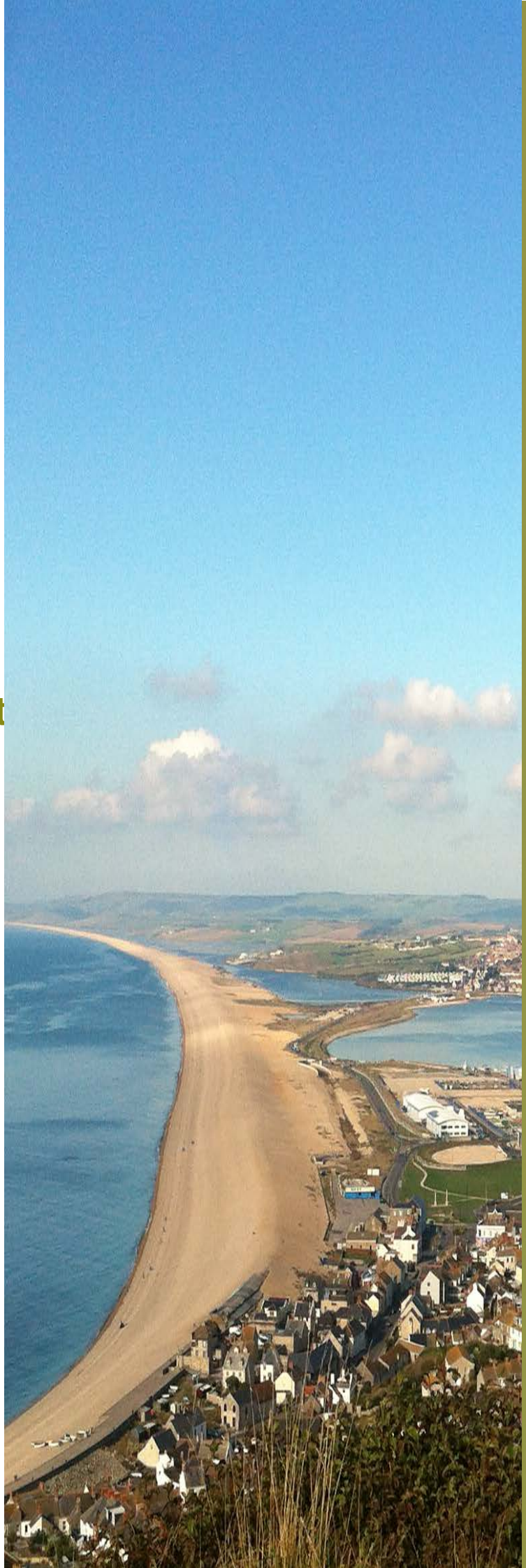
Marine Management Organisation

South Marine Plan Areas Options Report

February 2015

FOR CONSULTATION



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    - verifying any comments and/or information provided as part of the consultation process is from a legitimate source;
    - collating statistical information on stakeholders' input to marine planning.
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Contents

1.1 Introduction

This report sets out the options developed as part of the planning process for the South Inshore and the South Offshore Marine Plan Areas. Options development is part of the planning process that looks at alternative approaches to developing a plan, in order to address issues raised and achieve the plan objectives.

The report has been developed for informal consultation on the options; the associated suggested plan policies have been provided to both illustrate and differentiate between the options presented. They are at a very early stage of development, but include the policies provides a starting point for discussion on draft plan policies with government and stakeholders. As part of an iterative process these policies will be subject to further discussions and refinement as the plans progress.

The options stage is a significant phase in the planning process; it considers the different ways of delivering the Vision and Objectives and is the mechanism that produces draft plan policies, which in turn provide the basis for decision-making using the plan (putting the plan into effect). Options offer the opportunity to assess the various pros and cons of different policy variants, including examination of types and combinations of policies, and the evidence to substantiate a preferred option. Interrogation via the options process, including examination of policies, also allows for a greater understanding of exactly what it is a plan can achieve and where it can complement existing measures.

