Should be screened out because it is not spatially explicit	1
ECO1	Decision-makers will ensure that cumulative impacts upon the ecosystem are taken account of in decision-making processes including associated assessments.	Should be screened out because it is not spatially explicit	1
ECO2	Where a proposed new licensable marine activity or proposed change to an existing licensable marine activity in the marine areas will impact upon water quality, the licensing authority will require the applicant to address those impacts to the satisfaction of the decision-making authorities responsible for regulating or monitoring water quality.	Should be screened out because it is not spatially explicit	1
ECO3	Where a proposed new licensable marine activity or proposed change to an existing licensable marine activity poses an increased risk of release of pollutants as a result of increased collision risk, the licensing authority will require the applicant to address the risks to the satisfaction of the decision-making authorities responsible for navigation safety and regulating or monitoring water quality.	Should be screened out because it is not spatially explicit	1

Policy	Description	Screening View	Screening Criteria No. (See Figure 8)
BIO1	Decision-makers will ensure that the considerations covered by a) to e) are taken account of in decision-making processes including associated assessments. In doing so, they will refer to the best available spatial information on the location or distribution of biodiversity interests.	Should be screened out because it is not spatially explicit	1
BIO2	Licensing authorities will encourage licensable marine activities, where appropriate, to incorporate features (as part of good design) that enhance any potential benefits to marine ecology, biodiversity and geological conservation interests	Should be screened out because it is not spatially explicit.	1
MPA1	Decision-making authorities will have regard to activities between or outside of an MPA that may impact upon delivery of an 'ecologically coherent network of MPAs' in decision-making processes including associated assessments	Whilst the policy area can be derived, this policy doesn't clarify the nature or location of activities so should be screened out.	1
CC1	Decision making authorities and applicants should consult at the earliest opportunity with those bodies best able to provide advice on: · How new licensable marine activities or management measures for marine protected areas may themselves be impacted upon and respond to climate change over their lifetime · How new licensable marine activities or management measures for marine protected areas impact upon climate change adaptation measures elsewhere during the lifetime of the proposal as well as how the scope proposed may be adapted accordingly and / or impact(s) may be mitigated	Should be screened out because it is not spatially explicit	1
CC2	Licensable marine activities should minimise as far as practicable emissions of greenhouse gases directly associated with construction, operation and / or decommissioning (as appropriate). Applicants should also demonstrate consideration of the impact of their proposal on emissions from other users affected by the proposal.	Should be screened out because it is not spatially explicit	1
GOV1	Decision making authorities should draft plans and policies in accordance with other relevant statutory plans and their policies unless relevant considerations indicate otherwise	Should be screened out because it is not spatially explicit	1
GOV2	Decision makers, including those responsible for the production of land based plans should ensure, when they are producing or reviewing plans that appropriate allocation is made for the onshore infrastructure requirements of new marine activities.	Should be screened out because it is not spatially explicit	1
GOV3	When making decisions on applications, decision making authorities must take account of non-statutory plans such as shoreline management plans (SMP), estuary management plans (EMPs) and other similar management plans.	Should be screened out because it is not spatially explicit.	1
GOV4	Where plans may impact on bordering states, decision making authorities must ensure that the affected states are consulted prior to adoption and as early in the plan making process as reasonably practicable.	Should be screened out because it is not spatially explicit. It relates to planning and decision-making process rather than the outcome.	1

Policy	Description	Screening View	Screening Criteria No. (See Figure 8)
GOV5	Decision making authorities, those contributing to the formation of plans for managing the marine environment and those seeking to undertake development or licensable marine activities within the marine environment, shall seek to maximise opportunities for co–location wherever possible. The requirements of this policy should focus on applications that would be subject to the requirements of the Environmental Impact Assessment Directive, whilst acknowledging that for some activities, particularly where plan areas are very busy, opportunities for co-location should be sought regardless of the scale of the activity.	Should be screened out because it is not spatially explicit. It relates to planning and decision-making process rather than the outcome.	1
GOV6	Applicants proposing licensable marine activities that may inhibit navigational safety should demonstrate in their application that the proposal complies with the relevant legislation and guidance.	Should be screened out because it is not spatially explicit	1
GOV7	In proposing new licensable marine activities or management measures, decision making authorities and applicants must identify any potential for proposals to displace other existing activities. Proposals will need to demonstrate: - fulfilment of other plan objectives - any potential negative impacts upon achieving other marine plan objectives resulting from the displacement of existing activities. proposed mitigation measures that may be offered in relation to: - minimising displacement in the first instance - reducing the impact upon other activities / interests arising from displacement. Activities or measures that result in levels of displacement with resulting disbenefit in excess of the benefits gained will not be supported.	Should be screened out because it is not spatially explicit. However, the marine plan HRA will set out monitoring recommendations (as part of iterative plan review process) so that marine planning can better manage displacement in the future.	1
EV1	The MMO will prioritise the commissioning of new evidence in line with those areas identified in its Strategic Evidence Plan (SEP) and will ensure that all new evidence is made publicly available where possible.	Should be screened out because it is not spatially explicit	1
EV2	The MMO will support the work of partner organisations undertaking relevant research to improve our understanding of the activities and resources in the marine plan areas.	Should be screened out because it is not spatially explicit	1
EV3	In addition to the research commissioned through the Strategic Evidence Plan, the MMO will work with partners and stakeholders (both UK and international) to develop our understanding of how activities interact both with one another and the wider environment.	Should be screened out because it is not spatially explicit	1
EV4	The MMO will support and encourage transparency, openness and removal of barriers to data sharing for all stakeholders generating data in the marine plan areas.	Should be screened out because it is not spatially explicit	1
EV5	The MMO will continue to work closely with the Marine Science Coordination Committee (MSCC), and its groups, to ensure that the identification of any new evidence relevant to marine planning can feed into the planning process.	Should be screened out because it is not spatially explicit	1
EV6	The MMO will continue to set up data sharing agreements with holders of marine data relevant to	Should be screened out because it is not spatially	1

Policy	Description	Screening View	Screening Criteria No. (See Figure 8)
	marine planning. This will include agreements with international planning authorities bordering the East plan areas to ensure that relevant cross-border evidence is collated as far as possible.	explicit	
CCS1	Any non carbon dioxide storage licensable marine activities associated with a potential carbon dioxide storage location (mapped in Figure 7 below) will be subject to the following in order of sequence: a) those proposing new licensable marine activities should, wherever possible, demonstrate that they will not prevent future CCS use; b) where this is not possible, they should set out how they will minimise or mitigate the impact on future CCS use; c) where it is not possible to minimise or mitigate the impact, they will set out the reasons why and the case for proceeding with their application. In determining a licence, the decision making authorities will assess which of (a), (b) or (c) should apply and the degree to which they are satisfied including, in the case of (c), the relative merits of the proposed licensable marine activities vs. carbon dioxide storage. The above sequence will be a relevant consideration against the granting of other consents.	Screen in on basis that no HRA has previously prepared for CCS and there is some spatial context – the mapped areas will be presented in the Appropriate Assessment document	Screened In
CCS2	The licensing authorities will assess the location of CCS pipelines proposed by the licence applicant (and other connections between offshore facilities and the mainland) and the location of any offshore facilities, against other plan policies in assessing the potential impact on other licensable marine activities. Subject to the consenting process for individual projects, where possible, CCS pipelines should be co-located with other pipelines and cables where possible (see policies GOV5 and CAB1).	Should be screened out because it is not spatially explicit	1
CCS3	The licensing authority will presume in favour of infrastructure associated with CCS when that infrastructure involves the re-use of oil/gas infrastructure (either in depleted fields or in active fields via enhanced hydrocarbon recovery).	Should be screened out because impacts from oil and gas extraction, and therefore use of infrastructure, have been subject to HRA. Additional impacts from CCS cannot be assessed as this is not spatially specific.	2
OG1	The decision making authority will allocate areas identified for extraction of oil and gas by existing extraction licences. No licensable marine activities will be permitted within allocated areas, unless compatibility with oil and gas extraction can be satisfactorily demonstrated, or agreement between the oil and gas operator and the proponent can be negotiated.	Should be screened out because HRAs have been produced for licensing blocks already	2
OG2	There will be a presumption in favour of new oil and gas exploration and licensable marine activities, subject to: · fulfilling requirements for Environmental Impact Assessment and any requirements under the Habitats Regulations, the Offshore Regulations and Wild Birds legislation · meeting other requirements outlined in the plan	Should be screened out because HRAs have been produced for licensing blocks already	2

Policy	Description	Screening View	Screening Criteria No. (See Figure 8)
	· addressing situations where there is an interest over use of the same space as other licensable, or permittable, activities. These situations will be addressed through consultation between oil and gas licence applicants and rights holders, with a view to agreeing a mutually acceptable way forward. In determining an application, the decision making authorities will assess the relative merits of the proposed licensable marine activities vs. existing licensable or permittable activities.		
WIND1	Sites held under a lease or an agreement for lease granted by The Crown Estate will be allocated by decision making authorities for renewable wind energy development until either: a) constructed or b) surrendered back to The Crown Estate or c) terminated by the Secretary of State, If any other new licensable marine activities are proposed, the proponent will have to clearly demonstrate that they will not compromise the wind farm development	Should be screened out because HRAs have been produced for R3OWF	2
WIND2	Decision making authorities will presume in favour of wind development, including supporting infrastructure, over other new development proposals inside round 3 zones subject to a ZAP process or an equivalent zone level assessment having been undertaken and where any negative impacts relevant to the project are mitigated to the satisfaction of the decision making authorities.	Should be screened out because HRAs have been produced for R3OWF	2
WIND3	All applications for windfarms outside of WIND1, WIND2, demonstration projects or a future leasing round must provide a strong case for development explaining why the proposed site is suitable and how it will contribute to other plan objectives and policies.	Should be screened out because HRAs have been produced for R3OWF	2
TIDE1	For areas of identified tidal stream resource the following will apply in order of sequence: a) Those proposing new licensable marine activities should demonstrate that they will not sterilise an area identified of tidal stream resource. b) Where this is not possible applicants will set out how they will minimise or mitigate the impact on the ability to exploit tidal stream resource in the future c) Where it is not possible to minimise or mitigate their impacts, they must set out any impacts (both positive and negative) that the proposals will have on the plan objectives in order for the regulatory authority to determine whether an application should go ahead.	Possibly screen in but nature of development is not specified, so possibly not sufficiently spatially explicit - – the mapped areas will be presented in the Appropriate Assessment document	?
CAB1	The decision making authorities will presume in favour of cable installation where the cable is buried. Where this is not achievable, protection measures may be offered. These will be determined by the decision making authorities on an application basis to minimise the risk of and mitigation of any adverse impacts which include but are not restricted to; sediment deposits, plumes, anchor strike, gear snagging, on both the cable and other seabed users, subject to normal depth limitations	Should be screened out because it is not spatially explicit	1
AGG1	The decision making authorities will protect areas for extraction of aggregates within areas subject to	Screen in because not subject to HRA previously	Screened In

