



Marine
Management
Organisation

**Sustainability
Appraisal Scoping
Report:**

**North East Inshore and Offshore
North West Inshore and Offshore
South East Inshore
South West Inshore and Offshore
Marine Plans**

June 2016

Post consultation



Marine
Management
Organisation

Sustainability Appraisal Scoping Report:

North East Inshore and Offshore, North West Inshore and Offshore, South East Inshore and South West Inshore and Offshore Marine Plans

June 2016

Post consultation

Report prepared by: Ramboll Environ, Marine Planning Consultants and ClearLead Consulting Ltd.



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Contents

1. Introduction and Purpose of this Report	1
1.1 Introduction	1
1.2 Structure of the Scoping Report – a new approach.....	1
1.3 Consultation	3
2. Introduction to the Marine Plans.....	6
2.1 Policy and data context	6
2.2 Scope of Marine Plans – approach and principles	7
2.3 Remit of the Marine Plans.....	9
3 Introduction to the SA.....	13
3.1 Background and purpose of the SA	13
3.2 SA Process	13
4 Methodology of the SA scoping.....	15
4.1 Overall approach.....	15
4.2 Baseline database.....	15
4.2.1 The purpose of the database	15
4.2.2 Topics covered within the database	17
4.2.3 The approach to data collection	19
4.2.4 The layout of the database.....	20
4.3 Report-cards	24
4.3.1 Cultural heritage.....	25
4.3.2 Geology, substrates and coastal processes.....	25
4.3.3 Seascape and landscape.....	25
4.3.4 Water	25
4.3.5 Air quality	25
4.3.6 Climate.....	25
4.3.7 Communities, health and well-being	25
4.3.8 Economy	25
4.3.9 Biodiversity, habitats, flora and fauna	25
4.4 Mapped data	26
4.4.1 Cultural heritage.....	26
4.4.2 Geology, substrates and coastal processes.....	26
4.4.3 Seascape and landscape.....	27
4.4.4 Water	27
4.4.5 Air quality	27
4.4.6 Climate.....	27
4.4.7 Communities, health and well being.....	28
4.4.8 Economy	28
4.4.9 Biodiversity habitats, flora and fauna	29
5 Results of SA scoping	31

5.1 The scope of the SAs – SA framework	31
5.2 Scope of the SAs: Cultural heritage	35
5.3 Scope of the SAs: Geology, substrates and coastal processes	35
5.4 Scope of the SAs: Seascape and landscape	35
5.5 Scope of the SAs: Water.....	36
5.6 Scope of the SAs: Air quality.....	36
5.7 Scope of the SAs: Climate	37
5.8 Scope of the SAs: Communities, health and well being.....	37
5.9 Scope of the SAs: Economy	38
5.10 Scope of the SAs: Biodiversity, habitats, flora and fauna.....	42
6 Results of SA scoping – scope and level of detail.....	45
6.1 Geographical scope including transboundary effects.....	45
6.2 Temporal scope	45
6.3 Level of detail.....	45
6.4 Cumulative effects.....	46
7 Related appraisal processes	48
7.1 Habitat Regulations Assessment	48
7.2 Equalities Impact Assessment screening process	49
7.2.1 Introduction	49
7.2.2. What are the marine plans and who will they affect?	49
7.2.3 Key considerations.....	50
7.2.3 What is the approach?	53
8 What happens next?	54
8.1 Next stages in the SA process	54
8.2 Contact details	55

Figures

Figure 3.1: Stages in the SA process.....	14
Figure 4.1: Database policy and data screen shots	22

Tables

Table 2.1: Remit of the marine plans.....	10
Table 4.1: Fulfilling the requirements of the SEA regulations.....	16
Table 4.2: Draft SA framework	18
Table 5.1: SA framework.....	32
Table 7.1: Equalities Impact Assessment – Considerations.....	51

1. Introduction and purpose of this report

1.1 Introduction

The Marine Management Organisation (MMO) is currently preparing the marine plans for the north east, north west, south west and south east marine plan areas. The plans will set out how the [UK Marine Policy Statement](#) will be implemented in these marine plan areas.

Marine plans, and their reflection of the [UK Marine Policy Statement](#), contribute to a plan led regulatory system for marine activities. They provide greater coherence in policy and a forward looking, proactive and spatial planning approach to the management of the marine area, its resources, and the activities and interactions that take place within it. The marine plans will cover a 20 year period and will be reviewed regularly throughout this time.

The marine plans will seek to take account of social, economic and environmental factors that affect the north east, north west, south west and south east marine plan areas and the communities that are dependent on or have an interest in them.

The marine plans will be subject to an integrated Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) in line with the requirements of Statutory Instrument 2004 No. 1633: The Environmental Assessment of Plans and Programmes Regulations 2004.

This scoping report is the first formal output of the SA process. The scoping report provides baseline information on the environmental, social and economic characteristics of the marine plan areas, including the likely evolution of the baseline without the marine plans.

The scoping report has been prepared by Ramboll Environ, Marine Planning Consultants and ClearLead Consulting Ltd on behalf of the MMO.

1.2 Structure of the scoping report – a new approach

The purpose of SA scoping is to define the scope and level of detail of the assessment of the marine plans and to provide the statutory consultation bodies with the opportunity to comment on “*the scope and level of detail of the information that must be included in the report*”, SI 2004 No. 1633 PART 3 12.—(5).

The primary purpose of data collection at this stage is to help set the scope of the SA (what factors are to be scoped in (included) and scoped out (not included) of the appraisal stage of the SA). This information is then used to develop a SA framework, against which the plan will be appraised.

A secondary purpose is to assemble an evidence base which can be used to inform the appraisal of the marine plans. It should be noted that this process will continue throughout the SA process, and a more detailed baseline data collection may be needed once the appraisal of the marine plan options is underway. Therefore, the

evidence base at this stage should not be seen as final for the purposes of the assessment. At the assessment stage further data may be necessary and the assessment will draw on other data sources (such as more local data available from local councils and other stakeholders).

Collection of baseline data is an important part of SA. However, SA (or indeed planning) is not about collecting data for the sake of it. The overall approach to this scoping report has been to focus on collecting data and information that is crucial to the decision making process and then using this to effectively scope in (or out) those issues that are relevant to each marine plan. The word “issues” includes potentially negative issues (challenges) and positive issues (opportunities) and refers to issues which are significant in helping to set the scope of the SA. Issues which are for marine plans to address will be developed as part of the planning process. There could be some overlap between planning and sustainability issues, but they are likely to be considered in more detail as part of the plan making process. This is consistent with SA best practice.

SA scoping reports have traditionally been long text based documents which have attempted to collect all the necessary data at the early scoping stage. However, at the scoping stage there is often uncertainty regarding the level of detail or exact scope of the plans to be appraised. This can lead to unnecessary data being collected or the data collected not being the correct level of detail or spatial scale. Therefore, the primary purpose of this scoping report is to collect the data which is appropriate to the decisions that will be taken at the scoping stage, with regard to the coverage and level of detail of the assessment. The data that has been collected will be useful in assembling an evidence base (both for the SA and for the marine plans) but there is an acknowledgement that this does not represent all the data / evidence that could be needed to appraise the marine plans.

This scoping report has also taken a new approach to presentation, as follows:

- a fully searchable baseline database
- a series of report cards

The baseline database has been produced as part of the SA scoping process. This baseline database includes information that can help to characterise the plan areas, identify impacts upon receptors, legislative and policy targets and objectives that should be met, issues that have been identified for each sub topic and also identifies known data gaps. This database is considered to be a starting point, underpinning scoping decisions and can be built upon as the SA and marine plan processes develop.

The series of report cards have been produced to provide a more accessible way of interpreting the findings of the SA scoping process. Expert judgement has been used to determine which elements of the baseline / issues have been discussed on the report cards. The report cards have then been used to define the scope of the SA.

Taking all of the above into account, the format of this report is as follows:

1. Section 1 (this section): introduction to the report and explanation of the consultation that has been undertaken as part of SA scoping
2. Section 2: background to the marine plans and details of their scope and remit
3. Section 3: introduction to the SA process
4. Section 4: methodology of the SA scoping
5. Section 5: results of the SA scoping with regard to the topic scope of the SA
6. Section 6: results of the SA scoping with regard to the geographical and temporal scope of the SA, the level of detail of the SA and how the SA report will deal with other pertinent issues¹
7. Section 7: outline details of two related appraisal processes, Habitat Regulations Assessment and Equalities Impact Assessment
8. Section 8: outline of next steps for the marine plans process and the SA

1.3 Consultation

The scoping report is the primary mechanism for consulting on the scope and level of detail of the SA, and was consulted on in accordance with the requirements of Regulation 12(5) and (6) of the SEA Regulations². To adhere to the SEA regulations it needs to be sent to the following statutory bodies:

- Natural England (NE)
- Historic England (HE)
- The Environment Agency (EA)

In addition, the scoping report has also been issued to the following organisations for comment:

- Associated British Ports
- Association of Inshore Fisheries and Conservation (IFCA)
- British Marine Aggregate Producers Association (BMAPA)
- Chamber of Shipping
- Department for Environment, Food and Rural Affairs (DEFRA)
- Department of Energy and Climate Change (DECC)
- Devon Coastal Partnership
- Durham Heritage Coast
- Joint Nature Conservation Committee (JNCC)
- National Federation of Fishermen's Organisations (NFFO)
- North-West Coastal Forum
- Wildlife and Countryside Link
- Oil and Gas UK
- Renewables UK
- Royal Yachting Association (RYA)
- Severn Estuaries Partnership
- Tamar Estuaries Consultative Forum

¹ Please note that this report does not address in detail how the appraisal will be undertaken. It is not necessary to consult on the methodology that will be used at the appraisal stage and this will be developed once the scope of the marine plans (and their alternatives) are clearer.

² The Environmental Assessment of Plans and Programmes Regulations 2004 SI No.1633

- Thames Estuary Partnership
- The Crown Estate
- Marine Scotland (The Scottish Government)
- Visit England
- Welsh Assembly

A number of these organisations, in addition to the statutory bodies and the MMO, form the SA Advisory Group. The full list of the members of the SA Advisory group is given below:

- Associated British Ports
- Association of Inshore Fisheries and Conservation (IFCA)
- British Marine Aggregate Producers Association (BMAPA)
- Chamber of Shipping
- Devon Coastal Partnership
- Durham Heritage Coast
- Historic England
- Joint Nature Conservation Committee (JNCC)
- Marine Scotland (The Scottish Government)
- Natural England
- National Federation of Fishermen's Organisations (NFFO)
- North-West Coastal Forum
- Royal Yachting Association (RYA)
- Severn Estuaries Partnership
- Tamar Estuaries Consultative Forum
- Thames Estuary Partnership
- The Crown Estate
- The Environment Agency (EA)
- Wildlife and Countryside Link

The overall objective of the advisory group is to guide and advise on the development of the SA for the North East, North West, South West and South East Marine Plans.

The advisory group provides objective procedural, technical and general advice:

- to facilitate the marine plan SA process
- to input, as appropriate to each stage of the SA process (scoping, appraisal of alternatives, appraisal of the draft plan and SA reporting)
- to promote stakeholder involvement
- to ensure appropriate consideration of relevant information, including that arising from consultations on the marine plans
- to achieve timely preparation of quality documents to inform the appraisal of the marine plans

The group met on Wednesday 2 March 2016 to discuss the scope of the SA and views expressed at this meeting have been reflected within this report. The group will

continue to meet and input into the SA at key points in the process. The public consultation on the scoping report ran from 11 April 2016 until 13 May 2016.

2. Introduction to the marine plans

2.1 Policy and data context

The MMO was established in 2010 through provisions made in the [Marine and Coastal Access Act \(MCAA\) 2009](#) ('The Act'). The Act also set out the mechanism for marine planning with the MMO given the delegated responsibility to prepare marine plans for English waters. Marine plans seek to provide greater coherence of policy and a forward-looking, proactive and spatial approach to the management of the marine area, its resources and the activities and interactions that take place within it.

The [UK Marine Policy Statement](#) (2011) provides the framework for preparing marine plans and taking decisions affecting the marine environment. The [UK Marine Policy Statement](#) facilitates and supports the formulation of national and regional marine plans, ensuring that marine resources are used in a sustainable way in line with the high level marine objectives.