Options development, like the planning process as a whole, is iterative and it is important to note that the draft policies set out in this report and accompanying spreadsheet, whilst thought to be realistic and achievable, are not yet finalised. This phase in the plans' development aims to facilitate consideration of possible policy choices by comparing and contrasting the options set out in this report. As a result of consultation, a preferred option will be selected and progressed. It is possible that a combination of more than one of the options presented will be developed as the preferred option.

At this stage the Marine Management Organisation would like to invite stakeholders to focus on the difference between what each option will achieve, and the overall intent of policies within the option. It is anticipated that once a preferred option has been selected, further work will take place to ensure that the wording of policies is clear and consistent. This will ensure that they offer clarity to decision makers in how and when they will be applied and support policy application.

In addition to ensuring that core issues have been addressed, the policy variants presented in the accompanying spreadsheet have been selected as realistic combinations of policies that make sense as a 'package' rather than containing significant conflicts. Draft policy variants within an option have been selected for their compatibility as well as their ability to address the issues. Whilst the plan policies aim to be realistic based on current policy, evidence and the planning process so far, some of the policies are quite ambitious or strong in a deliberate attempt to differentiate between options. That should help facilitate a comparison between options and, as such, stimulate a response from consultees on what they would prefer (and in turn, what they not like to see go forward).

It should be noted that the policies set out within the options that are taken forward in the planning process will be developed further in terms of their spatial extent. It is anticipated that many will be supported by policy or indicative maps that will provide further spatial detail on where the policies apply or variations in how policies may impact across the plan area. The objectives, and resulting policies, presented below are of varying scope with some being very defined while others remain broader. Some of the policies will apply across the both the South Inshore and Offshore Marine Plan area, while some may be limited to the Inshore or Offshore Plan Areas only, and others restricted spatially.

This report provides an overview of how the Marine Management Organisation has approached the options process. It sets out the results of the options analysis so far. It goes on to describe the next step in the process, which is the selection of a preferred option. The results section of the report contains narratives of the different options to give readers an idea of how the options will differ in their outcomes. The full options with all suggested policies can be found in the accompanying spreadsheet, which should be used as a companion to the narratives themselves. In considering the policy variants, readers may find it helpful to refer to the justification text included within the objectives in Annex 1. Further information on the methodology used to produce options is included as Annex 2.

The Marine Management Organisation would like to invite comment on the options as set out in section five of this report and the consultation questions, which are set out in section 1.2

1.2 Consultation Details

The Marine Management Organisation welcomes your comments on the contents of this report which provides the context for these questions with consultees encouraged to consider the content of the report in thinking about the following questions.

1. Which is your preferred option? In answering this question, please note it is not possible to select a combination. However, in your response to question 3 you can tell us if you prefer a combination of the options

2. Why do you prefer this option?

3. Would you make any changes to this option and, if so, what? Would you like to combine aspects of different options into a new option? For example, if you prefer option 1 for objective 1 but option 3 for objective 2, please tell us.

Although the focus of the consultation is the options, you may wish to comment on the plan policies presented. Please note that these questions are optional.

4. Do you agree with the intent of the policies? If not how would you change them?

5. Please indicate those issues you feel are out of scope of marine plan policy (eg. those appropriate for signposting rather than marine plan policy).

Consultation on the report commences on Tuesday 3rd February 2015 will last for 4 weeks closing on Wednesday 4th March 2015 at 12pm.

Please submit comments on the report through the following link:
https://www.connect.marinemanagement.org.uk/consultations/south-options

If you have any problems responding to this consultation or wish to discuss any aspect of the report in more detail please do not hesitate to contact the Marine Planning team as below:

Telephone: 0191 376 2790
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2. Background

2.1 Requirements for options

The Marine and Coastal Access Act 2009 requires a sustainability appraisal to be conducted on a marine plan (Schedule 6, paragraph 10). Though not specifically stated in the Act, this is interpreted as including the requirements of the Strategic Environmental Assessment Directive[1].

The Strategic Environmental Assessment Directive and the UK Regulations of this Directive[2], require those developing a plan or programme to consider "…reasonable alternatives taking into account the objectives and geographical scope of the plan…". In the UK, the term 'options' is more commonly used, rather than 'alternatives', as this reflects established usage of the term in land-based planning, where options for achieving the objectives of a plan were often considered prior to the legal requirement to do so.