Policy	Description	Screening View	Screening Criteria No. (See Figure 8)
	Exploration and Option Agreements with The Crown Estate by not permitting other new licensable marine activities unless compatibility with aggregate extraction can be satisfactorily demonstrated. The policy will apply to the point where a production licence is applied for (after which policy AGG2 applies).	and spatially explicit - – the mapped areas will be presented in the Appropriate Assessment document	
AGG2	The decision making authorities will protect areas for extraction of aggregates where a licence to do so has been granted or formally applied for by not permitting other new licensable marine activities unless compatibility with aggregate extraction can be satisfactorily demonstrated. These areas will remain allocated for aggregate extraction until such times as they are worked to economic exhaustion or are not re-licensed.	Screen in because not subject to HRA previously and spatially explicit - – the mapped areas will be presented in the Appropriate Assessment document	Screened In
AGG3	Within defined areas of high potential aggregate resource the following will apply in order of sequence: a) those proposing new non aggregate licensable marine activities should, wherever possible, demonstrate that they will not sterilise aggregate extraction; b) where this not possible, they should set out how they will minimise or mitigate the impact on the ability to extract aggregate; c) where it is not possible to minimise or mitigate the impact, they will set out the reasons why and the case for proceeding with their application. In determining a licence, the decision making authorities will assess which of (a), (b) or (c) should apply and the degree to which they are satisfied including, in the case of (c), the relative merits of the proposed development vs. aggregate extraction.	Area is known but the nature of the development is not specified, so possibly not sufficiently spatially explicit	1
AGG4	Decision making authorities will take account of published national and sub national guidelines on the provision of marine minerals when determining all applications for marine licences to ensure an adequate supply of minerals for construction aggregate, beach recharge and reclamations.	Should be screened out because it is not spatially explicit	1
DEF1	Decision making authorities will presume in favour of new licensable marine activities where the proposal does not coincide with a known area of MOD activity for munitions dumping, military practice, or low flying activity. Within areas of munitions dumping, military practice or low flying, the following will apply in order of sequence: a) those proposing new licensable marine activities should, demonstrate that they will not prevent operation of these defence activities through providing evidence of confirmation from the MOD agreeing to the proposal b) where this not possible, they should set out how they will minimise or mitigate the impact on the ability to undertake these defence activities and provide evidence of confirmation from the MOD that the proposed mitigation measures are acceptable c) where it is not possible to minimise or mitigate the impact, they will set out the reasons why and the case for proceeding with their application. In determining an application, the decision making	Should be screened out because MOD activity is not very spatially explicit over a large area, plus the nature of the potential development is unclear.	1

Policy	Description	Screening View	Screening Criteria No. (See Figure 8)
	authorities will assess which of (a), (b) or (c) should apply and the degree to which they are satisfied including, in the case of (c), the relative merits of the proposed development or activities vs. the impact on defence and national security, through discussions with the MOD. If the MOD object to the proposal; then the licensable marine activities will not be permitted.		
PS1	Decision making authorities will not consent licensable marine activities that requires static, sea surface infrastructure or significantly reduces under-keel clearance in IMO designated routes	Should be screened out due to lack of spatially specific understanding of nature and location of potential activities (no change in existing use patterns).	1
PS2	Applications that include static, sea surface infrastructure in areas where navigation risk is high will be not be consented unless it can be demonstrated that consultation with harbour and other navigation authorities, relevant regulators and commercial shipping representation has materially informed proposals that: i) are compatible with the need to maintain space for safe navigation avoiding diversion wherever possible ii) anticipate and provide for future safe navigational requirements insomuch as evidence and stakeholder input allows iii) account for in-combination and cumulative impacts upon navigation resulting from the proposed licensable marine activity and other existing uses as well as known proposed developments, and wider maritime activities and constrains including offshore oil and gas, dredging, fishing, recreational craft, and marine protected areas.	Should be screened out because it is not spatially explicit	1
PS3	Applications for licensable marine activity below the low water mark should demonstrate that they will not interfere with any existing navigation channels or approaches to ports and harbours, or any future opportunity for expansion of such channels or approaches. Evidence to support this should include responses from relevant consultees, such as Harbour Authorities or major port operations. Where a proposal will interfere with any existing navigation channels or approaches, then the applicant should demonstrate that they have looked at all possible mitigation or minimisation needed. a) those proposing new licensable marine activities should, wherever possible, demonstrate that they will not restrict navigation to or from a proximate port or harbour; b) where this not possible, they should set out how they will minimise or mitigate the impact on the ability to navigate port or harbour navigation channels and / or approaches; c) where it is not possible to minimise or mitigate the impact, they will set out the reasons why and the case for proceeding with their application.	Should be screened out because it is not spatially explicit	1
DD1	The licensing authority will not permit new development in existing dredging and disposal areas where a licence has been granted or formally applied unless there are exceptional circumstances	Should be screened out due to lack of spatially specific understanding of nature and location of potential activities (no change in	1

Policy	Description	Screening View	Screening Criteria No. (See Figure 8)
		existing use patterns).	
DD2	Within defined areas of navigational dredging the following will be considered when applying for a new license for maintenance dredging and disposal activities: a) those proposing new licensable marine activities should consult relevant guidance and follow applicable licensing processes; b) where an application is submitted relating to new disposal sites or increasing capacity of existing sites, applicants must demonstrate that there are no safe and practicable alternatives as per guidance c) where it is not possible to minimise or mitigate the impact as per guidance and / or application process, applicants will set out the reasons why and the case for proceeding with their application. In determining a licence, the licensing authorities will assess the degree to which (a) (dredging and disposal) and (b) (disposal sites) are satisfied.	Should be screened out due to lack of spatially specific understanding of nature and location of potential activities (no change in existing use patterns).	1
FISH1	Within areas of fishing activity, the following will apply in order of sequence: a) those proposing new licensable marine activities should, demonstrate that they will not prevent fishing activities on, or access to, fishing grounds or landing sites; b) where this not possible, they should set out how they will minimise or mitigate the impact on the ability to undertake fishing activities and access fishing grounds and or landing sites; c) where it is not possible to minimise or mitigate the impact, they will set out the reasons why and the case for proceeding with their application. All cases will need to demonstrate fulfilment of other plan objectives and any potential negative impacts upon achieving other marine plan objectives resulting from displacement of fishing activity In determining an application, the decision making authorities will assess which of (a), (b) or (c) should apply and the degree to which they are satisfied including, in the case of (c), the relative merits of the proposed development or activities vs. fishing activities and access to fishing grounds or landing sites.	Should be screened out because it is not spatially explicit	1
FISH2	Within spawning and nursery areas and the associated habitat, the following will apply in order of sequence: a) those proposing new licensable marine activities should, wherever possible, demonstrate that they will not impact spawning and nursery areas and the associated habitat; b) where this not possible, they should set out how they will minimise or mitigate the impact on the spawning and nursery areas and the associated habitat; c) where it is not possible to minimise or mitigate the impact, they will set out the reasons why and the case for proceeding with their application. In determining an application, the decision making authorities will assess which of (a), (b) or (c) should apply and the degree to which they are satisfied including, in	Should be screened out because it is not spatially explicit	1

Policy	Description	Screening View	Screening Criteria No. (See Figure 8)
	the case of (c), the relative merits of the proposed development or activity vs. spawning and nursery grounds and the associated habitat and their resulting benefits.		
AQ1	Within designated shellfish waters, shellfish harvesting waters and sites subject to Several Orders the following will apply in order of sequence: a) Proponents of new licensable marine activities should, wherever possible, demonstrate that they will not sterilise the seabed and associated water column b) Where a) is not possible, proponents should set out how they will minimise or mitigate the impact on aquaculture activity; c) Where b) is not possible, proponents should set out the reasons why, and the case for proceeding with their application.	Should be screened out because it is not spatially explicit	1
TR1	Where licensable marine activities involving construction visible from the coastline is required, the licensing authority will prefer applications that will undertake construction in a manner sympathetic to tourism and recreation activities in the vicinity.	Should be screened out because level of compatibility with tourism and recreation activities is not spatially explicit.	1
TR2	Development in the marine area visible from terrestrial designations, including but not exclusively Areas of Outstanding Natural Beauty, Heritage Coasts and National Parks should be sympathetic to or in-keeping with the terrestrial features through: Maintaining the character of the undeveloped coast, protecting and enhancing its distinctive landscapes, particularly in areas defined as Heritage Coast Developments functioning well and adding to the overall quality of the area, not just for the short term but over the lifetime of the development; Developments being visually sympathetic as a result of good design. This applies to developments visible from terrestrial designations but is also a wider aspiration of the East areas marine plans. Applicants considering the plans of the designated areas when planning developments. See also GOV 3 and SOC4.	Should be screened out because level of compatibility with tourism and recreation activities is not spatially explicit.	1
TR3	Any offshore licensable marine activities that involves a static object in the marine area which may impact on boating routes should demonstrate they have consulted with the boating industry and demonstrate how as part of their licence application they have mitigated any negative impacts on these routes.	Should be screened out because it is not clear what policy protects.	1
TR4	Applications supporting tourism diversification in communities in the plan area, including expanding the season through new forms of tourism, will be encouraged when in compliance with other relevant policies in the marine plan	Should be screened out because it is not spatially explicit	1

4 References

ABPmer, 2010. 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, 2011. 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, 2013. Habitats Regulations Appraisal of Draft Plan for Wave and Tidal Energy in Scottish Waters Information for Appropriate Assessment Report for the Scottish Government January 2013; ABP Marine Environmental Research Ltd. Report No. R. 1863a-d (pre-screening, screening, assessment information and consultation review reports)

BirdLife International (2010). BirdLife Seabird Wikispace. Available online: http://seabird.wikispaces.com/

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.

Department of Energy and Climate Change (DECC). 2011. Offshore Oil & Gas Licensing. 26th Seaward Round Southern North Sea http://www.offshore-sea.org.uk/downloads/26th_Round_Southern_North_Sea_Blocks_AA.pdf

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

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

European Commission 2001, Assessment of plans and projects significantly affecting Natura 2000 sites

Evans, P.G.H. and Teilmann, J. (editors)., .2009. Report of ASCOBANS/HELCOM Small Cetacean Population Structure Workshop. ASCOBANS/UNEP Secretariat, Bonn, Germany. 140pp.