The Act divides UK waters into marine planning areas with an inshore area (0 to 12 nautical miles (nm)) and offshore area (12 to 200nm or Exclusive Economic Zone limit/median line). Based on stakeholder feedback, and to provide a consistent and simple approach to marine plans, the MMO is preparing adjacent inshore and offshore marine plans through a single integrated process, with the exception of the south east, where an inshore plan only will be prepared as there is no south east offshore marine plan area. Therefore, a single 'plan document' is developed for the majority of the marine plan areas with distinctions made as to which policies are relevant to either the inshore or offshore marine plan areas, or to both, in each geographical region. The 11 English marine plan areas are identified on Figure 1.1 of this report (please see Annex 1 – Maps) – available at <https://www.gov.uk/government/consultations/marine-plan-sustainability-appraisal-scoping-report>

The first marine plans to be adopted were the East Marine Plans in April 2014. The South Marine Plan is currently being prepared for public consultation. The North West, North East, South West and South East Marine Plans³ are being progressed concurrently and these marine plans will set out how the [UK Marine Policy Statement](#) will be implemented in each marine plan area. All such regional marine plans must conform to the [UK Marine Policy Statement](#) unless relevant considerations indicate otherwise, taking into account the social, economic and environmental factors that affect the marine plan areas and the communities that are dependent on, or have an interest in, the area.

The government's vision for the marine environment (as expressed in the [UK Marine Policy Statement](#)), is for, "clean, healthy, safe, productive and biologically diverse oceans and seas". The [UK high level marine objectives](#), published in April 2009, set the broad outcomes for the UK's marine area in achieving this vision, and reflect the principles for sustainable development. The high level marine objectives are:

³ North East Inshore and Offshore, North West Inshore and Offshore, South West Inshore and Offshore and South East Inshore

- achieving a sustainable marine economy
- ensuring a strong, healthy and just society
- living within environmental limits
- promoting good governance
- using sound science responsibly

The aim of marine planning is to ensure a sustainable future for our coastal and offshore waters through managing and balancing the many activities, resources and assets affecting the marine space and in so doing, deliver the [UK high level marine objectives](#).

The marine planning system does not exist in isolation and it should be noted that the terrestrial (land-use) planning system has been in existence for over 60 years. Both marine and land-use planning systems have a presumption in favour of sustainable development and are based upon a set of high level objectives and a framework of national policies, which inform planning at the area specific level.

Whilst there are similarities there are also key differences. Integration of both systems is built in to the [MCCA](#) ensuring that the MMO takes all reasonable steps to ensure that marine plans are compatible with the development plans in the land-use planning system. As well as conforming with the [UK Marine Policy Statement](#), the marine plans must also be in accordance with other UK national policy including the [Planning Act](#) (2008) the [Localism Act](#) (2011), the [National Planning Policy Framework](#) (2012) and [National Policy Statements](#) such as those for ports and energy and the procedures for consents of Nationally Significant Infrastructure Projects under the Planning Act 2008 (as amended). Relevant provisions in these marine plans and policies will therefore form policy drivers for the regional marine plans.

2.2 Scope of marine plans – approach and principles

The marine planning approach and principles ensure that marine plans have regard to other relevant programmes and plans and:

- are based on a sound evidence base as far as possible
- are participative and informed by data provided by relevant interested parties
- take an ecosystem approach
- are streamlined and efficient making effective use of existing data and management arrangements where appropriate
- are in line with the principles of Integrated Coastal Zone Management
- are forward looking whilst ensuring appropriate flexibility

The marine plans are enabling and empowering tools that provide greater certainty about where activities could best take place and assist users in determining preferred locations.

Specifically the marine plans:

- enable efficient use of space, highlighting the need and opportunities for co-existence in areas with a high concentration of activities
- clarify where co-existence is not appropriate, and where activities should be avoided
- enable dialogue and negotiation where co-existence is an option, so impacts can be mitigated or minimised. In some cases where impacts cannot be minimised but where proposals will bring other benefits, the marine plans enable these to be taken into account in the decision making process
- give greater certainty around existing activity through the [Marine Planning Evidence Base](#)
- provide appropriate safeguarding for areas of future resource potential where evidence allows
- allow flexibility where evidence is limited so developers and decision makers are able to apply their knowledge and experience
- support the development of proposals by:
 - setting out requirements that apply irrespective of specific location, including 'how' an activity or development is undertaken
 - identifying factors within marine plan objectives which will improve chances of success within the decision making process, for example encouraging proposals to sustain local jobs, draw on the local skills base and promote diversification
 - providing context for when 'imperative reasons of overriding public interest' are being considered,^[1] such as the need for nationally significant infrastructure
 - increasing awareness of which other relevant legislation, policy, regulations, existing measures and available guidance should or must be taken into consideration
 - reiterating the importance of other relevant project-level regulation and assessment within the decision making process

The marine plans enable sustainable economic growth, whilst respecting local communities and protecting the marine environment. Policies will be presented within an economic, social and environmental framework, helping to deliver the high level marine objectives set out in the [UK Marine Policy Statement](#) and sustainable development of the marine area.

^[1] Further information on imperative reasons of overriding public interest can be found at <http://www.defra.gov.uk/consult/2012/08/07/habitats-directive-iropi/>

2.3 Remit of the marine plans

The [MCCA](#) sets out the provisions for a strategic marine planning system, including the production of a [UK Marine Policy Statement](#) and marine plans. The [UK Marine Policy Statement](#) sets out both short and long-term objectives for the sustainable use of the marine environment and the marine plans interpret the [UK Marine Policy Statement](#) in a way that addresses the issues identified through evidence gathering and meets the aspirations of stakeholders.

Table 2.1 below highlights the remit of the marine plans and is organised into topics in order to provide specific examples.

In terms of general approach, marine plans will seek to support and complement existing plans wherever appropriate, in order to avoid duplication. Signposting was used successfully in the East and draft South Marine Plans to point towards relevant information and policies held in other existing plans. This ensures that marine plans can focus on issues where they make a real difference.

The [Localism Act](#) places a duty to co-operate on the MMO and other public authorities in the preparation of marine plan and Local Authority development plans (this includes the local plan and neighbourhood plans which have been made in relation to the area, as required by the [National Planning Policy Framework](#)). It requires local authorities and other public bodies to engage constructively, actively and on an ongoing basis. That duty applies to the marine plans, to their implementation and any subsequent revisions. These requirements, together with the options for communities to formulate their own Neighbourhood Plans, bring new opportunities for an integrated planning system for land and sea.

To enable integrated coastal planning, specific attention is being given by the MMO to appraising the policies in Local Authority development plans and other relevant plans to inform the production of the marine plans. However, the marine plans are not likely to be able to allocate space in the same manner, nor be as prescriptive. This is not surprising, given their greater spatial coverage (and multi-space use of the seas), covering areas more akin to regional planning, although the marine plans will contain an element of spatial specificity.

Table 2.1: Remit of the marine plans

SA topic	Remit of the marine plans
Physical and chemical aspects	
<i>Cultural heritage</i>	The marine plans will be used when considering the potential impacts of proposals, many of which will be assessed with regards to their impact on heritage assets. It is important in the drafting of the marine plans, and at the project level, to account for the degree of change in heritage assets that certain developments may represent. Given the future trajectory for certain industries, the potential for future cumulative impacts on heritage assets could also be a consideration of the plans.
<i>Geology, geomorphology and coastal processes</i>	The marine plans will be used by the MMO and other decision makers when considering the potential impacts of proposals, many of which will be assessed with regards to their impact on sediments, coastal processes and underlying geology.
<i>Seascape and landscape</i>	The marine plans will be used by the MMO and other decision makers when considering the potential impacts of proposals, many of which will be assessed with regards to their impact on seascape and landscape.
<i>Water environment</i>	The marine plans will be used by the MMO and other decision makers when considering the potential impacts of proposals, many of which will be assessed with regards to their impact on water quality and circulation. It will be important when drafting the plans, and at the project level, to account for the degree of risk to the water environment that certain proposals may represent.

SA topic	Remit of the marine plans
<i>Air quality and climate</i>	<p>The marine plans will be used by the MMO and other decision makers when considering the potential impacts of proposals, many of which will be assessed with regards to their impact on air and climate. It will be important in the drafting of the marine plans to account for the degree of air and climate change impacts and benefits that certain proposals may represent. Given the future trajectory for certain industries including renewable energy there is significant potential to contribute to climate change mitigation targets, for example.</p> <p>The marine plans will also be used by the MMO and other decision makers to consider potential impacts on coastal flooding and climate change adaptation benefits that proposals can put in place. The marine plans will also be used to consider how all marine users will be able to adapt to climate change.</p>
Social and economic aspects	
<i>Communities, health and well being</i>	<p>The marine plans will be used by the MMO and other decision makers when considering the potential impacts of proposals, some of which may be assessed with regards to their impact on communities and health. It will be important in the drafting of the marine plans, and at the project level, to account for a degree of change in communities and health. Given the future trajectory for certain industries, the potential future cumulative impacts on communities and health could also be a consideration of the marine plans.</p>
<i>Economy</i>	<p>The marine plans will be used by the MMO and other decision makers when considering the potential impacts of proposals, many of which will be assessed with regards to their impact on the economy. It will be important in the drafting of the marine plans, and at the project level, to account for the degree of risk to the economy that certain developments may represent. Where appropriate, and data permitting, such an assessment should include, projected risks associated with adaptation and mitigation measures or consequence related to developments. Given the future trajectory for certain industries, the potential future cumulative impacts could also be a consideration of the marine plans.</p>
Ecological aspects	

SA topic	Remit of the marine plans
<i>Marine ecology</i>	<p>The activities covered in the marine plans may have both direct and indirect effects upon marine ecology. For example, direct effects may include loss or disturbance of habitats through activities such as dredging and disposal. Indirectly, noise or pollution generated from marine developments both inshore and offshore may impact upon marine ecology; for example, noise and vibration from construction may disturb bird and marine mammal populations. The marine plans will be drafted in accordance with the provisions of the UK Marine Policy Statement with regard to the protection of marine ecology and they will be used when considering the potential impacts of developments.</p>

3 Introduction to the Sustainability Appraisal

3.1 Background and purpose of the Sustainability Appraisal

The Sustainability Appraisal (SA) considers the economic, social and environmental impacts of an emerging plan (the three dimensions of sustainable development). The aim in undertaking SA is to identify a plan's likely significant effects and take steps to avoid and/or mitigate the negative effects as well as identify opportunities to maximise a plan's contribution to sustainability.

SA differs from Strategic Environmental Assessment (SEA) in that it gives greater consideration to socio-economic issues (although the SEA regulations refer to a possible need to consider issues such as 'population' and 'human health' and to contribute to sustainable development) alongside the environment.

The purpose of SEA is:

"...to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to contributing to sustainable development".
(Article 1 of the [SEA Directive](#)).

The SA ensures that sustainability issues are considered in a structured, clear and transparent manner through its focus on testing and comparing the merits of different plan alternatives as well as consultation with key stakeholders. Note that there is no formal guidance for SA of marine plans – the closest to this would be the [National Planning Practice Guidance](#) for terrestrial plans. However, please note that terrestrial plans have greater level of detail in them for a smaller area so the guidance reflects that.