The term 'reasonable alternatives' is interpreted in the Government's Guide to the SEA Directive as meaning those options that are relevant and realistic.

The Guide to the SEA Directive gives examples of what reasonable and realistic alternatives could be, but these are all focused on land-based planning. The marine planning description document gives further useful detail on the likely characteristics of a preferred option, suggesting it is likely to be:

a) effective (likely to deliver goals, objectives and targets)
b) efficient (delivery achieved with fewer resources)
c) equitable (between different locations, different objectives, and different sectors).

The above suggests that an option:

a) Needs to be within the remit of planning (or at least planning can contribute to its achievement). For marine planning this means it:

[1] Marine and Coastal Access Act 2009: Explanatory Notes", paragraph 904.
[2] http://www.legislation.gov.uk/uksi/2004/1633/pdfs/uksi_20041633_en.pdf

i. needs to be in line with the Marine Policy Statement (and other relevant national and local policy)
ii. needs to be deliverable (ie the policies included in an option can be implemented by decision making authorities under relevant legislation such as the Marine and Coastal Access Act (2009), the Localism Act (2011), and the Planning Act (2008))

b) Needs to relate to the issues identified, both now and into the future.

2.2 Approach to options

There are different ways of developing options, and the criteria by which options processes and options themselves are judged, leave a large degree of flexibility.

The approach to options that has evolved in terrestrial planning cannot be readily transposed to marine planning because the issues marine planning deals with are different, as is the regulatory context within which marine plans sit.

Though the issues land-based plans deal with are varied and cover society, environment and the economy, the main mechanism for regulating activity is through the designation of different spaces or targets for different types of land-use, for example for housing, or for a particular category of employment activity. Additional criteria for approval of a project may also be set as a means of encouraging certain behaviours, for example specifying the need for the inclusion of renewable energy in developments. These issues are often addressed through bespoke studies that themselves set out options for addressing issues, for example different options for retail land use within a plan area.

The land-based regulatory context is also relatively simple, with plan-making bodies being the primary decision-maker for all except large, nationally-significant projects. Furthermore, there is over 70 years of precedent and experience in developing and applying land-based plans upon which to base decisions. During this time land-based planning authorities have developed a key understanding of what is within their remit and of the issues they need to address.

The approach to plan development to date has used learning from land-based planning; this has included using the Planning Advisory Service and advice from contractors working on the sustainability appraisals for the East and South marine plans.

For the reasons given above, there is flexibility in the approach to be adopted and the task of developing options for marine plans is different to that for land-based planning. An overview of the approaches tested is presented in Annex 2. The approach taken is to draft policies of ‘high’, ‘medium’ and ‘low’ strength and to use combinations of these to develop three options made up of a suite of policies that are compatible with each other. This approach is outlined in further detail in section 4 of this report.