Malcolm, I. A., Godfrey, J and Youngson, A.F, 2010. Review of migratory routes and behaviour of Atlantic Salmon, sea trout and European eel in Scotland's coastal environment: implications for the development of marine renewables. Scottish Marine and Freshwater Science Vol. 1 No 14 (draft report Published by Marine Scotland Science)

Marine Management Organisation (2012a) East of England Marine Plans Habitats Regulations Assessment Pre-Screening European Sites Information (*Final Draft for Consultation*). Report Prepared by ABP Marine Environmental Research, Hartley Anderson and Hyder Consulting (UK) Ltd Report 003-UA003460-UE21R-04 24 February 2012

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

Marine Management Organisation. 2013b. East of England Marine Plans Habitats Regulations Appraisal - Screening Report. Report Prepared by ABP Marine Environmental Research, Hartley Anderson and Hyder Consulting (UK) Ltd ABPmer Report No.R.2020b. March 2013

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

Marine Management Organisation. 2013d. Habitats Regulations Appraisal of Draft East marine plans in English Waters: Appropriate Assessment March 2013

SCANS-II .2008. Small Cetaceans in the European Atlantic and North Sea. Final Report to the European Commission under project LIFE04NAT/GB/000245. Available from Sea Mammal Research Unit, University of St. andrews, 54pp

SNH, 2010. Otter and Development – Scottish Wildlife Series. Online site access January 2010 http://www.snh.org.uk/publications/on-line/wildlife/otters/default.asp

Teilmann, J., Sveegaard, S., Dietz, R., Petersen, I.K., Berggren, P. & Desportes, G. 2008. High density areas for harbour porpoises in Danish waters. National Environmental Research Institute, University of Aarhus. 84 pp. - NERI Technical Report No. 657.

Thompson, PM., Cheney, BJ., Ingram, S., Stevick, P., Wilson, B. & Hammond, P. 2011 Distribution, abundance and population structure of bottlenose dolphins in Scottish waters, Commissioned Report, 2011, 354.

5 Figures

Figure 1: East Inshore and Offshore Marine Plan Areas Showing 100km Buffer Zone Used for Pre-Screening

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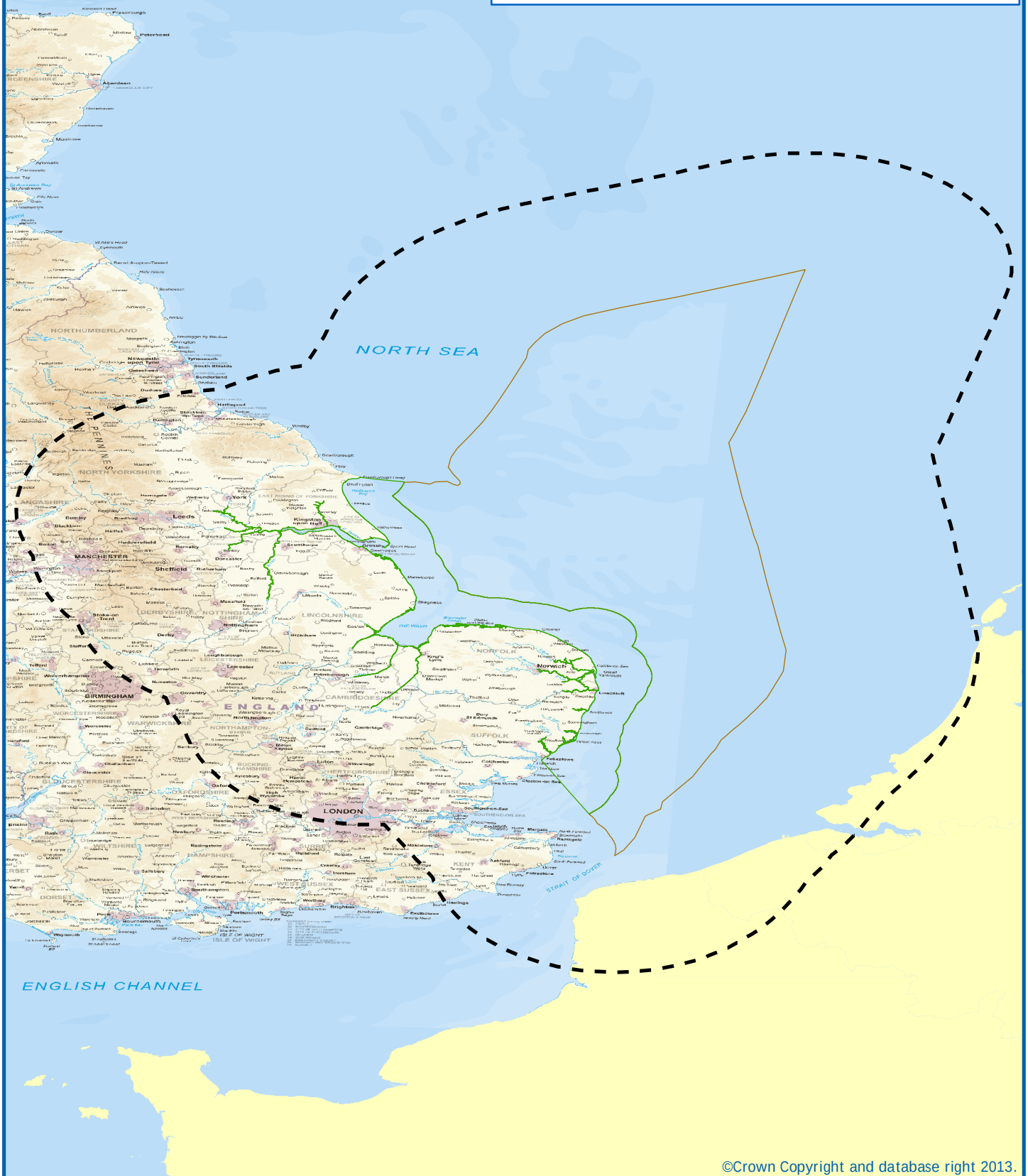
March 2013
This map has been produced using the ETRS89 Coordinate Reference System



100km HRA Screening Zone
East Inshore Marine Plan Area
East Offshore Marine Plan Area

Figure 2a: SAC Sites within 100km Buffer Zone Screened into Assessment at Pre-Screening

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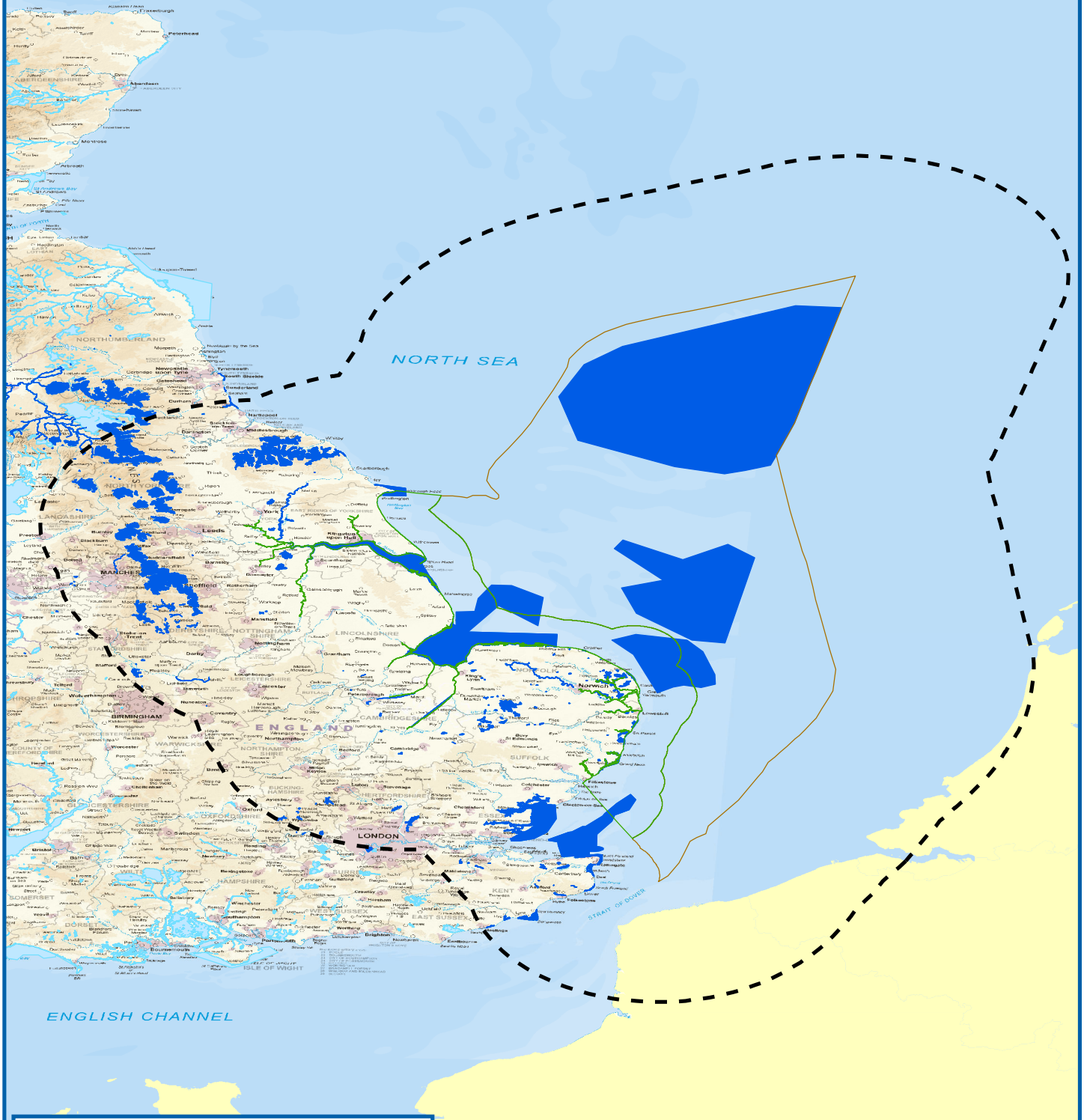

Figure 2b: SPA Sites within 100km Buffer Zone Screened into Assessment at Pre-Screening