3.2 Sustainability Appraisal process

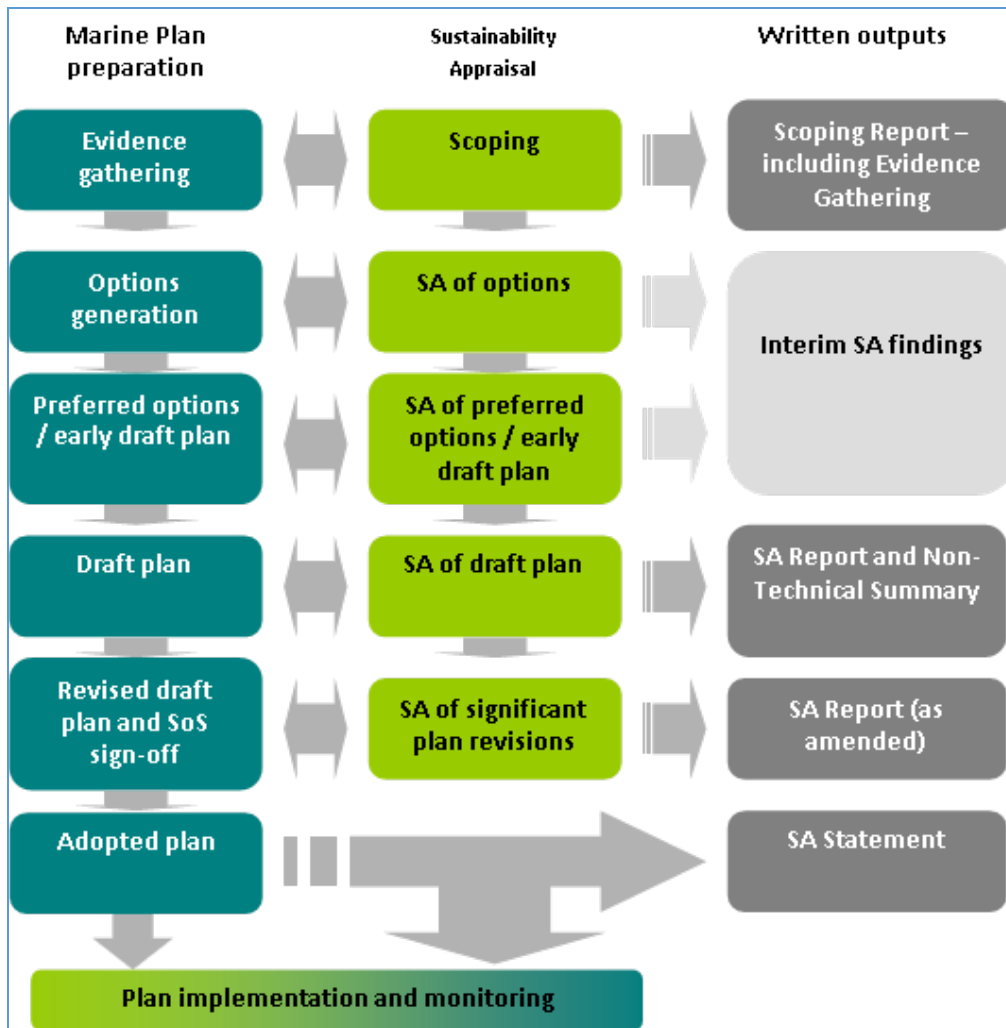
The stages in the SA process have been developed to take into account the five procedural stages of SEA outlined in the [Practical Guide](#)⁴ and [National Planning Practice Guidance](#).

- stage A: (Scoping) Setting the context, establishing the baseline (with the acknowledgement that this process needs to continue as the SA and marine plan processes continue) and deciding on the scope of the appraisal (what this document does)
- stage B: Developing and refining marine plan alternatives and appraising the effects
- stage C: Preparing the SA Report
- stage D: Consulting on the SA Report and the draft marine plans and appraising any significant changes
- stage E: Monitoring the significant effects of implementing the marine plans

⁴ ODPM et al. (2005) A Practical Guide to the Strategic Environmental Assessment Directive.

In practice, the SA is an iterative process which will be undertaken in parallel with the development of marine plans and feed into the marine plans' development at appropriate intervals – see Figure 3.1 below. The SA is particularly important at the options stage when its findings help inform the choice between competing reasonable alternatives.

Figure 3.1: Stages in the SA process



The SA is currently in Stage A, Scoping. The purpose of Stage A is to decide on the scope and the level of detail of the SA. These details should then be subject to consultation in line with the requirements of the [SEA Regulations](#)⁵.

⁵ The Environmental Assessment of Plans and Programmes Regulations 2004 SI No.1633

4 Methodology of the sustainability appraisal scoping

4.1 Overall approach

The key aspects of the approach to the SA scoping of the North East, North West, South West and South East Marine Plans include:

- the production of a combined SA scoping report for all seven marine plan areas (this report)
- the inclusion of a baseline database in excel spreadsheet format which is publicly available on the MMO website
- the production of report cards for each SA sub topic to present the key information in a more accessible format
- the use of the information in the baseline database and report cards to sets the scope for the appraisal
- the production of mapped data in a SA scoping report annex (Annex 1)

This approach is focused on defining and guiding the reader to the significant issues, whilst providing clear signposting to where further information is available.

4.2 Baseline database

4.2.1 The purpose of the database

The baseline database sets out a baseline characterisation of the marine plan areas in a way that is both clear and user friendly. This is a conscious attempt to move away from very long text based SA scoping reports, which is a particular risk with this project as this SA scoping report covers seven marine plans.

The information in the baseline database addresses a number of the requirements of the SEA regulations, as shown in Table 4.1.

Table 4.1: Fulfilling the requirements of the SEA regulations

What the regulations say ⁶	How this is addressed
<p>1. (the plan's)... relationship with other relevant plans and programmes.</p> <p>5. The environmental protection objectives, established at international, community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.</p>	<p>Policies, targets and objectives from relevant plans, programmes and legislation that are significant and need to be complied with have been included in the baseline database⁷.</p>
<p>2. The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme</p> <p>3. The environmental characteristics of areas likely to be significantly affected</p>	<p>The baseline database includes information on aspects of the environment broken down into relevant topics. This involves setting out the key characteristics of areas and identifying the receptors which could be affected. The database divides information into baseline (something which is a statement of fact) and issues (something which is subject to interpretation).</p> <p>The report cards outline the likely evolution of the environment over the duration of the marine plans (also known as the future baseline).</p> <p>As highlighted in the methodology, this data collection process will continue through the SA process and a more detailed baseline data collection may be needed once the appraisal of the plan and its alternatives is underway.</p>

⁶ Please see Schedule 2 of the SEA regulations: *Information for Environmental Reports*.

⁷ It should be noted that the SA scoping make reference to MMO research paper number 1109 and 1110 carried out by Atkins. This report is entitled "Sub-National Policy Review: North West/ South West & North East/ South East (February 2016)". This research report sets out detailed sub-national policy reviews and include plans which cover the management and use of sea/ coastal areas and resources including: plans produced by coastal local authorities; relevant port plans; National Park plans; AONB plans; Heritage Coast plans; Local Enterprise Partnership strategic economic plans; River Basin Management Plans; Shoreline Management Plans; and Estuary Management Plans.

What the regulations say ⁶	How this is addressed
4. Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive	<p>The information collected in the database includes any issues, problems or opportunities that have been identified during the data collection exercise.</p> <p>This includes information on birds and Natura 2000 sites (incorporating sites designated under both the Birds and Habitats Directives).</p>

4.2.2 Topics covered within the database

A set of themes were identified (please see the first column of Table 4.2 for a list of these themes), consistent with those used to scope the South Marine Plan, in order to structure the gathering of evidence and to aid the design of the baseline database. It was anticipated that the structure of the SA framework used to appraise the South Marine Plan would be appropriate to the North East, North West, South East and South West Marine Plans with edits made according to the key issues identified for each plan area as part of the scoping process.

An initial review of the themes undertaken by the SA team ensured that the draft SA framework was comprehensive, streamlined, adhered to relevant regulations and was able to gain buy in from stakeholders. The changes made as a result of this review include:

- a review of the formal scoping responses received on the South Marine Plan SA scoping report indicated that stakeholders were keen that climate change issues were dealt with under a separate topic
- the need to ensure that the framework is as streamlined as possible (especially considering the wide plan area coverage of the document) to ensure transparency and a focus on the significant issues; and does not appear to favour one topic over others
- the need to ensure that the topics under the SEA regulations are addressed (consideration is required of all topics even if it is decided after data collection to scope issues out)
- the need to address equality issues and address the requirements of the Equality Act 2010 (see Section 7.2 of this scoping report for more details)

This work has resulted in a draft SA framework that has been used to guide the data collection and this is shown in Table 4.2.

It is also important to consider the links to both the [Marine Strategy Framework Directive](#) (MSFD) and the [Water Framework Directive](#) (WFD). The MSFD aims to achieve Good Environmental Status (GES) for all EU waters (please note that the MSFD does not apply in transitional waters – ie estuaries) by 2020, where GES is defined by 11 Descriptors. All of the descriptors are relevant to the topics considered

in this SA framework. In addition to achieving GES, the MSFD also requires the establishment of Marine Protected Areas (MPAs), which contribute to the creation of an ecologically coherent network of MPAs and help to meet the aims of international conventions to which the EU is party. The MSFD requires Member States to work together to achieve GES for the Regional Seas defined by the Directive. The marine plan areas considered by this document sit within two of the sub-regions of the North East Atlantic Marine Region (the Greater North Sea and the Celtic Seas sub-regions).

The [Water Framework Directive](#) aims to achieve Good Status for inland surface waters (rivers and lakes), transitional waters (estuaries), coastal waters and groundwater across the EU by 2015, where 'good' is defined in terms of chemical and biological water quality elements. Coastal waters under the WFD overlap with the geographic area covered by the MSFD. In English marine plan areas, the WFD area extends out to 1 nautical mile (nm). Where overlaps occur the MSFD is only intended to apply to those aspects of GES which are not already covered by WFD (for example noise, litter, aspects of biodiversity).

Relevant aspects of the MSFD and the WFD are addressed in the biodiversity and water report cards.

Table 4.2: Draft SA framework

Overarching SA topic	Proposed SA sub topic
Physical and Chemical Aspects	
Cultural heritage	Heritage Assets within marine plan areas ⁸ Heritage Assets adjacent to marine plan areas
Geology, substrates and coastal processes	Seabed substrates and bathymetry Coastal features and processes
Seascape and landscape	Effects on seascape and landscape
Water	Tides and currents Water temperature and salinity Pollution and water quality (including eutrophication) Marine litter
Air quality	Air pollutants
Climate	Greenhouse gas emissions Climate change resilience and adaptation (including coastal flooding)
Social and Economic Aspects	

⁸ The 'adjacent to' category will capture assets that might be affected by the marine plans because of the setting of monuments on the coast, the consequences of coastal erosion, plan policies relating to tourism etc., but it will avoid repetition in respect of assets that are in the intertidal zone or close inshore, to which 'coastal' might be assumed to refer.

Overarching SA topic	Proposed SA sub topic
Communities, health and well being	Health and wider determinants of health Effects on communities (including employment and skills) Effects on protected equality groups
Economy	Ports and shipping ⁹ (including dredging and disposal) Fisheries and aquaculture Leisure / recreation Tourism Marine manufacturing Defence Aggregate extraction Energy generation and infrastructure development <ul style="list-style-type: none"> • renewables • carbon capture and storage • nuclear • fossil Fuels Seabed assets (eg cables, outfalls and pipelines)
Ecological Aspects	
Biodiversity, Habitats, Flora and Fauna	Protected sites and species Benthic and inter-tidal ecology Fish and shellfish (inc. cephalopods) ¹⁰ Marine mega fauna (inc. marine mammals and turtles) Plankton Ornithology Non-indigenous species

4.2.3 The approach to data collection

Considerable care has been taken to ensure that this report is streamlined and provides signposting to the significant amount of data that has been collected by the MMO and other organisations, with the database and report cards being a key component of the SA scoping stage along with this report.

To help achieve this aim, a phased approach to data collection has been taken. This phased approach is set out below:

- key technical specialists were provided with a number of issues documents compiled by MMO specialists for each plan area under broad subjects. The issues from these issues documents were added to the baseline database and

⁹ As well as sea ports please note that this covers river wharves and docking facilities

¹⁰ Please note that basking sharks are addressed under the marine mega fauna sub topic and all other shark species are addressed under the fish and shellfish sub topic

the appropriate work was undertaken to ensure that these issues were fully evidenced

- for each SA sub-topic a review was undertaken on the kinds of data that were included in the South Marine Plan and East Marine Plans SA scoping reports. If these data sources were relevant, the data was added to the baseline database
- the MMO's [Master Data Register](#) was reviewed and appropriate data added to the database
- evidence reports commissioned by the MMO were reviewed and appropriate data added to the baseline database

A guiding principle of the data collection process was to focus on data that was needed to define the scope for the SA. The databases are live documents – they are fit for purpose at the scoping stage and are likely to be added to as the SA process continues.