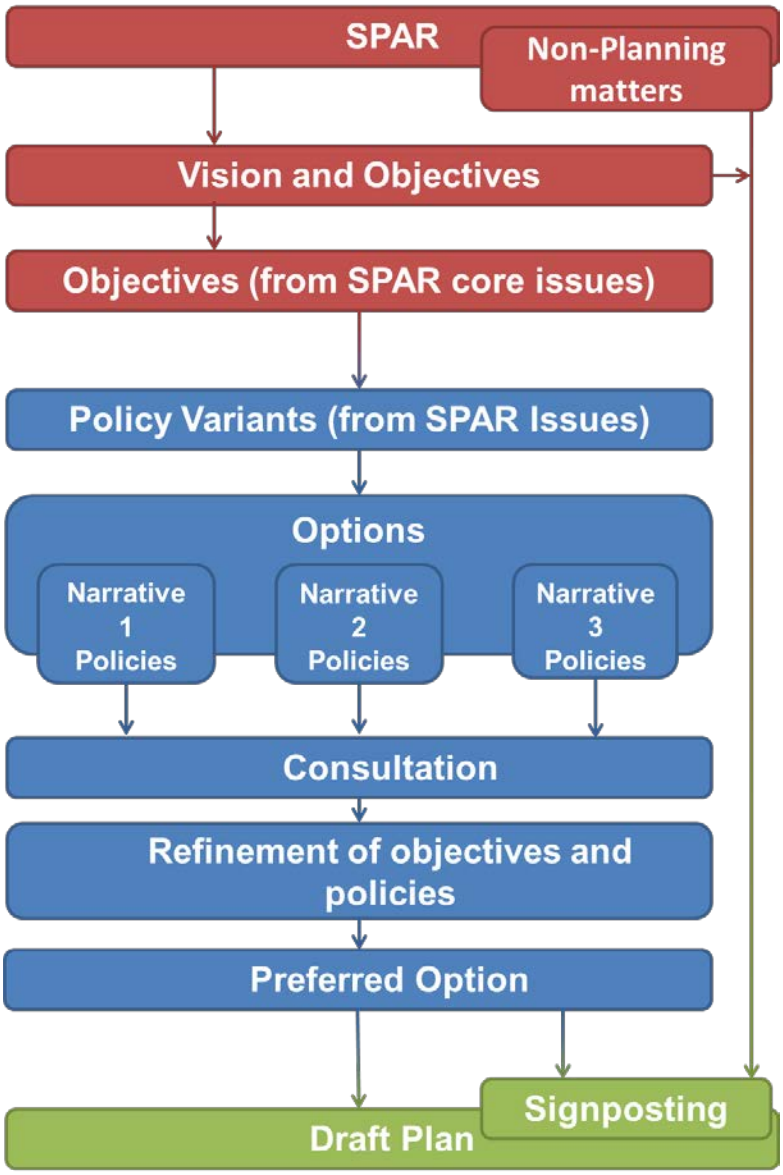
The issues that marine planning seeks to address are wide-ranging, therefore there is a particular challenge to find a coherent set of policies that will both address all of the core issues whilst maintaining compatibility. In other words, addressing an issue in isolation may enable a variety of policy responses to be selected but only some of

those choices will make sense when viewed alongside equivalent choices for a range of other issues.

The plan policies set out in the spreadsheet accompanying this report have been developed to respond to the issues identified in the South Plans Analytical Report and carried through to the Vision and Objectives, as described in further detail in section 3 below. This approach represents a ‘golden thread’ that links each stage of the planning process through consistency in the identification of core issues, development of Vision and Objectives to reflect these, and in turn development of possible policies to form options, which provide the response to and realisation of objectives.

This ‘golden thread’ is outlined in figure 1 below, which aims to describe how the policies and objectives presented in this report have been arrived at:

Figure 1: 'The Golden Thread'



Evidence gathering was undertaken for the South Plan Analytical Report and identified issues.
Issues then categorised into planning and non-planning matters, based on whether planning could deal with the issue and was the appropriate mechanism to do so.
Non-marine planning matters–are matters best addressed by a response or mechanism? other than marine plans. Such responses may include other plans, decisions and management measures that affect the marine plan area and are already in existence, in development or required without need for an operative marine plan. A marine plan objective is therefore not required to address such matters, but rather an increased awareness (eg through signposting to relevant information and policies held in other existing plans), or other activities to raise awareness and encourage improved implementation. This avoids replication of objectives and policies and ensures marine plans focus on issues where they can add value or are not otherwise addressed.
Marine planning issues have been grouped into Core Issues which were then used to develop objectives. Further information on this part of the process is provided under Section 3: Vision and Objectives.
The more specific **sector / topic issues** which contributed to the **core issues** have been used to formulate policies.
Policies are designed to achieve the objectives, and therefore each policy sits under the objective that it is designed to address most, though some policies deliver across several objectives.

As described above, the planning process is an iterative one and the Marine Management Organisation would stress that the policies themselves, as well as the Vision and Objectives they are designed to achieve, are still in draft format at this stage and that further refinements are expected to arise as a result of consultation with stakeholders.