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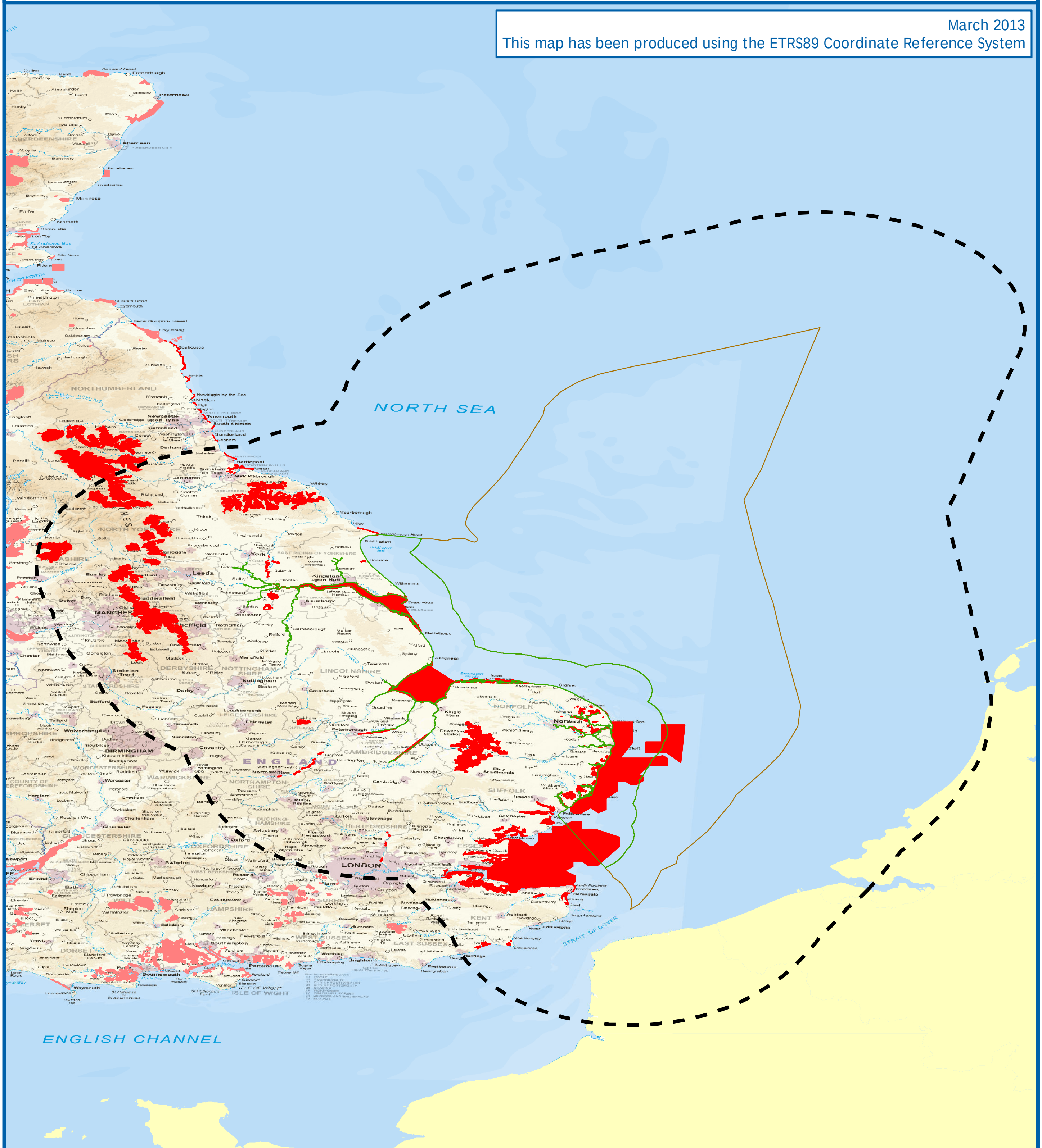

- 100km HRA Screening Zone
- East Inshore Marine Plan Area
- East Offshore Marine Plan Area
- Special Protection Area
- Special Protection Areas Outside the 100km Zone

Figure 2c: Ramsar Sites within 100km Buffer Zone Screened into Assessment at Pre-Screening

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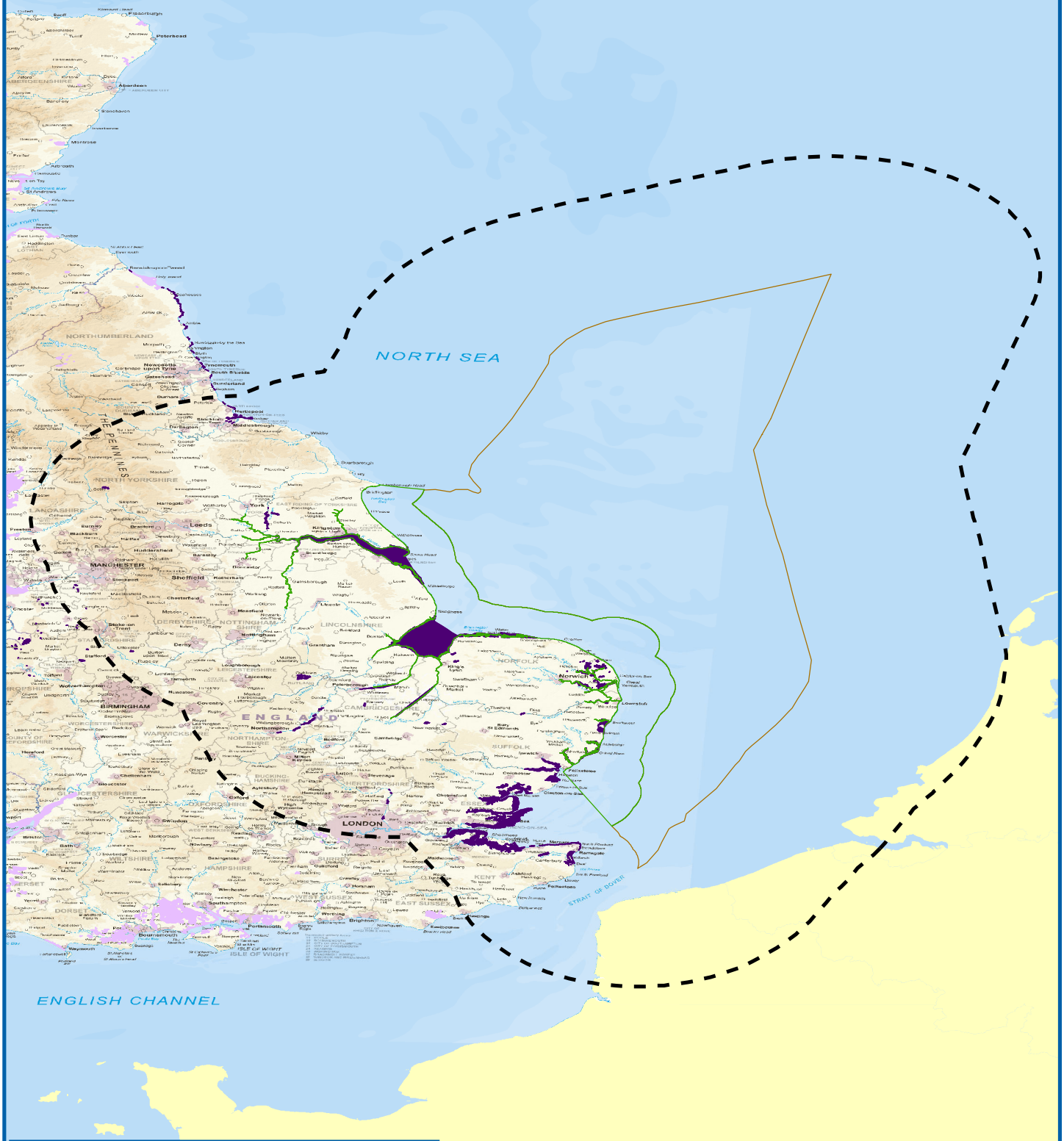

- 100km HRA Screening Zone
- East Inshore Marine Plan Area
- East Offshore Marine Plan Area
- Ramsar
- Ramsar Outside the 100km Zone

Figure 2d: East Offshore Marine Plan Areas Showing 100km Buffer Zone and Transnational Sites for Pre-Screening

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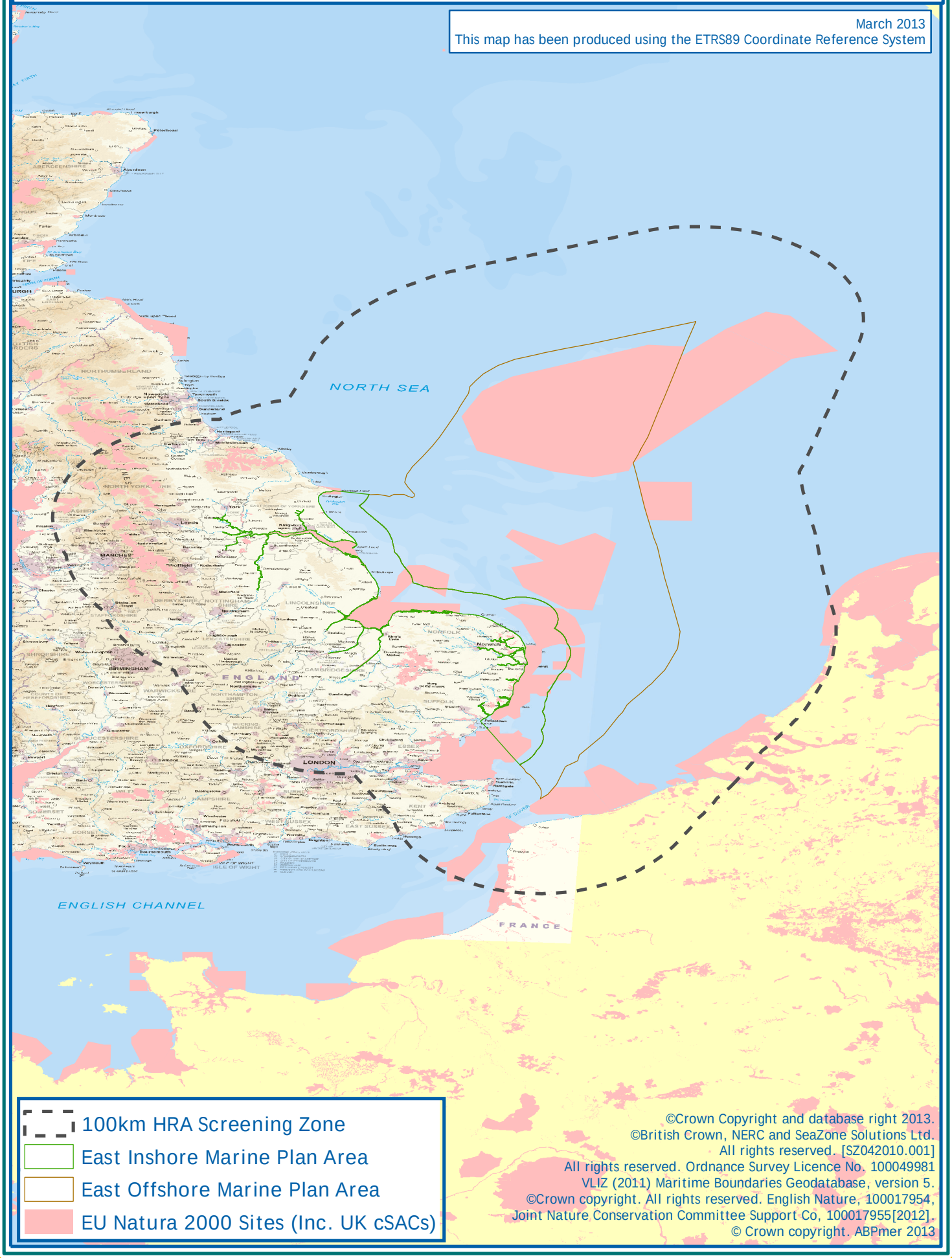