Once the steps above were complete a review was then undertaken of the adequacy of the data collected (both in terms of its coverage and whether the level of detail presented is appropriate). If significant gaps were identified then further data collection was undertaken to try and fill those gaps where possible. A number of data gaps remain and are identified as a separate category within the baseline database. Particularly significant data gaps are highlighted on the report cards.

4.2.4 The layout of the database

The database addresses the nine SA topic areas set out in Table 4.2. The database comprises of two linked sheets, the first of which identifies a range of information under the four following categories:

Policy / target: The most significant international (including EU), national and sub-national policy and regulatory requirements are identified as well as key guidance documents. Key targets set out within these documents are also identified. Expert judgement was used to determine the most significant pieces of legislation / policy.

Baseline: Information which relates to the current status of the environment is presented for each SA topic area.

Issue: Salient issues for each SA topic area are identified in the database as identified in the literature reviewed. Again, expert judgement was used to judge which the most significant issues are. For more information on the definition of the word issue see section 1.2 of this report.

Data gaps: Where gaps in data exist or there is lack of information to judge the importance of an issue.

Additional information provided includes what SA sub-topic the text relates to (eg fish, benthic, plankton etc. under the biodiversity heading), what plan area the text relates to and commentary is provided in the 'Comments' cell if required.

The source information that has contributed to the policy/target, baseline and issues is referenced on the second sheet in the spreadsheets. A 'data identifier' is used to

link the sheets through a one-to-many relationship (one data source may relate to several issues or statements of the baseline case). Sources are clearly identified and referenced.

All of the columns in the database can be filtered so, for example, just the issues relating to the south west inshore marine plan area can be identified if required. The database is therefore an important filtering tool which underpins the identification of issues and the baseline case, and provides details which would otherwise result in an overly lengthy and complex SA scoping report which covers seven marine plan areas and nine SA topics.

The two screenshots below show the first and second sheets of the database respectively.

Data Source and Quality Assessment

Data Identifier	Access Initial	MHO Risk	Format	Source	Abstract	Date Cap	Overall Quality Assessment Results		Link to Data	Link to Completed QA
							Classification			
DEIRA_Bathing Water Directive 2006/7/EC 2015 clarification_November 2015	AB	No	Statutory Report	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/474262/2015_bathing_water_classification.pdf	This document details the classification for each designated bathing beach in 2015.	02/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	
MHO_Strategic Scoping Report for Marine Planning in England_August 2013	AB	No	Statutory Report	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216227/mho-scoping-2013.pdf	This document provides a high level summary of the important issues in each of the plan areas.	02/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	
Marine Conservation Society_Great British Beach Clean 2014_Report	AB	No	Non-Statutory Report	https://www.mcs.org.uk/files/2015/06/gbbc-2014-report.pdf	Statistics on the results of the national beach clean for 2014.	02/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	
Jørgen et al_Scientific Report PCB pollution continue to impact population of orca and other dolphin in European waters_Nature 2016	AB	No	Academic Paper	http://www.nature.com/articles/2411873	PCB concentrations have been shown to be related to killer whale and bottlenose dolphin populations around the UK, at far in excess of the concentration likely to cause toxic effects.	02/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	
HM Government_UK Initial Assessment and Good Environmental Status_2012	AB	No	Statutory Report	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/495324/uk-2012-marine-status-report-2012-12-20.pdf	This document sets the characteristics for Good Environmental Status (GES) and the more detailed targets and indicators for GES for the UK marine environment in order to fulfil the obligations of the MSFD.	02/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	
UKMMS_Charting Progress 2 An Assessment of the State of UK Seas_2010	AB	No	Statutory Report	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/211010/charting-progress-2.pdf	Charting Progress 2 illustrates the changes since 2005 and the evidence we have made to assess the characterisation of 'clean, healthy, safe, productive and biologically diverse oceans and seas'. It reports data for the eight regions at sea.	02/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	
The Tideway London_2016	AB	No	Other Plans/Spec/Website	https://www.tideway.com/our-projects	Local planning policies	04/02/2016				
The OSPAR Commission_The OSPAR Convention_1992	AB	No	Statutory Report	http://www.ospar.org/~/media/Files/1290/Water_Convention_v_9.pdf	OSPAR convention	04/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	
International Maritime Organization_International Convention for the Prevention of Pollution from Ships (MARPOL)_1973	AB	No	Statutory Report	http://www.imo.org/~/media/About/Conventions/Convention%20for%20the%20Prevention%20of%20Pollution%20from%20Ships%20(MARPOL).pdf	MARPOL convention	04/02/2016				
International Maritime Organization_International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC)_1990	AB	No	Statutory Report	http://www.imo.org/~/media/About/Conventions/Convention%20on%20Oil%20Pollution%20Preparedness%20Response%20and%20Cooperation.pdf	an international maritime convention establishing measures for dealing with marine oil pollution incidents nationally and in cooperation with other countries	04/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	
International Maritime Organization_International Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter_1972	AB	No	Statutory Report	http://www.imo.org/~/media/About/Conventions/Convention%20on%20the%20Prevention%20of%20Marine%20Pollution%20by%20Dumping%20of%20Wastes%20and%20Other%20Matter.pdf	The objective is to promote the effective control of all sources of marine pollution and to take all practical steps to prevent pollution of the sea by dumping of wastes and other matter.	04/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	Unable to locate document. Summary page from IMO website.
The OSPAR Commission_OSPAR_The North East Atlantic Environment Strategy_2010	AB	No	Statutory Report	http://www.ospar.org/~/media/Files/1290/Water_Convention_v_9.pdf	Under the North-East Atlantic Environment Strategy (NEAE Strategy) OSPAR is taking forward implementation of the implementation of the Ecosystem Approach (NEAE Strategy Part I) and the suite of five thematic strategies (NEAE Strategy Part II) to address the main threats that have been identified concerning our common competence.	04/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	This document also includes the implementation strategy, baseline data, action strategy and redressive/substance strategy.
OSPAR Commission_OSPAR Decision 2009/3 on the Use of Organic-Phase Drilling Fluids (OPF) and the Discharge of OPF-Contaminated Cuttings_2009	AB	No	Statutory Report	http://www.ospar.org/~/media/Files/1290/Water_Convention_v_9.pdf	OSPAR convention decision regarding the use and discharge of oil based drilling fluids in oil and gas production	04/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	
OSPAR Commission_OSPAR Decision 2009/2 on a Harmonised Mandatory Control System for the Use and Reduction of the Discharge of Offshore Chemicals (as amended by OSPAR Decision 2005/1)_2009	AB	No	Statutory Report	http://www.ospar.org/~/media/Files/1290/Water_Convention_v_9.pdf	OSPAR convention decision regarding the requirement for chemical use in offshore oil and gas drilling operations to be controlled and regulated by a harmonised mandatory control system, with the aim of reducing the use and discharge of chemicals	04/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	
OSPAR Commission_OSPAR Recommendation 2005/2 on an Environmental Guide for the Discharge by the Offshore Industry of Chemicals that are, or Contain, Added Substances, Listed in the OSPAR 2004 List of Chemicals for Priority Action_2005	AB	No	Statutory Report	http://www.ospar.org/~/media/Files/1290/Water_Convention_v_9.pdf	OSPAR convention recommendation regarding the requirement for a list of chemicals to be a chemical for priority action, used in offshore oil and gas drilling operations	04/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	
OSPAR Commission_OSPAR Recommendation 2000/1 on Best Environmental Practice (BEP) for the Reduction of Inputs of Agricultural Pesticides to the Environment through the Use of Integrated Crop	AB	No	Statutory Report	http://www.ospar.org/~/media/Files/1290/Water_Convention_v_9.pdf	OSPAR convention recommendation on the Best Environmental Practice (BEP) for the Reduction of Inputs of Agricultural Pesticides to the Environment through the Use of	04/02/2016			P:\Contract\UK25\UK15-22570_MMO_SAWater Environment\Water Environment Data	

4.3 Report-cards

The report cards present a summary of the baseline environment and issues within each plan area for each SA sub topic. They are broken down into the following sections:

- baseline / issues for each plan area
- summary of the legislative / policy context (the report cards focus on international and national legislation and policy, and whilst sub national policy is included it is generally too detailed to include on the report cards)
- key cross cutting baseline / issues across all plan areas
- the likely evolution of the environment over the plan duration (sometimes referred to as the future baseline)
- potential interactions with other topics as a summary as this list cannot be exhaustive (these sections will be revisited at the assessment stage to ensure that any judgements on inter-relationships between impacts is undertaken using the best available evidence)
- potential transboundary issues
- key data gaps

The report cards use the information within the databases and present this in an accessible way. The purpose of the report cards is to demonstrate what the significant issues are within each plan area. These have then been used to scope the assessment for each SA sub topic for each plan area. The decision regarding what information from the database to present on the report cards has been made using the expert judgement of the SA team and the views of the SA Advisory Group. As well as using information contained in the database some of the boxes on the report cards present an interpretation of this information, again using the expert judgement of the SA team. The parts of the report card that are subject to expert judgement and interpretation are the following:

- the likely evolution of the environment over the plan duration (which will be further developed at the assessment stage to form the section in the SA report which relates to the future baseline)
- the potential interactions with other topics

The section outlining potential interactions with other topics sets out interactions that are known to be occurring (and these have been referenced where evidence is available), interactions that have been predicted through modelling, such as climate change impacts, and other potential interactions which could occur in the future. This information will be used to help make an assessment of the inter-relationships between the potential impacts of the draft marine plans (and their alternatives).

References to the databases have been added to the report cards in a number of places to ensure a clear audit trail. For example, (Water_101) indicates issue 101 in the water database.

The following report cards have been provided (see section 4.3.1 to 4.3.9). Because of the subject matter or because of the amount of information collected some of the

SA sub topics have been combined. Please note that the report cards set out what the important issues are for each marine plan area for the SA scoping.

4.3.1 Cultural heritage

- heritage assets within marine plan areas
- heritage assets adjacent to marine plan areas

4.3.2 Geology, substrates and coastal processes

- seabed substrates and bathymetry and coastal features and processes

4.3.3 Seascape and landscape

- effects on seascape and landscape

4.3.4 Water

- tides and currents
- temperature and salinity
- marine litter
- pollution and water quality (including eutrophication)

4.3.5 Air quality

- air pollutants

4.3.6 Climate

- greenhouse gas emissions and climate change resilience and adaptation (including coastal flooding)

4.3.7 Communities, health and well-being

- health and wider determinants of health and effects on protected equality groups
- effects on communities (including employment and skills)

4.3.8 Economy

- ports and shipping (including dredging and disposal)
- fisheries and aquaculture
- leisure / recreation and tourism
- marine manufacturing and defence
- aggregate extraction and seabed assets (such as cables, outfalls and pipelines)
- energy generation and infrastructure development

4.3.9 Biodiversity, habitats, flora and fauna

- protected sites and species

- benthic and inter-tidal ecology
- fish and shellfish (including cephalopods)
- marine mega fauna (including marine mammals and turtles)
- plankton
- ornithology
- non-indigenous species

4.4 Mapped data

Annex 1 includes a selection of mapped data that sets out the context for the SA and helps readers to interpret the baseline database. It will also be used to inform the appraisal of the marine plans. The maps that have been produced are a sample of the range of maps that are available from the MMO and other sources. Please note that this annex is not meant to be comprehensive. The MMO (and others) hold a large amount of mapped data. The MMO data is outlined in the [Master Data Register](#) and within the [Marine Planning Evidence Base](#). Because of the availability of the [Marine Planning Evidence Base](#) (which is kept updated and is publicly available) it has not been necessary to reproduce comprehensive baseline maps for the SA scoping report.

The sections below set out which maps have been reproduced for each SA topic (figure references refer to Annex 1) and each section also gives a guide to the maps available on the [Marine Planning Evidence Base](#).

Another source that is likely to be useful at the assessment stage is the [UK Offshore Energy Strategic Environmental Assessment 3](#) (OESEA3) which includes mapped data on a range of subjects.

4.4.1 Cultural heritage

The following maps have been included in Annex 1:

- Figure 1.1: Marine plan areas
- Figure 1.2: Heritage assets

Other maps available in the [Marine Planning Evidence Base](#) include:

- Sites protected by Military Remains Act
- National parks
- Scheduled ancient monuments
- Registered battlefields

4.4.2 Geology, substrates and coastal processes

[BGS Bedrock and Seabed Sediment maps](#) are available to view on the British Geological Survey website.