3. Vision and Objectives

Options set out choices for delivering the objectives, and thereby contribute to the vision, identified through the planning process so far in the South marine plan areas. The objectives in turn are driven by the outcome of earlier work in the process on evidence and issues; that linked process is briefly described below. Whilst the Vision and Objectives have been through several revisions and will need to start being finalised as we move towards drafting the actual plans, it is anticipated that they will continue to evolve depending on comments received during the consultation on options.

The development of, and revisions to, the South Plan Analytical Report produced an extensive list of issues, which were consulted upon with stakeholders via public consultation and workshops and subsequently revised. Some of the issues identified are already addressed by existing measures including legislation, or policy, or are the remit of other organisations. In these cases, marine plans can at most highlight and signpost these issues and associated information to users of the marine plans. This signposting process was started in the South Plan Analytical Report and will continue throughout the planning process. The full list of issues that marine planning can address can be found in the South Plan Analytical Report, along with the results of analysis summarising them as 14 core issues based on shared characteristics, with the contributing sector or topic-level issues sitting beneath them, as constituent parts.

Core issues heavily influenced the development of the draft Vision and Objectives (see Annex 1 for the full Vision and Objectives and Annex 2 for definitions of the various terms discussed here) , with each core issue covered by an objective. The core issues have been further developed through consultation on the draft Vision and Objectives. They are being refined throughout the planning process, underlining its iterative nature, and therefore may develop further in response to comments arising from the options consultation. That in turn may lead to refinement of the Vision and Objectives.

The Draft Vision and Objectives for the South Inshore and South Offshore Marine Plan Areas (July 2014) document was published for consultation from 9 - 31 July 2014. The document utilised four goals derived from four ‘themes’ in the South Plan Analytical Report, ie protect the natural and historic environment, maintain and enhance social benefits, enable sustainable economic development, and promote opportunities for employment, investment and regeneration.

Following consultation and internal review, it was considered that these goals had served their purpose in assisting development of objectives. Due to the obvious overlap, they were replaced with reference to the five areas covered by the High

Level Marine Objectives being included in within the Marine Policy Statement. They cover:

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

The Vision and Objectives were developed with considerable input from stakeholders. The consultation process on the draft Vision and Objectives was supported by a series of workshops from 15-18 July 2014 to raise awareness of marine planning and canvass stakeholder views on the draft Vision and Objectives. 167 people from a wide range of organisations attended, representing an array of national and local stakeholders with interests in the South marine plan areas including tourism, recreation, ports and shipping, aggregates, local authorities, private consultancies, conservation and environmental interests and coastal forums.

A Consultation Summary was published of all comments made on the draft Vision and Objectives. It did not include the revised versions, instead these were to be shared with stakeholders as part of the options process. The comments were used to inform further development of the draft Vision and Objectives for the South marine plan areas (as now shown in Annex 1 and to help establish options for policy development addressing the issues for the South marine plan areas. The latest draft objectives are considered to address the core and contributing issues more clearly, clarify the matters for which marine plans can add value by complementing existing measures and provide a framework for specific and measureable plan policies. Some general justification for the policies that sit under each objective is included in the new context section for each objective (see Annex 1).

It is important to recognise that there are a number of other influences within the marine plan areas, some with overlapping objectives (such as local authority policies and strategies), together with other factors influencing change (such as changes to the licensing system and market forces). Marine plans are therefore not the sole instrument of change. Revision of the objectives continued the process of identifying the non-marine planning matters (see Figure 1, Section 2).

This further improves the focus on matters that can be addressed by marine plan policies. In some cases, information, institutional or market failure may mean that the achievement of the High Level Marine Objective may be constrained. In such cases, it may be that a plan objective is not required, but rather an increased awareness (eg through signposting to other statutory documents) or improved implementation of existing drivers. While noting that many factors beyond marine plans influence change, stakeholder comments and experience from marine planning so far mean that statements have generally not been included in each South objective qualifying its application such as “marine planning’s contribution to …” etc.