Figure 3a: SAC Sites within Marine Plan Areas and One Tidal Ellipse Distance Screened into Assessment Due to Potential Habitat or Water Quality Effects

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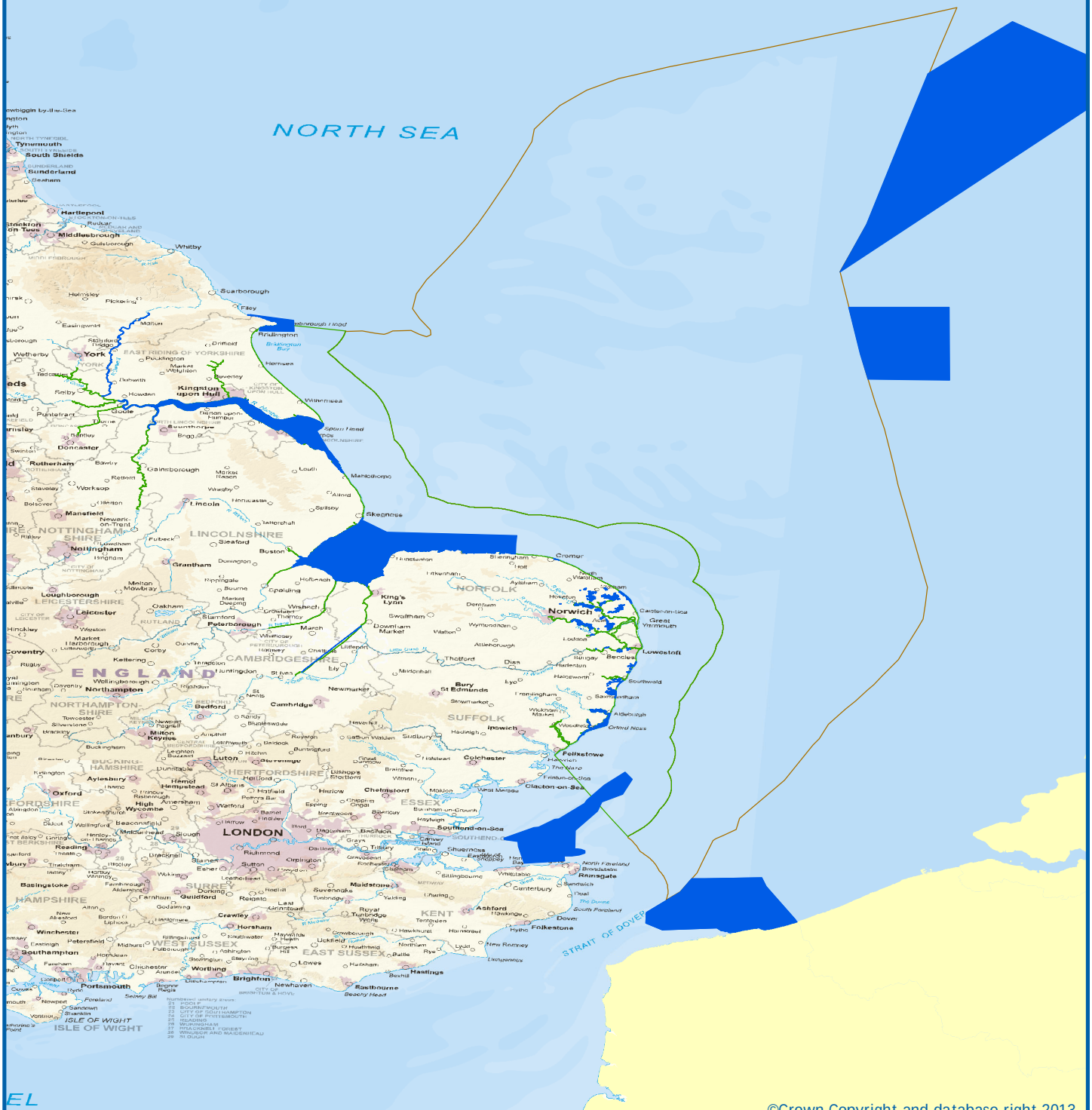

Figure 3b: SPA Sites within Marine Plan Areas and One Tidal Ellipse Distance Screened into Assessment Due to Potential Habitat or Water Quality Effects

marine management organisation

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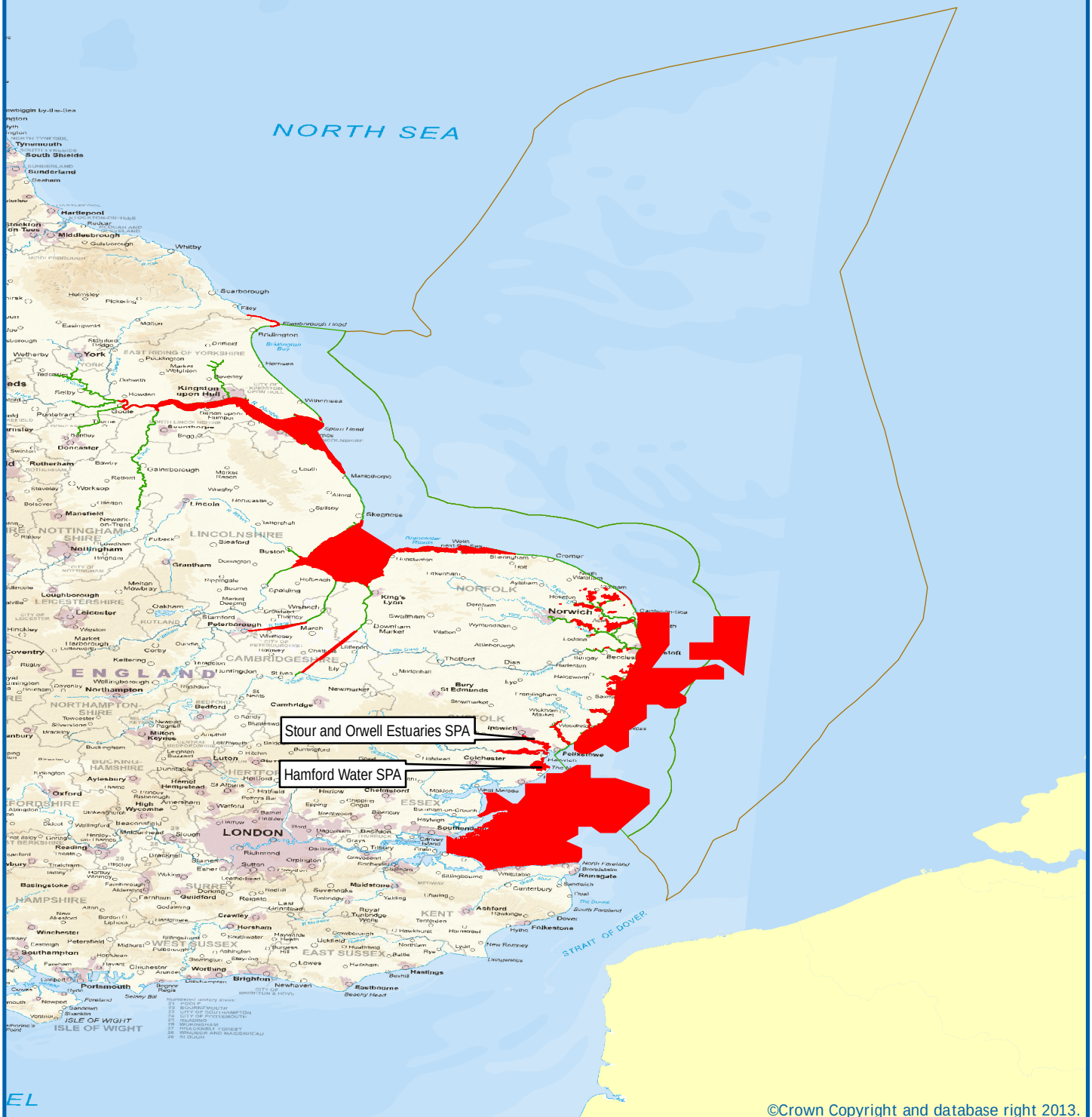

Figure 3c: Ramsar Sites within Marine Plan Areas and One Tidal Ellipse Distance Screened into Assessment Due to Potential Habitat or Water Quality Effects