Other maps available in the [Marine Planning Evidence Base](#) include:

- seabed habitats (broadscale habitats)

4.4.3 Seascape and landscape

The following maps have been included in Annex 1:

- Figure 1.2: Heritage assets
- Figure 3.1: National Character Areas
- Figure 3.2: Seascape Character Areas (included as an example – this refers to the East Plan area and a small portion of the South Plan area)

Other maps available in the [Marine Planning Evidence Base](#) include:

- land and sea visual resource

4.4.4 Water

The following maps have been included in Annex 1:

- Figure 4.1: Water Framework Directive Coastal Waterbodies and Estuarine Waterbodies

Other maps available in the [Marine Planning Evidence Base](#) include:

- Blue flag beaches
- Bathing waters compliance

4.4.5 Air quality

The following maps have been included in Annex 1:

- Figure 5.1: Ports

Other maps available in the [Marine Planning Evidence Base](#) include:

- Air quality management areas

4.4.6 Climate

No figures have been included in Annex 1 for this topic. With regard to climate, the main mapped resource is the [UK climate projections website](#). The UK climate projections website has mapped data for a large number of different projections for different spatial levels (UK wide / coastal areas / river basin regions) plus a range of emission scenarios (for example low / medium / high emissions scenarios) and other variables (for example, winter / summer mean temperatures, winter / summer maximum and minimum temperatures, winter / summer mean precipitation, relative humidity, cloud amount etc. Because of the availability of mapped data on the climate projections website and the large range of data available, maps have not been reproduced in this report.

In addition, maps available in the [Marine Planning Evidence Base](#) include:

- shoreline management plans
- offshore wind (round 1, 2 and 3 and ports suitable for round 3 development)
- wave lease areas and tidal lease areas

4.4.7 Communities, health and wellbeing

Maps available in the [Marine Planning Evidence Base](#) include:

- UK fishing fleet port landings 2014
- socio – economic typologies of coastal communities
- inshore fishing effort
- recreational model mapping (beach activity potential, boat angling activity potential, motor boat activity potential, personal water craft activity potential, sailing activity potential and scuba diving activity potential)
- RYA yachting activity (including club sites, training centres, marinas, RYA cruising routes, racing areas and sailing areas). The Royal Yachting Association UK Coastal Atlas of Recreational Boating will also include a new recreational dataset, forming a ‘heat map’ of activity around the coast, plus an update to the sailing & racing areas following a survey of clubs and training centres. The new data should be available this year and therefore will be able to be used for the SA and marine plans as they are developed.

4.4.8 Economy

The following maps have been included in Annex 1:

- Figure 5.1: Ports¹¹
- Figure 8.1: UK fishing effort
- Figure 8.2: Area Between International Maritime Organisation Routing Areas
- Figure 8.3: Current Aquaculture Potential and Mussel Farm Lease Sites (included as an example – this refers to the East Plan area and a small portion of the South Plan area)
- Figure 8.4: Shellfish bivalve classification (UK wide)

Other maps available in the [Marine Planning Evidence Base](#) include:

- oil and gas award license blocks
- hydrocarbon fields
- licenced aggregate areas and exploration and options agreements
- cables (subsea and submarine cables) and surface and sub-surface infrastructure

¹¹ Please note that the Major Ports listed on the map are those included in the UK Major Ports Group Limited. The UKMPG is the trade association representing most of the larger commercial ports in the United Kingdom

- navigational dredging
- dredging (including beneficial use of dredged material)
- terrestrial energy installations (including nuclear power stations)
- offshore wind (round 1, 2 and 3 and ports suitable for round 3 development)
- wave lease areas and tidal lease areas
- carbon capture potential
- underground coal gasification
- UK fishing fleet port landings 2014
- inshore fishing effort
- anchoring areas
- national shipping density
- recreational model mapping (beach activity potential, boat angling activity potential, motor boat activity potential, personal water craft activity potential, sailing activity potential and scuba diving activity potential)
- RYA yachting activity (including club sites, training centres, marinas, RYA cruising routes, racing areas and sailing areas)

Please also note that maps of [Safeguarded Wharves](#) are available from the Port of London Authority.

4.4.9 Biodiversity habitats, flora and fauna

The following maps have been included in Annex 1:

- Figure 9.1: Seabird winter density
- Figure 9.2: Seabird summer density
- Figure 9.3: RSPB important bird areas
- Figure 9.4: Marine protected areas
- Figure 9.5: Important bass nursery areas
- Figure 9.6: Grey seal average at-sea densities (seals per 5x5km)¹²
- Figure 9.7: Grey seal average total at-sea and hauled-out densities (seals per 5x5km)
- Figure 9.8: Harbour seal average at-sea usage (seals per 5x5km)
- Figure 9.9: Harbour seal average total at-sea and hauled-out densities (seals per 5x5km)

Other maps available in the [Marine Planning Evidence Base](#) include:

- Habitat Directive Annex 1 features
- Habitats and species (features of conservation importance (FOCI), habitats of conservation importance (HOCl) and broadscale habitats)
- Nature reserves and trusts
- underwater noise

¹² The seal usage maps are produced by looking at movement patterns from electronically tagged seals. The resulting patterns of usage are scaled to population levels using data collected in aerial survey counts at haul out sites, to produce estimates of mean density (seals per 5x5 km grid cells). The estimation of mean seal usage (and the corresponding uncertainty) is an involved process. The resulting maps should thus be interpreted with care.

- fish habitat
- European Nature Information System (EUNIS) seabed habitats

5 Results of SA scoping

5.1 The scope of the SAs – SA framework

The purpose of the SA framework is to ensure that all the sustainability topics that could be affected by activities included in the marine plans are addressed. Marine plans cover a wide range of topics and activities and therefore the SA framework needs to be comprehensive. The marine plans (and any reasonable alternatives) are then appraised against the topics in the SA framework.

A consistent SA framework has been developed for the appraisal of each of the seven marine plan areas and it is important to consider whether every issue will need to form part of the SA for each marine plan. The report cards that have been produced set out in detail what the sustainability issues are for each marine plan area and this information has not been reproduced here. This section formally confirms which elements of the SA framework will be addressed in each marine plan appraisal. This is done in two parts. Table 5.1 presents the SA framework and indicates how this relates to the different plan areas. Section 5.2 onwards sets out what the implications of this are for each of the SA sub topics.

Table 5.1: SA framework

Overarching SA topic	SA sub topic	NE (I) ¹³	NE (O)	NW (I)	NW (O)	SW (I)	SW (O)	SE (I)
Physical and chemical aspects								
Cultural heritage	Heritage assets within marine plan areas	✓	✓	✓	✓	✓	✓	✓
	Heritage assets adjacent to marine plan areas	✓	✓	✓	✓	✓	✓	✓
Geology, substrates and coastal processes	Seabed substrates and bathymetry	✓	✓	✓	✓	✓	✓	✓
	Coastal features and processes	✓	✓	✓	✓	✓	✓	✓
Seascape and landscape	Effects on seascape and landscape	✓	✓	✓	✓	✓	✓	✓
Water	Tides and currents	✓	✓	✓	✓	✓	✓	✓
	Water temperature and salinity	✓	✓	✓	✓	✓	✓	✓
	Pollution and water quality (including eutrophication)	✓	✓	✓	✓	✓	✓	✓
	Marine litter	✓	✓	✓	✓	✓	✓	✓
Air quality	Air pollutants	✓	✓	✓	✓	✓	✓	✓
Climate	Greenhouse gas emissions	✓	✓	✓	✓	✓	✓	✓
	Climate change resilience and adaptation (including coastal flooding)	✓	✓	✓	✓	✓	✓	✓
Social and Economic Aspects								

¹³ "I" denotes relevance to the inshore plan SA and "O" denotes relevance to the offshore plan SA

Overarching SA topic	SA sub topic	NE (I) ¹³	NE (O)	NW (I)	NW (O)	SW (I)	SW (O)	SE (I)
Communities, health and well being	Health and wider determinants of health and Effects on protected equality groups	✓		✓		✓		✓
	Effects on communities (including employment and skills)	✓	✓	✓	✓	✓	✓	✓
Economy	Ports and shipping (including dredging and disposal)	✓	✓	✓	✓	✓	✓	✓
	Fisheries and aquaculture	✓	✓	✓	✓	✓	✓	✓
	Leisure / recreation	✓	✓	✓	✓	✓	✓	✓
	Tourism	✓		✓		✓		✓
	Marine manufacturing	✓		✓		✓		✓
	Defence	✓	✓	✓	✓	✓	✓	✓
	Aggregate extraction	✓		✓	✓	✓		✓
	Energy generation and infrastructure development	✓	✓	✓	✓	✓	✓	✓
	• Renewables							
	• Carbon capture and storage	✓	✓	✓	✓			✓
	• Nuclear	✓		✓		✓		✓
• Fossil fuels	✓	✓	✓	✓	✓	✓	✓	
Seabed assets (e.g. cables, outfalls and pipelines)	✓	✓	✓	✓	✓	✓	✓	
Ecological aspects								

Overarching SA topic	SA sub topic	NE (I) ¹³	NE (O)	NW (I)	NW (O)	SW (I)	SW (O)	SE (I)
Biodiversity, Habitats, Flora and Fauna	Protected sites and species	✓	✓	✓	✓	✓	✓	✓
	Benthic and inter-tidal ecology	✓	✓	✓	✓	✓	✓	✓
	Fish and shellfish (inc. cephalopods)	✓	✓	✓	✓	✓	✓	✓
	Marine mega fauna (inc. marine mammals and turtles)	✓	✓	✓	✓	✓	✓	✓
	Plankton	✓	✓	✓	✓	✓	✓	✓
	Ornithology	✓	✓	✓	✓	✓	✓	✓
	Non-indigenous species	✓	✓	✓	✓	✓	✓	✓

5.2 Scope of the SAs: Cultural heritage

Heritage assets within marine plan areas and heritage assets adjacent to marine plan areas

This topic has been scoped in for all the marine plan areas. Heritage assets - including designated heritage assets and non-designated heritage assets of equivalent significance - are present or potentially present within each marine plan area. Heritage assets are also present on land in the vicinity of inshore marine plan areas; their setting will often encompass the adjacent marine plan area. Heritage assets both within and adjacent to marine plan areas are susceptible to damage from marine activities. Heritage assets are also an important source of social and economic benefits to coastal communities and sea users. The [UK Marine Policy Statement](#) and the [National Planning Policy Framework](#) include policies for heritage assets and the historic environment, and cultural heritage – including architectural and archaeological heritage. Consequently, it is important that marine plans are assessed in respect of cultural heritage.

5.3 Scope of the SAs: Geology, substrates and coastal processes

Seabed substrates and bathymetry and coastal features and processes

Issues relating to physical processes and resultant changes to the coast, the sea bed and sediments are of greatest concern in the dynamic inshore plan areas where marine processes are influenced by human activity and development. The interlinked issues of coastal squeeze and how to adapt to climate change are both of concern in the inshore plan areas. Geo-conservation and the impacts from activities which cause physical changes to the sea bed subsequently affecting flora/fauna is a cross-cutting issue (although the magnitude of any such effects is unclear). Each plan area will have its own individual issues at a site specific level but strategically the topic is scoped in for all inshore plan areas. The offshore plan areas are perhaps less significant in relation to changes to marine processes and sediments. However, there are a number of designated sites for conservation which rely on seabed substrates and sediment processes in these offshore areas. In addition, some human activity such as oil/gas extraction, offshore wind developments, uses of certain fishing gear and the potential for CO₂ storage etc. has the potential to affect geology or substrates in such plan areas. Therefore on a precautionary basis this topic is also scoped in to the offshore plan areas.

5.4 Scope of the SAs: Seascape and landscape

Seascape and landscape

Seascape and landscape has been scoped in for all seven marine plans and is relevant to the inshore and offshore areas. The visual impacts of developments on the landscape/seascape have the potential to influence views in different ways, affect the setting of historical/cultural features and potentially reduce local revenue. These may arise from both offshore developments and their coastal-based infrastructure. Potential sensitive receptors include people living in (or visiting) an area of the coast or at sea and the setting, and therefore perception of designated landscapes, non-designated landscapes and cultural/heritage assets for which there are particular cultural associations.