In order to respond to the desire to improve the measurability of marine plan objective delivery the aspiration for the south plans’ objectives, is to become SMARTer (specific, measureable, achievable, relevant and time bound) than the East marine plans. However, there were a mix of views on how this is achieved,

including those who see the policies as the means to make objectives SMARTer. Learning to date has shown that due to the nature of the issues to be addressed, available evidence, and stakeholder appetite, the plans are likely to still contain a mixture of objectives from those that are SMART to those that are more broad, although it remains to be seen where the balance lies depending on further consultation.

The Vision and Objectives provide the essential context for the development of options, and as such are included in this report. They will continue to be refined throughout the plan-making process until publication of the South marine plans consultation drafts. Comments are not sought directly on the objectives, but consideration of options, development of plan policies and the consideration of resultant emerging monitoring requirements may generate consequential changes to the objectives in order to ensure they are fit for purpose and achievable.

Table 1: Summary of Revised Draft Objectives

Number	Objective
Objective 1	To reduce contributory drivers[3] of climate change that result from human activities through specific action to minimise and mitigate emissions of greenhouse gases
Objective 2	To reduce the environmental, social and economic risks of climate change, activities should take account of adaptation and mitigation measures, that reduce (net) vulnerability and/or improve resilience to climate and coastal change
Objective 3	To support the objectives of Marine Protected Areas and the delivery of an ecologically coherent network by ensuring enhanced resilience and the capability to adapt to change
Objective 4	Activities within and adjacent to the South marine plan areas must take account of the achievement or maintenance of Good Environmental Status (GEnS) and Good Ecological Status (GES) under the Marine Strategy Framework Directive and Water Framework Directives respectively
Objective 5	To safeguard space for the natural marine environment to enable continued provision of ecosystem goods and services
Objective 6	Disturbance impacts on mobile species, within or reliant on the South marine plan areas, resulting from new proposals and existing activities must be avoided, minimised or mitigated
Objective 7	Cumulative impacts affecting estuarine water quality within the South Inshore Plan area should be addressed through strategic management addressing terrestrial and marine drivers

[3] Contributory drivers are defined as the human controlled influences that contribute towards a rapidly changing climate. Specifically, those contributions originating from marine activities and their associated terrestrial infrastructure (eg port operations).

Number	Objective
Objective 8	Displacement of marine activities should be avoided, minimised or mitigated in order to achieve a net gain in social benefits (especially to coastal communities)
Objective 9	Maintenance and enhancement of access to, and within, the south plan areas (that is appropriate to its setting and equitable to users) will be supported
Objective 10	Features significant to the historic environment of the South marine plan areas, that are not designated as heritage assets, should be identified and conserved
Objective 11	Decisions should consider the seascape of an area, and its constituent marine character and visual resource
Objective 12	To provide space to support existing, and facilitate future sustainable economic activity through the encouragement of colocation, mitigation of conflicts and minimisation of development footprints
Objective 13	To manage existing, and where appropriate facilitate the provision of new, infrastructure which supports marine and terrestrial activity incorporating resilience to the effects of climate change where appropriate
Objective 14	Regeneration and investment in, and diversification of activities which improve socio-economic conditions in south plan coastal communities will be supported
Objective 15	To support marine activities that create and enhance employment opportunities at all skills levels, particularly where this reflects existing or developing skills among the workforce of coastal communities using the South marine plan areas

4. Options methodology

A significant period of development and testing of different approaches to deriving plan options was carried out in order to ensure that the approach applied, described in the following pages of this report, was appropriately informed and best suited for the purposes of marine planning (see Annex 2, sections 2-3). The best approach was judged to be one based on drafting plan policies of varying strength.

Based on that approach, the process of developing options has comprised three steps:

1. Establishing policy variants
2. Testing compatibility of policy variants
3. Development of options

These are explained in more detail below.

4.1 Establishing policy variants

The first step in the options process identified whether a given sector or topic could contribute to achievement of an objective, and if so whether a marine plan policy was needed to bring this contribution about. In some cases it was identified that while there was potential for policies on a sector or topic to respond to issues under an objective, such action was already enabled through existing legislation, policy, or the remit of other organisations. In these cases this observation was recorded so that it could be revisited when considering 'non-policy' responses. Such responses, eg signposting, are seen by many to be one of the benefits of marine planning. It sets marine plans in context for those using them including in relation to other relevant drivers, and indicates where actions such as evidence gathering or improved implementation would be beneficial.