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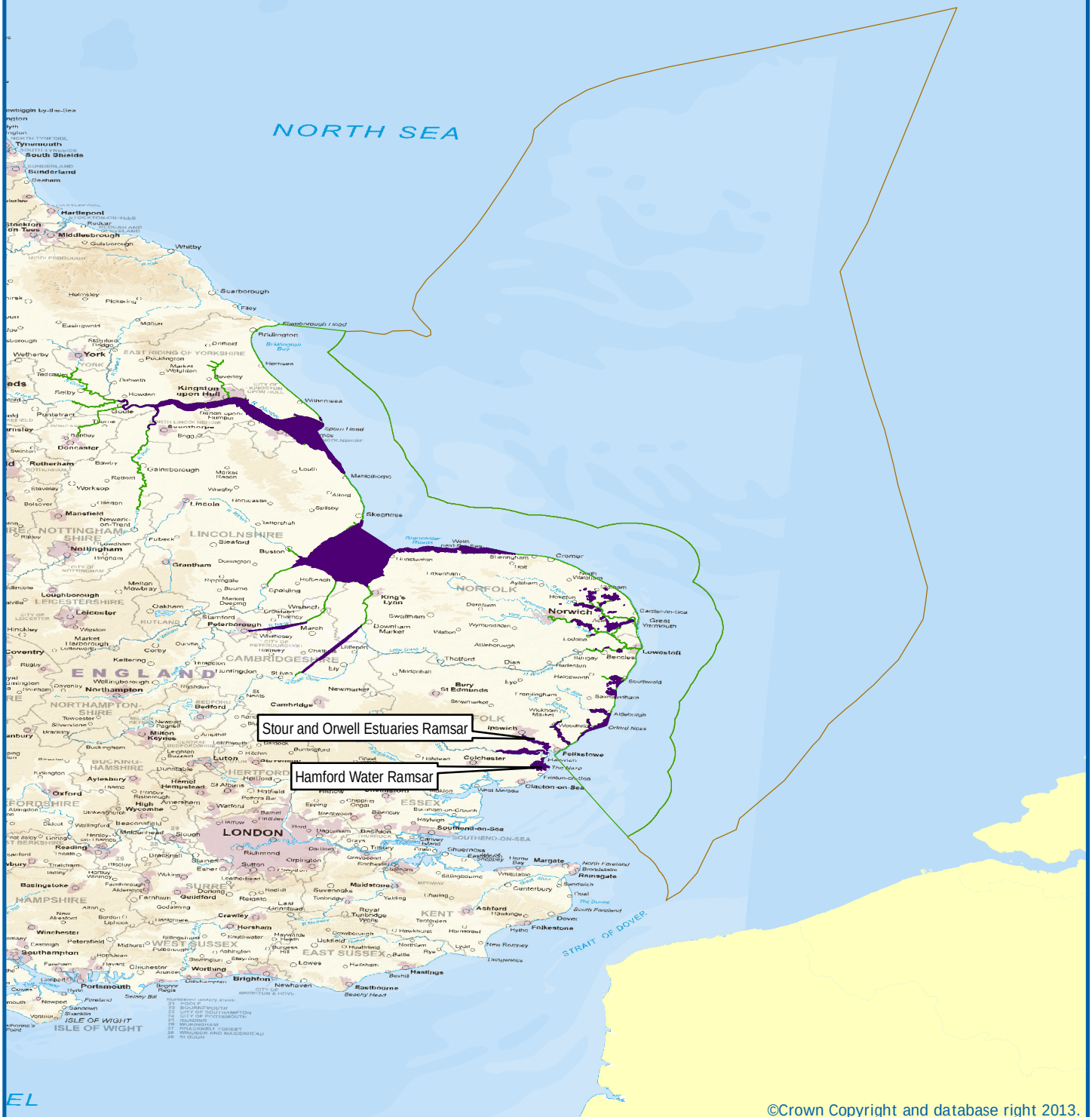

Figure 4a: SPA and Ramsar Sites Supporting Manx Shearwater (Maximum Foraging Distance 400km) that have been Screened into Assessment

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100km HRA Screening Zone
East Inshore Marine Plan Area
East Offshore Marine Plan Area
Manx Shearwater (*Puffinus puffinus*) SPA and Ramsar

Figure 4b: SPA and Ramsar Sites Supporting Northern Fulmar (Maximum Foraging Distance 400km) that have been Screened into Assessment

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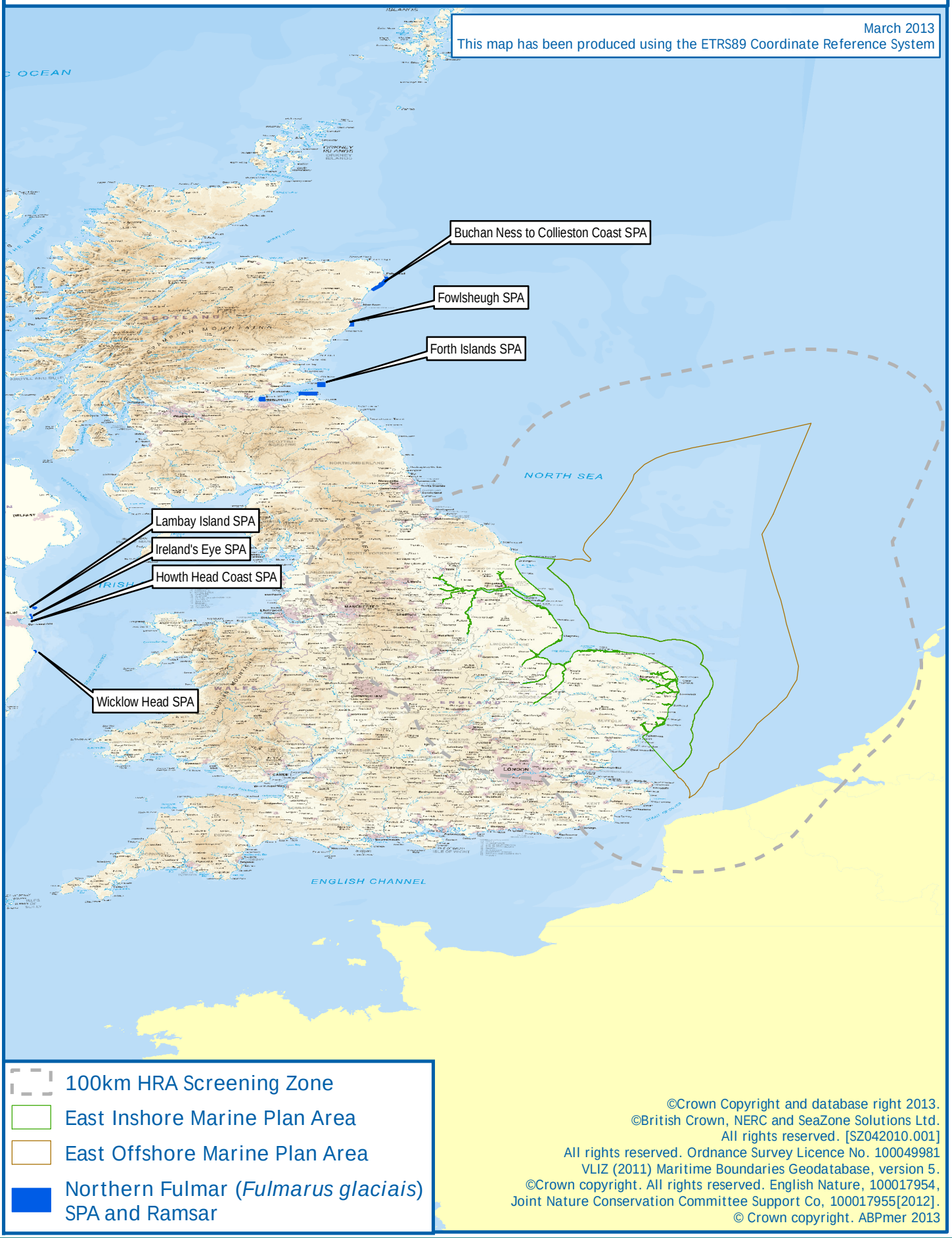

Figure 4c: SPA and Ramsar Sites Supporting Northern Gannet (Maximum Foraging Distance 400km) that have been Screened into Assessment

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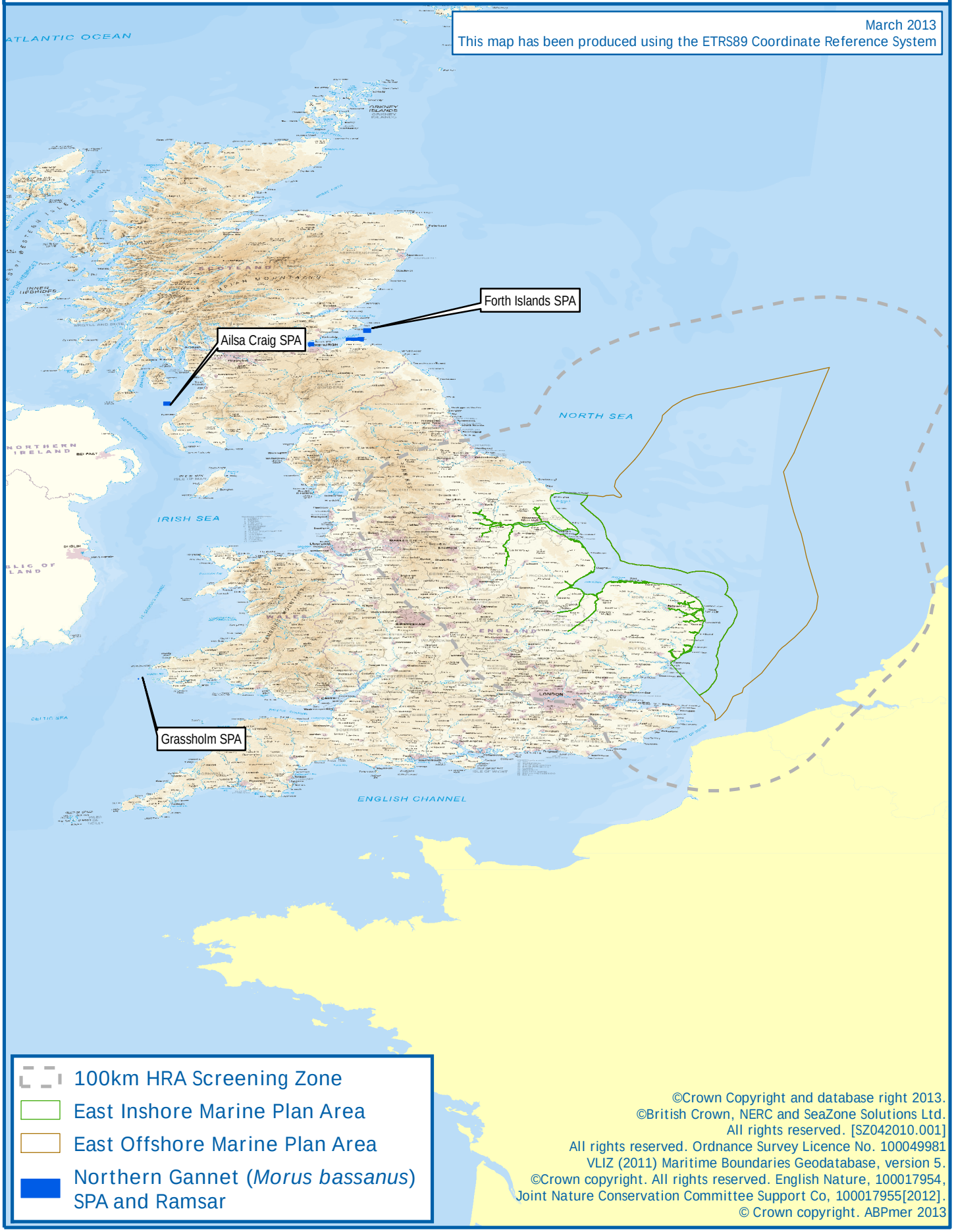