The present seascape is influenced by a diverse array of fixed and transient activities (for example shipping, aggregate extraction, gas field infrastructure and other activities). Some of these may have strong cultural associations (for example fishing). In addition, all the marine plan areas have overlapping designations that affect the coast. These include National Parks, AONBs and heritage coasts as well as sites in the north west, north east and south east being considered for inclusion on the World Heritage List. Therefore, it is important that any activities promoted in the marine plans are assessed against this topic.

5.5 Scope of the SAs: Water

All of the following topics have been scoped in for all seven marine plan area and they are relevant to both inshore and offshore assessments.

Tides and currents

Many activities proposed within the marine plans could potentially have an impact on currents and the tidal regime and climate change scenarios could exacerbate the impacts of tides and currents on coastal areas. Therefore, it is important that any activities promoted in the marine plans are assessed against this topic.

Water temperature and salinity

The [UK Climate Predictions 2009](#) indicate that the seas in all of the regions will continue to increase in temperature. Therefore, it is important that any activities promoted in the marine plans are assessed against this topic.

Pollution and water quality (including eutrophication)

Developments and other activities at the coast and at sea can have adverse effects on transitional waters, coastal waters and marine waters and historical problems exist that also need to be considered within the marine plans. Therefore, it is important that any activities promoted in the marine plans are assessed against this topic.

Marine litter

Marine litter is found in oceanic water, sediments on beaches and litter on UK beaches is a particular problem because the geographical location of the UK worsens this problem (the English Channel being one of the busiest shipping lanes in the world, proximity to the industrialised nations of northern Europe and the Atlantic gulf stream). There appears to be a particular issue with beach litter in the south west plan area. However, all plan areas have a problem with marine litter to some extent. Therefore, it is important that any activities promoted in the marine plans are assessed against this topic.

5.6 Scope of the SAs: Air quality

Air quality

This topic has been scoped in for all seven marine plans and is relevant to the inshore and offshore plan assessments. With regard to offshore effects, shipping is a key contributor to sulphur dioxide emissions and any actions within the plan that could affect the length of shipping routes could have an impact on emissions. With regard to inshore effects, ongoing challenges with air quality (from transport

emissions amongst others) in Air Quality Management Areas at the coast and increased shipping activity, port expansion and associated industry growth could lead to increased emissions at coastal locations. This effect is likely to be more significant in the south east marine plan area due to the extent of Air Quality Management Areas and the fact that port activities are a significant contributor to poor air quality. However, actions within the marine plans could have a significant effect on air quality in any of the marine plan areas. Therefore, it is important that any activities promoted in the marine plans are assessed against this topic.

5.7 Scope of the SAs: Climate

The following topics have both been scoped in for all seven marine plan areas and they are relevant to both inshore and offshore assessments.

Greenhouse gas emissions

Over the next 20 years, renewable energy generation could contribute to a decrease in greenhouse gas emissions from energy generation. The majority of renewable energy activity is in the inshore area but there is some activity in the offshore area, for example offshore wind areas in the north west offshore. In addition, any plan policies which affect the length of shipping routes will affect greenhouse gas emissions.

Climate change resilience and adaptation (including coastal flooding)

The impacts of climate change are already being observed, and impacts are predicted to continue. The main focus for climate change resilience and adaptation is the inshore zone and will address issues such as coastal inundation and flooding, loss of inter-tidal habitat and improving resilience of existing coastal defences and developments. However, there are some issues which may affect the offshore marine plans including ensuring offshore wind energy development (and any other offshore development) is resilient to the effects of climate change.

5.8 Scope of the SAs: Communities, health and well being

Effects on communities (including employment and skills)

This topic has been scoped in for all the marine plans and is relevant to the inshore and offshore plan assessments. Potential receptors in the inshore plan areas include:

- declining fishing and other traditionally skilled communities
- low paid, low skill workers, unemployed and under-employed people in coastal communities
- households affected by multiple forms of deprivation

Issues with relation to the offshore plan areas relate to employment and economic activity in sectors including fishing, ports and shipping, defence and maritime renewables sector. Communities dependent on fisheries and tourism are particular vulnerable to change because of the declines in fisheries and the seasonal nature of tourism. The region showing the highest dependency in terms of employment in fishing is south west England. The south east is the plan area with the highest number of people employed through the ports and shipping sector whereas the north

east has the lowest. There is a big maritime skills sector in the north west marine plan area. There is high tourism employment dependency across all plan areas although this is most significant in the south west of England. There is also a need to address socio-economic deprivation and coastal communities particularly in the north west and north east as these areas are feeling the effects of industrial decline. It is recommended that the sub-topics of communities and employment and skills are considered together in one sub-topic.

Communities: Health and wider determinants of health and effects on protected equality groups

These topics have been scoped in for all four inshore marine plans however it is recommended that it is scoped out for the three offshore plan areas. Potential sensitive receptors include ageing coastal communities, disabled people and people with long term health conditions. Health deprivation and disability tends to be higher on the coast compared with the rest of England. In addition, deprivation in relation to income, income deprivation affecting children and older people, employment and education is higher. In addition the overall trend of an ageing population is likely to continue and could increase the proportion of households who are particularly vulnerable to flooding and other adverse climate change risks facing coastal communities. Therefore, it is important that any activities promoted in the marine plans are assessed against this topic.

5.9 Scope of the SAs: Economy

Ports and shipping

This topic has been scoped in for all seven marine plans and is relevant to the inshore and offshore plan assessments. The UK ports sector is the largest in Europe, in terms of tonnage handled. Shipping is an essential and valuable economic activity for the UK. There are significant movements of ships around the UK coast and into and out of UK ports serving the UK's economic interests. There are also significant levels of passing traffic, for example through the English Channel and other ships freely using the navigable seas adjacent to the UK. The south east is the busiest in the marine plan areas under consideration in terms of both ports and shipping routes. However, all of the marine plan areas have major ports and shipping routes within them. Therefore, it is important that any activities promoted in the marine plans are assessed against this topic. Please note that in London this will also include the effect of development on safeguarded wharves.

Fisheries and aquaculture

This topic has been scoped in for all seven marine plans and is relevant to the inshore and offshore plan assessments. Aquaculture is relevant only to the inshore areas and all of the plan areas have some aquaculture activity. Even in the north east inshore plan area, which has the least concentration of aquaculture sites, there could be future potential and employment in aquaculture can be significant to areas which are deprived or peripheral. With regard to fishing this is an important activity in all the plan areas both in the inshore and offshore areas. Therefore, it is important that any activities promoted in the marine plans are assessed against this topic.

Leisure / recreation and tourism

Tourism has been scoped in for all four inshore marine plans. However it is recommended that it is scoped out for the three offshore plan areas as tourism is generally coastal with the significant issue being the effects that marine plan activities may have on coastal towns and cities that are important for tourism (activities that visitors may participate in are addressed under leisure and recreation). With regard to leisure and recreation, most activity happens in the inshore area. However, boating activity and activities such as wildlife watching do cross into offshore areas. Therefore, leisure and recreation have been scoped in for all seven plan areas. With regard to recreation, recreational boating is a significant activity and the effects on the different types of recreational boating facility needs to be examined at the assessment stage and this will include harbours, marinas, moorings, anchorages, clubs and training centres as each of these types of facility have differing needs and requirements, and provide different services to the community around them. With regard to tourism, all of the plan areas have some coastal towns that are in the list of top 20 towns and cities visited in Great Britain by UK residents. In the north west inshore marine plan area examples include Blackpool (ranked 3rd) and Liverpool (ranked 6th). In the north east inshore plan area, Scarborough (ranked 2nd) and Berwick-upon-Tweed (ranked 17th). In the south east inshore plan area, London (ranked 1st) and in the south west Newquay (ranked 13th) and Bristol (ranked 15th). With regard to leisure and recreation, the south west is particularly important for boating (with the south coast generally dominating boating activity). However, the Merseyside area, Thames area and the north east coastal region are also popular for boating. In addition, all of the plan areas include a number of Royal Yachting Association cruising routes, sailing areas and racing areas (which cross inshore and offshore areas). Other examples include recreational and sport fishing which is widespread although participation rates are highest in the south west, south east and north east. The effects on all recreational activities will need to be considered.

Marine manufacturing

This topic addresses industry that may affect the coastal zone and also securing manufacturing investment and the associated supply chain for offshore wind in the UK (which is a key government objective with regard to marine manufacturing). This topic has been scoped in for all four inshore marine plans. However it is recommended that it is scoped out for the three offshore marine plan areas.

The north west and the north east plan areas are particularly important with regard to industry in the coastal zone. In addition, Avonmouth is important in the south west plan area and although the south east marine plan area is not a significant area for industry in the coastal area, ports such as Port of London are key in exporting UK manufactured goods overseas. With regard to the supply chain for offshore wind, this will require a port (or ports) with the required facilities and commercial land. These would provide an industrial hub for wind turbine manufacturers and their supply chain. Examples include Barrow (north west), Newcastle upon Tyne and Hartlepool (north east) and Ramsgate and Medway (south east). There are no ports suitable in the south west plan area.

Defence

This topic has been scoped in for all seven marine plans and is relevant to the inshore and offshore plan assessments. Sea training is carried out within defined military practice and exercise (PEXA) training areas and all of the marine plan areas have PEXA areas within them or some other military presence. Therefore, it is important that any activities promoted in the marine plans are assessed against this topic.

Aggregate extraction

This topic has been scoped in for the following marine plan areas: north west (inshore and offshore), south east, south west (inshore) and north east (inshore). The north west has licenced areas in both the inshore and offshore. The south east is an area where there are future technical opportunities and the area has a number of important aggregate wharves where resource is landed. The south west has a very small amount of licenced aggregate in the inshore area but there could be future technical opportunities in this area. The north east (inshore and offshore) and the south west offshore area does not have any licenced areas or any future potential for aggregate extraction. However, both the south west and the north east inshore have a number of wharves where aggregate resource is landed so the inshore effects have been scoped into the SA.

Energy generation and infrastructure development – renewables

This topic has been scoped in for all seven marine plans and is relevant to the inshore and offshore plan assessments. The majority of renewable energy activity is in the inshore area but there is some activity in the offshore area, for example offshore wind areas in the north west offshore. With regard to renewables, each plan area has a slightly different focus so the focus of the SA might be slightly different.

In the north west, the focus is on offshore wind as the area has several operational wind farms (although none in round 3) and tidal power (Tidal Lagoon Power has an early stage proposal to create tidal lagoon north of Workington on west Cumbrian coast and there are also plans for a Wyre tidal energy barrage and a Mersey barrage).

In the south west there is no current or planned offshore wind activity and the main focus is on wave and tidal energy. The south west is the only plan area that has lease agreements for tidal and wave energy. There are tidal stream/lease agreements for lease sites in the south west inshore (Pulse Tidal Limited, Bristol Channel), North Cornwall Wave Demonstration Zone, North Devon Tidal; Demonstration Zone and Falmouth Bay Test Site (FabTest) and Tidal Lagoon Power are considering the potential of Bridgwater Bay, Somerset to develop a tidal lagoon).

In the north east, there is a small amount of offshore wind (but no round 3 sites) but there is a Wave and tidal demonstration facility at the National Renewable Energy Centre (NAREC).

In the south east, there is a small amount of offshore wind (but no round 3 sites) and no lease areas for tidal or wave energy.

Energy generation and infrastructure development – carbon capture and storage

This topic has been scoped into the assessments for all areas apart from the south west marine plan area. The [UK Offshore Energy SEA3](#) states that existing offshore oil and gas infrastructure in mature fields in this area provides the potential for re-use as storage facilities where structure design life and modifications allow. Proven sealing structures and an abundance of historical geological well and seismic data make the East Irish Sea (which covers the north west plan areas) and Regional Seas 1 and 2 (which covers the north east and the south east Marine plan areas) highly prospective for gas storage and CCS projects and this could potentially affect the inshore and offshore areas. The south west marine plan area are unlikely candidates for gas storage or CCS compared with North Sea and East Irish Sea prospects.