Having established where marine plan policies are needed to bring about a sector or topic contribution under each objective, these were reviewed so as to:

a) identify similarities and streamline where appropriate, to enable a policy to be drafted that would apply more widely to a number of sectors/topics while still meeting the needs of the individual sector(s) and / or topic(s)
b) identify any gaps ie check that the totality of contributions would deliver the objectives, to the extent that marine planning is able to, and whether any further policy was needed.

The review process also attempted to identify features that would allow policies to be as SMART (Specific, Measurable, Achievable, Relevant, Timely) as possible and, thereby, help make the objectives SMARTer.

Finally, this review confirmed that each policy had been allocated to the most relevant objective.

By attributing specific policies to particular objectives where the greatest impact of those polices can be expected, the contribution of those policies to plan objective outcomes should be more clearly identifiable through monitoring. However, it is recognised that in many cases a policy will contribute to more than one plan objective. Where this is the case, this information has been recorded and will inform development of context material in the draft marine plans.

It was then necessary to identify different policy variants that could be combined in different ways to form an option; that is, complete sets of policies that each respond to the same objective but act in different ways.

For each policy a total of up to three policy variants were developed. These were then categorised as 'high', 'medium' and 'low' strength relative to one another. The characteristic of 'strength' varied depending upon the nature of the sector or topic, but drew upon the following:

- mode or process: **how** should the activity be carried out? For example, are there technologies or methods that can contribute to the objective beyond 'obvious' or traditional forms?
- location: **where** should the policy apply?
    - plan-area wide – potentially reducing the level of prescription possible?

    - sub-area – should a policy address an objective and related core issue(s) in an area defined by evidence?
- timing: **when** should the policy be temporally restricted, and / or **when** should a policy temporally manage an activity?
- level of **prescription** – Interpreting relevant national and local policy as far as possible. Types of prescription were thought about such as designing policy that used certain strength of language eg use of 'will' rather than 'should'.

Option and policy development drew upon experience from the East marine plans, material within the South Plan Analytical Report and draft Vision and Objectives, A description of marine planning in England), the Marine Policy Statement, a review of sub-national policy documents eg Local Authority plans, National Policy Statements, and other national policy seen as relevant to a given sector or topic on a case-by-case basis.

A key element in this process was to ensure that the policy variants were all:

- realistic / feasible in their own right
- distinct from one another in terms of the change you might expect to see over the lifetime of the plan (this distinction might also be thought of in terms of how an objective is realised through the different policies)

The following was recorded for each policy that will feed into later stages of plan development (including implementation):

- the change expected as a result of the policy
- how the policy contributes to solving the core issue under the objective it is allocated to
- initial understanding of what decision-making process will primarily drive the change proposed through the policy
- suggested monitoring indicators (where identifiable).

4.2 Testing compatibility of policy variants

Having established a range of policy variants that could be combined to create various options, it was necessary to ensure that whatever combination of policies was selected to produce an option would be compatible. They aim to:

- confirm those policy variants that are inherently compatible eg those that are complementary or can be applied together, eg those that might appear incompatible but actually apply in different places
- confirm those policies that could be compatible, providing conditions were in place (these were considered compatible on the assumption that conditions would be described in more detail in any final plan)
- identify policy variants that are incompatible, and therefore could not be used in the same option.

To do so, compatibility was first confirmed within each objective, by posing the question:

'Would it be possible to make a decision in line with a policy variant as well as policy variants developed for other sectors or topics within the objective?'

In responding to this question, a policy variant compatibility table was completed for each objective (and later in the process, across objectives), assigning an indication of the level of compatibility for each policy variant (see Annex 2 section 4). Where necessary, policy variants were then re-drafted to improve compatibility. Once this was complete the policy variants were ready to be used in the building of options.