Figure 4d: SPA and Ramsar Sites Supporting Razorbill (Maximum Foraging Distance 312km) that have been Screened into Assessment

marine management organisation

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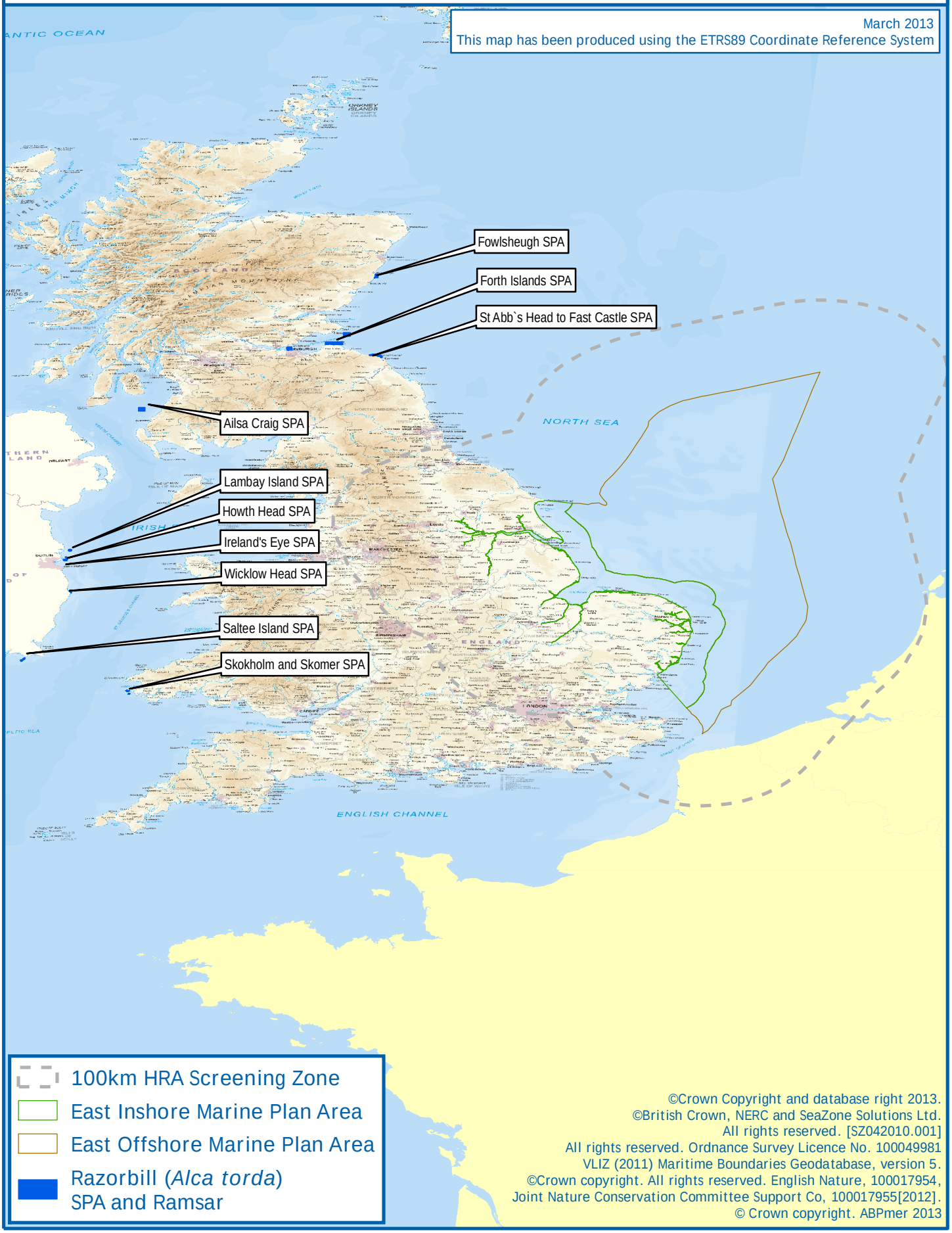

Figure 5a: SAC and Ramsar Sites within the 100km Buffer Zone Supporting Seal Species that have been Screened into Assessment

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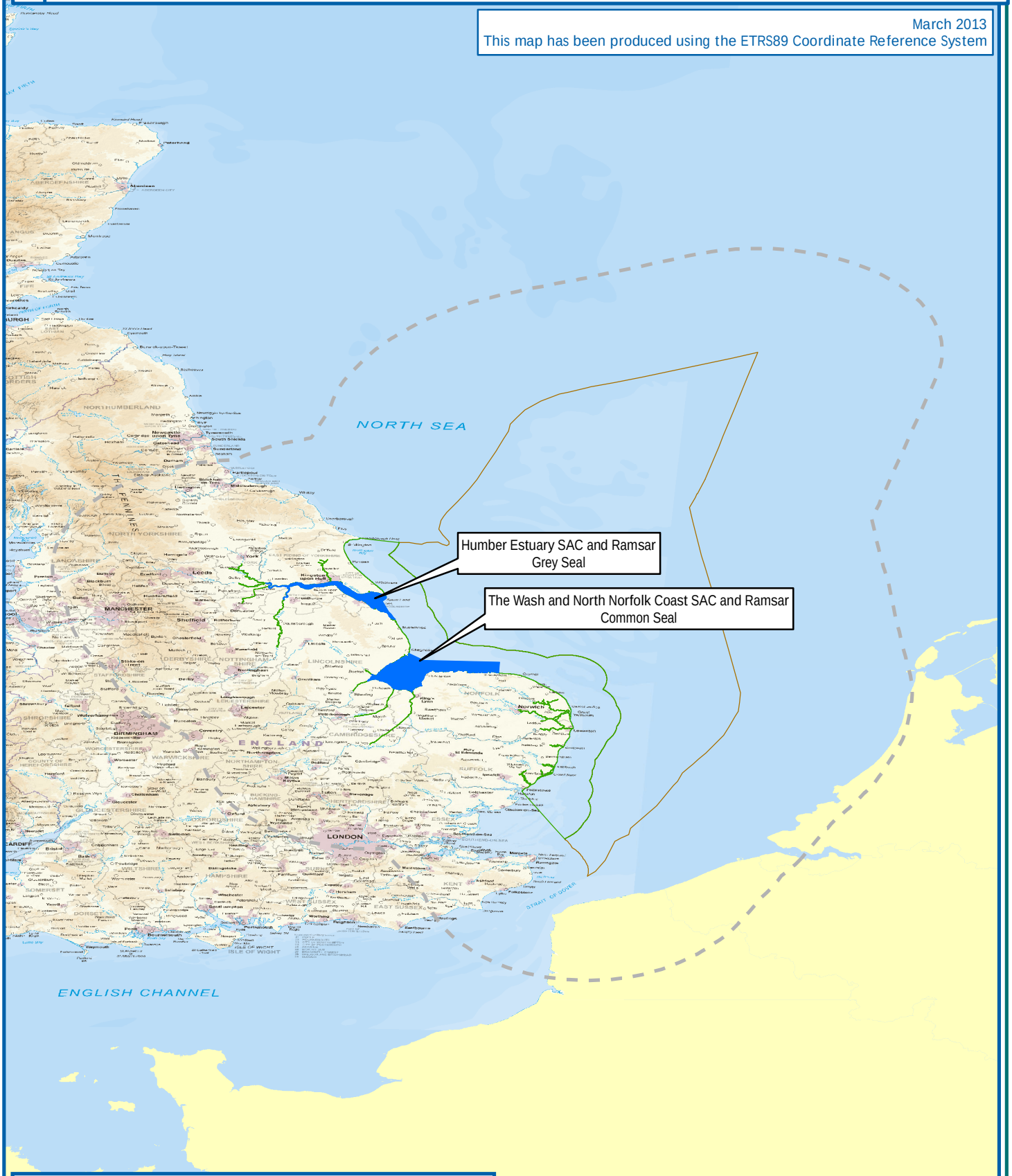

100km HRA Screening Zone
East Inshore Marine Plan Area
East Offshore Marine Plan Area
Marine Mammal Species SAC and Ramsar

Figure 5b: Transnational and UK SAC and Ramsar Sites Supporting Harbour Porpoise and Bottlenose Dolphins that have been Screened into Assessment