Energy generation and infrastructure development – nuclear

This topic has been scoped in for the inshore plan areas. All of these areas contain nuclear power stations which affect the inshore zone – south west (Hinkley point power station and planning permission was granted for Hinkley Point C in 2013), north west (Heysham 1 and 2 power stations are in the north west plan area and uGen's Moorside project aims to develop a new generation nuclear power station of up to 3.6GW on land in West Cumbria), north east plan area (Hartlepool), and south east (construction of a nuclear power station at Bradwell-on-Sea in Essex).

Energy generation and infrastructure development – fossil fuels

This topic has been scoped in for all the plan areas. With regard to oil and gas the main focus is the north west inshore and offshore plan areas and the north east offshore plan areas. In the south west plan area there are no oil or gas fields, no oil or gas terminals and no currently licenced areas and a large portion of this plan area is designated as a restricted area. However, the remaining blocks in the area could potentially be licensed in future licensing rounds run by the Oil and Gas Authority, within the plan period, especially if further strategic seismic programmes are undertaken. In the south east there is a small proportion of the area that is 28th round provisional award. There are no oil or gas fields, terminals or current licenced areas in the south east. With regard to underground coal gasification there are a number of areas along the coast of the north east inshore plan area north of Sunderland subject to Coal Authority Underground coal gasification licenses and one area off the coast of the Wirral in the north west inshore plan area.

Seabed assets (including cables, outfalls and pipelines)

This topic has been scoped in for all seven marine plans and is relevant to the inshore and offshore plan assessments. The south west coast acts as a landing point for a substantial number of economically important cable connections across the Atlantic to North America. The north west inshore and offshore area contains several cables crossing the Irish Sea linking England with Ireland, Northern Ireland and also contains a power interconnector to the Isle of Man and there is an interconnector from Kent to Belgium ('Nemo') currently being installed in the south east plan area. However, all of the areas (both inshore and offshore) are crossed with a number of cables, outfalls and pipelines and potential new sub-sea cabling to reinforce and better connect certain sections of the onshore grid is a key part of supporting the growth of renewable and low carbon generation. Therefore, it is

important that any activities promoted in the marine plans are assessed against this topic.

5.10 Scope of the SAs: Biodiversity, habitats, flora and fauna

Protected sites and species

Protected sites and species are present in all marine plan areas and have been scoped in for all seven marine plan areas. Species may be protected as features of protected sites, or in their own right, wherever they are found.

Sites in the marine plan areas that are protected by legislation include Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites, Sites of Special Scientific Interest (SSSIs) and Marine Conservation Zones (MCZs). SACs, SPAs and MCZs can be designated in both inshore and offshore plan areas, while SSSIs are only located in inshore areas, with most confined to the intertidal area. As at 31 July 2015, over 4 million hectares of England's sea out to the limit of the UK continental shelf (over 17%) was covered by the above protected sites designations. Several new and extended SACs and SPAs are being considered for designation. Possible SACs (pSAC) and potential SPAs (pSPA), including proposed changes or extensions to existing sites, are given the same level of protection as sites that are fully designated.

Connectivity and the creation of a coherent network of protected sites is a key aim of national and international legislation and conventions, including the MCAA, MSFD and OSPAR Convention. More detail on the legislation that underpins protected sites and species, and the contribution they make to UK, EU and international conservation aims is provided in the Protected Sites and Species report card.

A number of protected sites straddle marine plan boundaries or cross boundaries with adjacent marine planning authorities. Many protected species are highly mobile and / or widespread; with populations extending beyond individual plan boundaries, UK administrative boundaries and UK marine space. Management of protected sites and species therefore require cross border co-operation with other marine plan areas, other UK administrations, other EU countries and countries beyond the EU.

Marine plans can potentially affect protected sites or species (positively or negatively) by influencing the type, intensity, timing or location of activities within the plan area that could potentially affect features of protected sites or protected species. Protected sites may incorporate benthic and intertidal areas and many sites rely on the maintenance of geomorphological, sedimentary, coastal and ocean processes to retain their special character, which could be affected by decisions within marine plans. Protected species may interact with a wide variety of economic activities at the coast and in both inshore and offshore plan areas (e.g. dredging, aggregates, energy, shipping etc.). Decisions about where, when and how such activities take place are central to the development of marine plans and link with other topics within this report. There are also links to other areas of the biodiversity topic, as numerous species of fish, birds, marine megafauna etc. are protected in their own right and / or are features of protected sites. This topic is therefore an important consideration for all marine plan areas.

Benthic and inter-tidal ecology

Benthic ecology has been scoped in for all seven marine plan areas, with intertidal ecology scoped in for all inshore areas. A wide variety of habitats and species are found within the inshore and offshore plan areas, many of which are of conservation importance or can be found within areas designated for protection. There are numerous influences on the varying species and habitat types, including damage or disturbance from marine energy developments, interactions with fishing and pollution to name but a few. Consideration must be given to large scale and widespread increases in proposed coastal and offshore developments, increasing effects predicted from climate change and ongoing designation of protected areas. Therefore, it is important that any activities carried out in the marine plan areas are assessed against this topic.

Fish and shellfish (including cephalopods)

This topic has been scoped in for all seven marine plan areas. The specific species and issues requiring consideration vary depending on the plan area. Fish stock health is generally only monitored for commercially fished species, with little information on non-target species. Estuaries and coastal areas are important for migratory fish species as well as providing important nursery and spawning habitat for many other fish and shellfish. Large areas of inshore and offshore plan areas provide important nursery and spawning habitat for a range of species. There is an obvious interaction with commercial and recreational fishing but other economic activities have the potential to interact with this topic, including dredging, aggregate extraction, energy generation and distribution through subsea cables, shipping and water quality in particular. This topic is therefore an important consideration for all marine plan areas.

Marine mega fauna (including marine mammals and turtles)

This topic has been scoped in for all seven marine plan areas and is relevant to the inshore and offshore plan assessments. Numerous sensitive receptors can be found in these marine plan areas, including harbour porpoise, harbour seals, grey seals and leatherback turtles. There are numerous strategic level concerns for cetaceans, seals, turtles and basking sharks in the marine plan areas, with drivers including climate change, anthropogenic influence from offshore developments, fishing and marine vessel activity along with marine pollution and litter. Therefore, it is important that any activities carried out in the marine plan areas are assessed against this topic.

Plankton

This topic has been scoped in for all seven marine plans and is relevant to the inshore and offshore plan assessments. Long term observations suggest that plankton are generally healthy and subject to few anthropogenic disturbances. Increasingly effects are predicted on plankton from climate change due to increasing sea temperatures and ocean acidification. With an increase in large scale and widespread coastal and offshore developments, plankton may be considered increasingly at risk, while changes to marine legislation¹⁴ mean that plankton has become increasingly important as a proxy for assessing the condition of pelagic

¹⁴ The Marine Strategy Framework Directive introduces the use of plankton with a benthic life stage as a monitoring proxy

habitats. Therefore, it is important that any activities promoted in the marine plans are assessed against this topic.

Ornithology

This topic has been scoped in for all seven marine plans and is relevant to the inshore and offshore plan assessments. The effects of the inshore marine plans are likely to be more significant. However, activities within the offshore area can affect migration routes and feeding areas of various species. Each of the marine plan areas is important for seabirds in its own right, with a host of international and national designations in these areas demonstrating their importance and all of the marine plan areas are under pressure from various forms of development and these could have impacts on bird habitat and species. Activities associated with leisure and recreation can also impact on some seabird species, largely through disturbance to nesting sites or disturbance to feeding birds by recreational boat traffic.

Non-indigenous species

This topic has been scoped in for all seven marine plan areas. Non-indigenous species are found in all four inshore marine plan areas with information relating to the offshore area being limited. Pathways for the introduction and / or spread of non-indigenous species are present in all seven marine plan areas, so it is a potential risk and an important consideration for the development of all marine plans. Key introduction pathways for non-indigenous species are commercial shipping, recreational boating, aquaculture stock imports and natural dispersal.

6 Results of SA scoping – scope and level of detail

6.1 Geographical scope including transboundary effects

The SA will cover direct and indirect effects within the inshore and offshore marine plan areas but also possible direct and indirect effects relating to adjoining or connected terrestrial areas (including devolved administrations). Baseline data has been collected for such terrestrial areas (where appropriate) and presented in the issues database in order to judge any terrestrial effects of the marine plans.

The SA will also need to address effects on other Member States where relevant. It is possible that transboundary effects on other Member States will be identified at the appraisal stage. Working with other marine plan authorities, data related to transboundary issues has been collected, where appropriate, at the scoping stage to support the appraisal.

The spatial extent of the potential effects will need to be considered as part of the SA and it is recommended that the following general definition is used unless there is a specific more appropriate definition for individual topics:

- international / transboundary - effects extending beyond the UK
- national - effects within England or the UK but extending beyond the plan area
- local/regional - effects within the plan area or confined to the local area, typically <5km from source

6.2 Temporal scope

The marine plans will cover a 20 period and therefore the SA will consider the effects of the marine plans over the next 20 years and beyond where possible. It should be noted that making predictions beyond five years into the future increases the levels of uncertainty in the prediction of effects with this uncertainty increasing over longer time horizons. The duration of effects will be classified as follows:

- short term 3 to 5 years - within the marine plan review period
- medium term 5 to 20 years - within the marine plan duration
- long term 20+ years - beyond the marine plan duration

6.3 Level of detail

The SA will need to address both direct and indirect effects and distinguish between effects that are a direct result of the plan or are secondary, as they occur away from the original effect or as a result of a complex pathway. The SA will also need to consider the frequency of the effect, the probability of that effect occurring and whether the effect is likely to be permanent or temporary, reversible or irreversible as part of the consideration of the significance of the identified effects. The magnitude of the effect will need to be defined and it is recommended that the following general definition is used as a guide unless there is a specific more appropriate definition for individual topics:

- high 70%+ receptor or environmental capacity affected
- medium 30-70% of receptor or environmental capacity of affected
- low 10-30% of receptor or capacity affected
- very Low <10% of receptor or capacity affected

Department of Communities and Local Government (DCLG) guidance¹⁵ on [SEA efficiency and effectiveness](#) clarifies that the level of detail of an appraisal should correspond to the level of detail of the plan being appraised. This reflects the SEA Regulations which state:

“The report must include the information that may reasonably be required taking into account current knowledge and methods of appraisal, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment”.

The marine plans are regional scale strategic plans which do not seek to address site or project-specific details. The marine plans do not directly result in the development of new projects. They provide guidance for decision makers to assist in consenting (or otherwise) activities in the marine plan areas and also more general guidance with regard to management measures. As such, the exact location and nature of new activities will also depend upon market forces and development proposals being received.

This lack of detail on location and nature of activities results in uncertainty when predicting the effects of activities and consequently strategic impacts can be identified with the most certainty, together with the extent to which the marine plans seek to avoid or offset these impacts. Correspondingly, this SA's predictions and proposed mitigation measures will primarily be at a strategic level. At each stage of the appraisal any uncertainty, data gaps and assumptions taken will be made explicit and at each stage the SA will take a precautionary approach.

6.4 Nature of the effect

The nature of the effect will be reported by reference to the value and vulnerability of the area likely to be affected. This will draw on the baseline data to identify any special natural characteristics or cultural heritage, exceeded environmental quality standards or limit values, or intensive use, and the effects on landscapes which have a recognised national, Community or international protection status. In addition the risks to human health or the environment (for example, due to accidents) will need to be considered.

6.5 Cumulative effects

The MMO recognises the potential for cumulative effects to arise due to activities taking place in marine plan areas and, in accordance with the principles of

¹⁵ DCLG (2010) 'Towards a more efficient and effective use of Strategic Environmental Assessment and Sustainability Appraisal in spatial planning'

sustainable development, there is a need to consider such effects at the marine plan level.

Cumulative effects arise, for example, where several proposals each have insignificant effects but together have a significant effect; or where several individual effects of the plan (for example noise, dust and visual effects) have a combined effect. This includes synergistic effects where interactions produce a total effect greater than the sum of the individual effects.

Under the provisions of the [UK Marine Policy Statement](#) the MMO has an obligation to ensure potential cumulative effects are taken into account in decision making. The identification and evaluation of potential environmental, social, and economic effects of marine activities allows for effective management measures to be established to minimise or remove negative effects. Such measures may potentially be put in place through, for example, licensing conditions or marine plan policies. The assessment of cumulative effects and any mitigation measures applied must be proportionate and achievable on a practical level.

There is currently no consensus or national policy/legislative direction on the detailed approach to cumulative effects in marine planning. The SA process is required to make some judgement as to the extent of cumulative effects that could occur as a result of marine plans (such as policy implementation).

The methodology developed to identify and appraise the potential cumulative effects associated with the development of the marine plans will take account of the guidance produced by the MMO in December 2014 - A strategic framework for scoping cumulative effects MMO (2014a)¹⁶. This consists of a high level framework to enable potential cumulative effects to be identified at a strategic level and has been developed along with a toolkit of potential management approaches. Additional account will be taken of social impacts and interactions, as set out in “Social impacts and interactions between marine sectors” (MMO, 2014b)¹⁷.

The approach to the consideration of cumulative effects within the SAs will consider the scope and the coverage of the policies developed for each of the marine plan areas which will be developed at the options stage of the marine plans’ development.

¹⁶ MMO (2014a) A Strategic Framework for Scoping Cumulative Effects. A report produced for the Marine Management Organisation, pp 224. MMO Project No: 1055. ISBN: 978-1-909452-34-3.

¹⁷ MMO (2014b) Social Impacts and Interactions between Marine Sectors. A report produced for the Marine Management Organisation, pp 273. MMO Project No: 1060. ISBN: 978-1-909452-30-5.

7 Related appraisal processes

7.1 Habitat Regulations Assessment

As well as SA, the marine plans are also subject to a Habitat Regulations Assessment (HRA). This process is being undertaken as a requirement of the [Habitats Regulations](#) ¹⁸ for inshore and offshore waters and will assess the effects the marine plans may have on the network of Natura 2000 sites. Natura 2000 is a network of areas designated to conserve natural habitats that are in danger of disappearance in their natural range, have a small natural range, or present outstanding examples of typical characteristics of the biogeographic region and/or species that are rare, endangered, vulnerable or endemic within the European Community. Their creation is specified in the Habitats and Birds Directives as outlined below and referred to collectively as European sites. These European sites include:

- special areas of conservation (SACs) designated under the [EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora](#) (the Habitats Directive) for their habitats and/or species of European importance
- special protection areas (SPAs) classified under the [EC Directive on the Conservation of Wild Birds](#) (the Birds Directive) for rare, vulnerable and regularly occurring migratory bird species and internationally important wetlands
- sites of community importance (SCIs) that have been adopted by the European Commission but not yet formally designated by the government of each country
- candidate SACs (cSACs) that have been submitted to the European Commission, but not yet formally adopted

The term HRA refers to the assessment of the implication of a proposed plan on one or more European designated sites in view of the sites' conservation objectives. The marine plans HRA process will be carried out in the following stages:

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

The HRA will be presented in separate documents but the findings will be reflected within the findings of the full SA of the North East, North West, South East and South West Marine Plans.

¹⁸ The Conservation of Habitats and Species Regulations 2010 which replace the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) in England and Wales; and the Offshore Marine Conservation (Natural Habitats) Regulations 2007 (SI 2007 No. 1842) (as amended) (the Offshore Habitats Regulations).

7.2 Equalities Impact Assessment screening process

7.2.1 Introduction

The [Equality Act](#) (2010) covers nine protected characteristics which cannot be used, either directly or indirectly, as a basis for unequal treatment. A new equality duty, set out in Section 149 of the Equality Act requires public bodies to give due regard to the need to:

- promote equality of opportunity
- to tackle unfair discrimination
- to promote good relations between different groups

Therefore, as part of the SA it is necessary to consider whether the following groups (protected characteristics) are likely to be disproportionately affected by the policies in the marine plans (as compared to the rest of the population). An assessment will be carried out during the options assessment and draft plan assessment as part of the SA:

- age
- being or becoming a transsexual person
- being married or in a civil partnership
- being pregnant or having a child
- disability
- race including colour, nationality, ethnic or national origin
- religion, belief or lack of religion/belief
- sex / gender
- sexual orientation

This process is called an Equalities Impact Assessment (EQIA).

7.2.2. What are the marine plans and who will they affect?

Section 2 of this report sets out the context for the marine plans and their remit. The marine plans may affect a diversity of people with an interest in the marine environment. Marine planning policies will have implications on:

- the preparation of applications by developers and assessment of these applications by marine licensing authorities and other decision makers
- the choice of location of marine developments and activities
- the requirements placed on the management, construction, operation and expansion of marine proposals

A number of sectors/groups of people will be affected by the adoption of the marine plans including:

- marine activities/businesses: oil and gas, renewable energy, ports and harbours, aquaculture, aggregates, coastal defence as well as all the associated infrastructure

- recreational and commercial fisheries
- developers of licenced activities in England's marine areas (all such activities listed above)
- marine nature conservation, coastal defence, and marine heritage activities/conservation
- coastal communities
- public authorities
- The Ministry of Defence

7.2.3 Key considerations

The marine plans will have both positive and negative effects on communities. For example, coastal communities may benefit economically and socially from projects that are licenced under the framework of the marine plans. Communities may also suffer from possible adverse effects of marine projects if they do not consider issues such as air quality, landscape issues and flood risk adequately. However, what needs to be demonstrated through the equalities impact assessment process is whether communities with the protected characteristics are likely to be affected disproportionately by the marine plans because of the way they are written and implemented.

Another key consideration is that although marine plans set the framework for consent and licensing of projects they do not provide services on the ground. Therefore, they are not likely to be discriminatory in the way they operate.

Bearing all of these issues in mind regarding the scope and purpose of marine plans, Table 7.1 outlines some considerations for each protected characteristic and the conclusions regarding whether the marine plans are likely to have a disproportionate impact on people who have this protected characteristic.

Table 7.1: Equalities Impact Assessment – Considerations

Protected characteristic	Issues to consider	Conclusion
Age	<p>Many coastal communities comprise sizeable or growing numbers of older people and this is the case with regard to the marine plan areas under consideration. Whilst this places an increased demand on health and social care services, provision of these services is not an issue which the marine plans can have an influence on.</p> <p>Many older people face issues regarding disability and this is addressed in the disability section below with regard to access to recreational opportunities etc.</p>	<p>The marine plans will not have a disproportionate impact on people who have this protected characteristic.</p>
Sex / gender	<p>Baseline data collected for this scoping report has indicated that women provide certain roles within the fishing and aquaculture business. Women in fisher families, enterprises and communities take on multiple responsibilities ranging from being accountants and book keepers, to administrators, crews' cooks, drivers, representative at meetings and community organisers. There is also evidence that a lot of on-shore processing activities are dominated by women as a part of the aquaculture industry¹⁹. However, these businesses are generally run as a partnership, and quite often as a family. The marine plans will include policies on fisheries but it is not expected that these could be implemented in a way that will discriminate on the grounds of gender.</p>	<p>The marine plans will not have a disproportionate impact on people who have this protected characteristic.</p>

¹⁹ MMO Social impacts of fisheries, aquaculture, recreation, tourism and marine protected areas in Marine Plan areas in England, 2013.

Protected characteristic	Issues to consider	Conclusion
Being or becoming a transsexual person	<p>Limited data is available regarding the numbers of people undergoing gender reassignment at any one time.</p> <p>The House of Commons Women and Equalities Committee have recently published a report on transgender equality (January 2016)²⁰. This report sets out the key issues as access to NHS services and tackling transphobia in relation to a number of issues (reporting hate crime, recording of names and identities, prison and probation services, online services and media transphobia, schools and education and social care). Planning (marine or terrestrial) is not mentioned as a key issue.</p>	The marine plans will not have a disproportionate impact on people who have this protected characteristic.
Being married or in a civil partnership	The marine plans are not providing services that could unfairly discriminate against people who are married or are in a civil partnership.	The marine plans will not have a disproportionate impact on people who have this protected characteristic.
Being pregnant or having a child	The marine plans are not providing services that could unfairly discriminate (or place at harm) pregnant women. The marine plans have limited potential to measurably impact on discrimination and equal treatment of pregnant women or breastfeeding mothers.	The marine plans will not have a disproportionate impact on people who have this protected characteristic.
Disability	The marine plans are not providing services that could unfairly discriminate on the basis of disability. With regard to access to recreation / leisure this is addressed by the Disability Discrimination Act so any premises which are subject to public access would not be allowed to unfairly discriminate on this basis.	The marine plans will not have a disproportionate impact on people who have this protected characteristic.

²⁰ House of Commons Women and Equalities Committee Transgender Equality First Report of Session 2015–16. Report, together with formal minutes relating to the report. <http://www.publications.parliament.uk/pa/cm201516/cmselect/cmwomeq/390/390.pdf>

Protected characteristic	Issues to consider	Conclusion
Race including colour, nationality, ethnic or national origin	The marine plans are not providing services that could unfairly discriminate on the basis of race or national origin.	The marine plans will not have a disproportionate impact on people who have this protected characteristic.
Religion, belief or lack of religion/belief	The marine plans are not providing services that could unfairly discriminate on the basis of religion or lack of religion / belief.	The marine plans will not have a disproportionate impact on people who have this protected characteristic.
Sexual orientation.	The marine plans are not providing services that could unfairly discriminate on the basis of sexual orientation.	The marine plans will not have a disproportionate impact on people who have this protected characteristic.

7.2.3 What is the approach?

It is suggested that a full equalities impact assessment is not necessary as current evidence shows that the marine plans will not impact disproportionately on protected characteristics and has minimal relevance to equality issues.

The approach that is proposed is to include an integrated equalities impact assessment within the SA. This is to enable the MMO, as a public authority, to fulfil its duty to give due regard to the need to promote equality, tackle discrimination and promote good relations between different groups in society. At this stage in the SA process this simply means including protected equality characteristics in the SA frameworks for each of the marine plans.

8 What happens next?

8.1 Next stages in the SA process

Following the public consultation on this report, it has been revised to reflect the feedback received, where appropriate.

The next stage of the SA process is Stage B: Developing and refining marine plan alternatives and appraising the effects. At this stage, the MMO will develop alternative options of how to progress each of the marine plans. With regard to alternatives, Part 3 of the SEA Regulations states that an environmental report shall be prepared to identify, describe and evaluate the likely significant effects on the environment of implementing the plan or programme and *reasonable alternatives* taking into account the objectives and the geographical scope of the plan or programme.

[The Practical Guide](#) advises that reasonable, realistic and relevant alternatives should be considered and they should be sufficiently distinct to enable a meaningful comparison of their different effects. The overall SA process seeks to evaluate the potential significant effects of alternatives on each of the SA topics and sub-topics. It is recognised that at the strategic level there will be less detailed information available about some of the alternative options compared with the preferred draft marine plans which will contain a series of worked up policies. Therefore, a level of uncertainty will be acknowledged in the SA for the north east, north west, south east and south west marine plans. At this point in the development of the remaining marine plans, it is too soon to be able to provide detailed commentary on the likely range of options and therefore alternatives.

The vision and objectives of the marine plans will provide further information that can be used to clarify the scope of the alternatives. The evidence and issues will inform the development of plan area visions and policy options under the high level marine objectives. Policy options will be developed to meet the plan area visions and high level marine objectives in different ways. It is anticipated that as the marine planning process proceeds, a separate technical document looking at the development of alternatives will be produced, as part of the SA process.

The next stage after alternatives is the development of draft marine plans. The SEA Regulations require that an appraisal is carried out on a draft version of the marine plans and a statutory environmental report (a SA report under the English planning system) is produced and consulted on. The SA report will set out the results of the SA process, outline why alternatives were selected or rejected, report on the appraisal of the draft marine plans, outline mitigation and enhancement measures and include a programme for monitoring the effects of the marine plans. SA is an iterative process and the baseline characterisation may be revisited as part of the assessment, particularly in response to new data becoming available.

The SA report is a statutory document and will be produced alongside marine plans. It will be published at the same time, thus providing respondents with appropriate information on the sustainability implications of the marine plans on which to base their representation. A Non-Technical Summary will also be prepared which complies with the requirements set out in the SEA Regulations.

8.2 Contact details

If you have any queries relating to this report or the marine planning process, please email the Marine Planning Team, planning@marinemanagement.org.uk.