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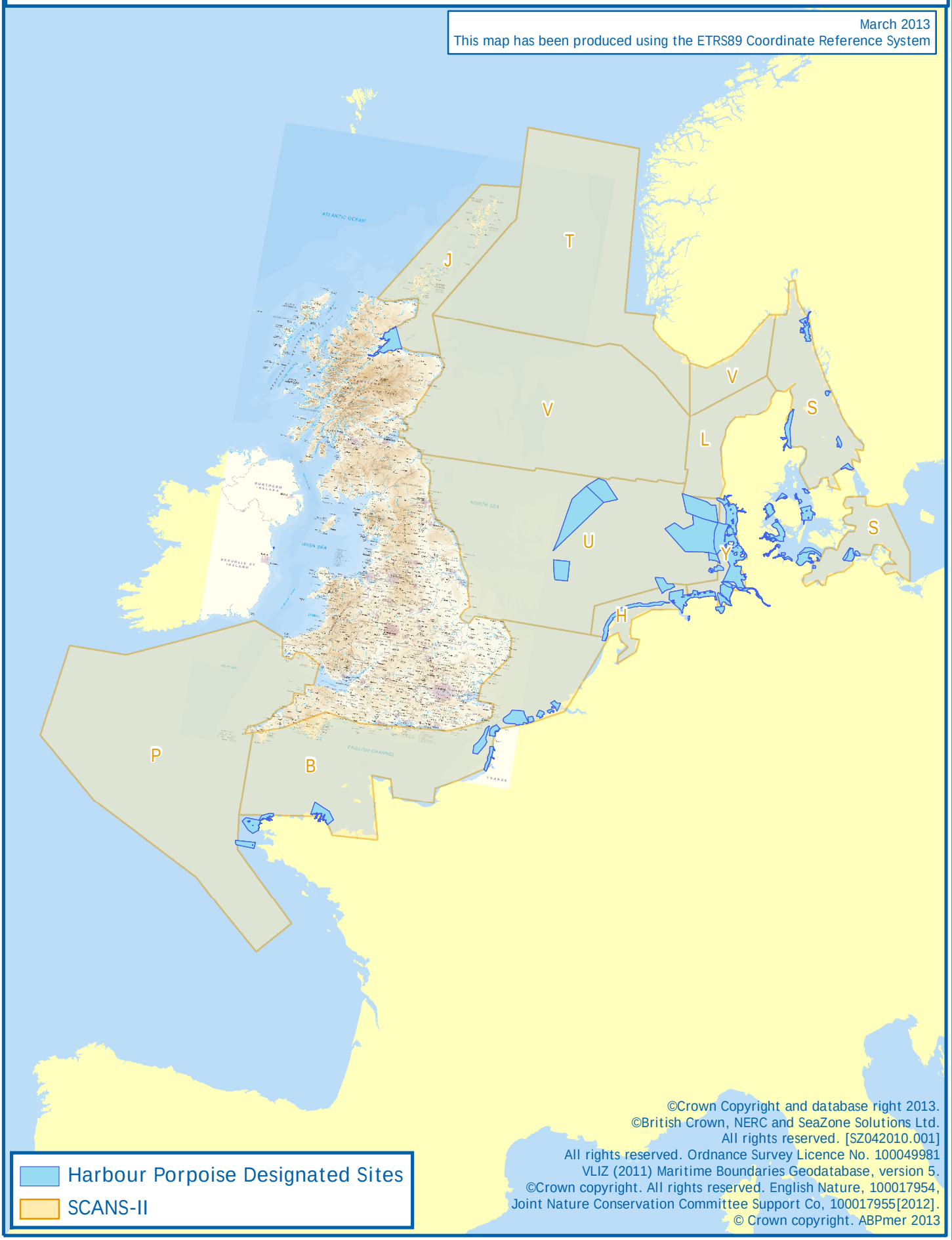

Figure 5c: SAC and Ramsar sites within 10km of the Marine Plan Areas Supporting Otter Species that have been Screened into Assessment

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Figure 6: SAC and Ramsar Sites Supporting Anadromous Fish and Freshwater Pearl Mussel Species that have been Screened into Assessment

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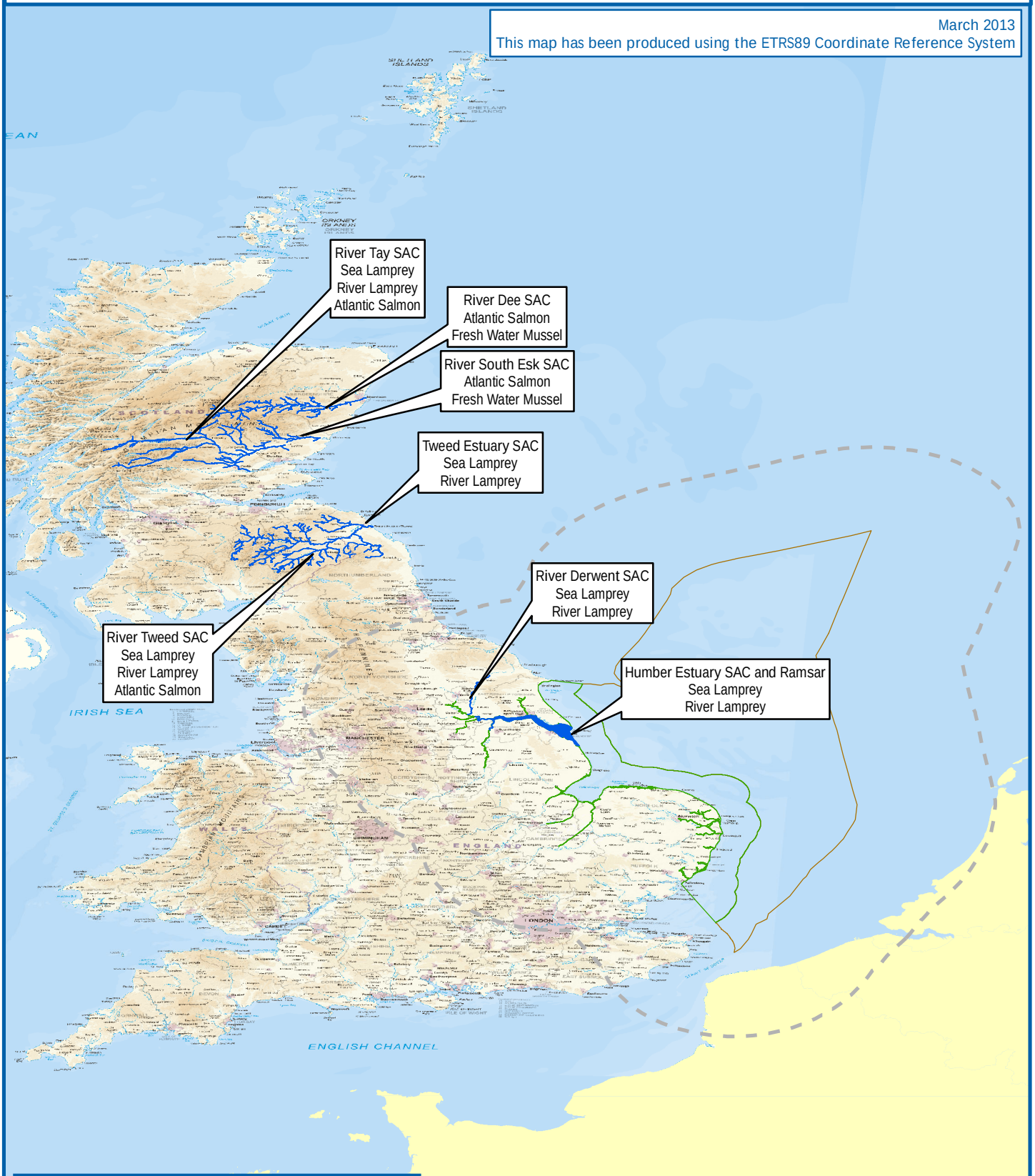

100km HRA Screening Zone
East Inshore Marine Plan Area
East Offshore Marine Plan Area
Migratory Fish & Pearl Mussel

Figure 7: SAC Site Supporting within 50km of the Marine Plan Areas Supporting Coastal Bat Species that have been Screened into Assessment

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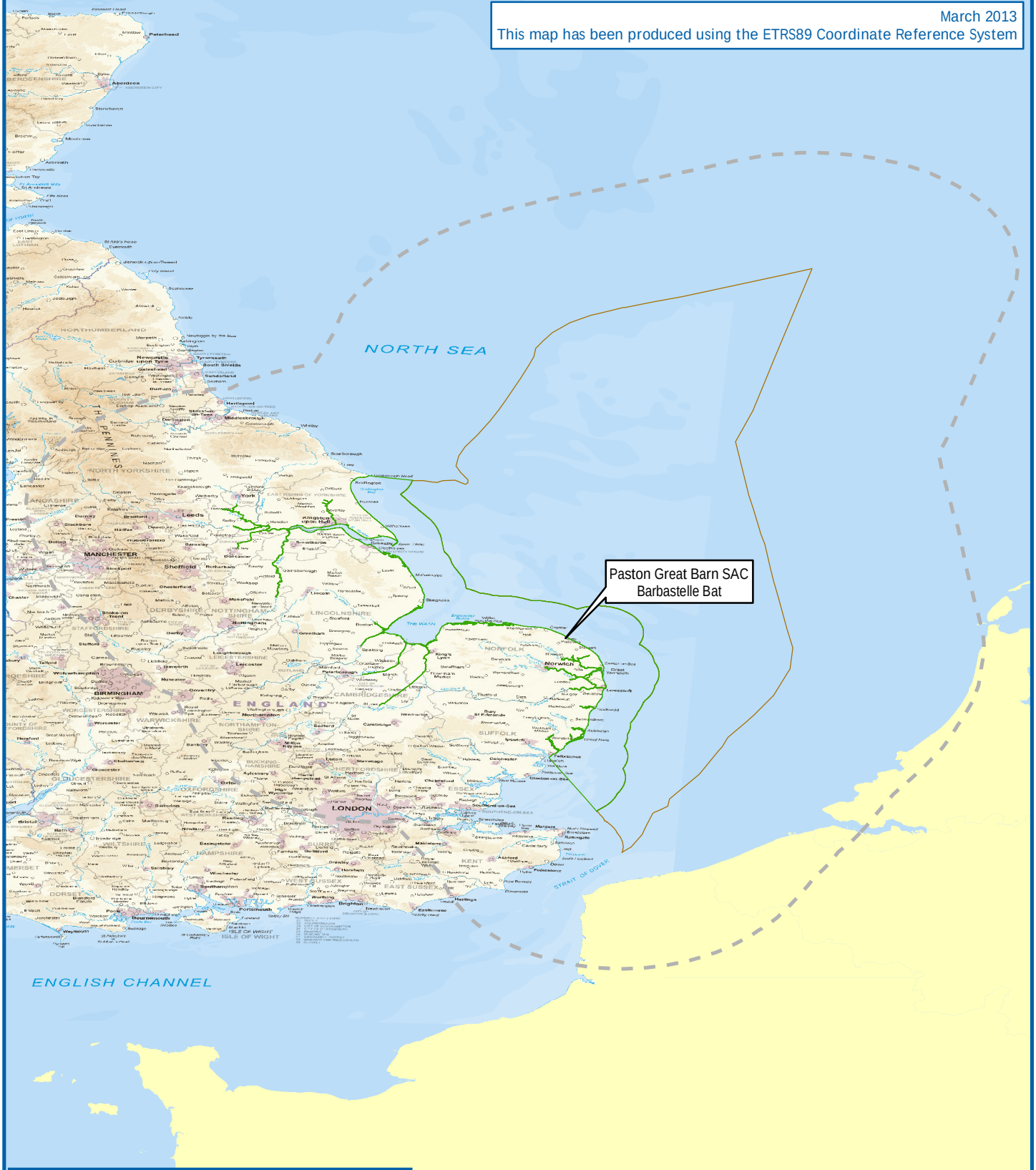

100km HRA Screening Zone
East Inshore Marine Plan Area
East Offshore Marine Plan Area
Bat Species SAC

Figure 8: Flow Diagram Describing the Policy Screening and Assessment process for the Marine Plan HRA