4.3 Development of options

Three plan options were then designed, each delivering the draft marine plan objectives as a whole but distinct from one another in terms of how the different combinations of policies achieve the desired outcomes. The options developed are:

1. A high strength option that includes the highest possible number of high-strength policies. To enable compatibility of high strength policies, some require clauses allowing an applicant to state the case for proceeding with a proposal even when it does not conform with a policy. There is no guarantee that if a case is stated, it will be successful. This is because the high-strength policies require a greater level of consideration of other policies than medium and low-strength policies do. This means that greater weight may be attached to any impacts identified. This should lead to a relatively greater degree of certainty that the intent of the policy and its desired outcome will be realised in most, but not all, cases.

2. An option that looks to find the middle ground across objectives (and therefore contains primarily medium strength policies). This option most closely resembles the East Inshore and Offshore Marine plans, in terms of phrasing and strength of policies and in terms of the likelihood of the outcomes gained from the policies. As the strength of requirements in the policies are less than those in option 1, there is more chance that a case can be made to proceed with a proposal or activity even if it is not in line with a policy. Therefore outcomes from the policies are less certain and there may be more scope for variation in how they are applied.

3. An option that seeks to be more prescriptive and looks to achieve more certain outcomes for issues that have been highlighted as being particularly important for the South marine plan areas. These primarily relate to:
    a. the protection of the environment (both for its intrinsic value, the ecosystem services it provides and to help sectors reliant upon it for some of their appeal, such as tourism and recreation),
    b. a number of sectors of very high economic or social importance, namely:
        i. Tourism and recreation
        ii. Shipping
        iii. Fishing
        iv. Aggregates

    Policies under this option provide the highest degree of certainty of outcome for the sectors and topics above, by removing the opportunity to state the case for proceeding when not in line with the policy. In so doing, it means that other sectors and topics can only be compatible with the above sectors and topics through use of a lower-strength policy that places fewer requirements on the decision maker and/or applicant in its implementation.

This option is therefore a mix of strengths of policy and involves a degree of trade-offs between sectors and topics.

In order to build the three options, compatibility testing was undertaken again, across all objectives to determine whether a decision could be made in line with any given policy variant alongside others in the option. If a policy variant was not compatible, then a different strength variant was selected and tested in the same manner until compatibility was achieved.

This process was iterative and in some cases a policy variant that had already been added to an option, would be removed and replaced with one of a different strength. This ensured that the most appropriate mix of polices was included for that option and avoided any bias towards any particular objectives, as these were the policies that were tested and added to an option first.

5. Options Narratives

The options are presented as narratives. Each narrative follows the same structure, broken down by headings that, in sequence, relate to the draft objectives. A narrative has been used in order to help to bring out the contrasts between the options, presenting the anticipated outcomes of them once the plans have been implemented. To further help the contrast between the options, text in bold in the narratives shows how they differ – this has been applied to options 2 and 3 to show how they differ in relation to option 1. The information in the narratives has also been placed into a table, which can be found in Annex 3, with the text for each heading shown side by side for all options, for ease of comparison. The narratives are written in the present or past tense, but must be thought of as being set in the future, indicating progress towards or realisation of the vision in around 20 years' time, These are 'predictions' of the impact the different options for the plan areas could have if they are implemented fully, by relevant decision makers and those undertaking activities in the South marine plan areas. The narratives must be read with this in mind – **they cannot be taken as statements of fact**.

To help distinguish between the options, some of main differences between them are highlighted in **bold text**. The aforementioned table in Annex 3 assists with comparison of the options too.

The narratives are also accompanied by a separate spreadsheet containing all the policy variants, organised by objective and option. The narratives paint a broad picture of the outcomes expected under an option and the accompanying spreadsheet should be used to provide more detail where it is required. The first tab contains a readme file, explaining how they should be used. The second tab contains all objectives and all policy variants. Further tabs present policy variants on an objective by objective basis.

The spreadsheet shows the high, medium and low strength variants of every policy, even if it is not used in the options themselves. A low strength policy is denoted by a policy code ending with an 'a', a medium strength with a 'b', a high strength with a 'c' and where relevant, a prescriptive one with a 'd'. A green cell with a 'Y' in it has been added to demonstrate which policy variant has been included in option 1, 2 or 3.

Where a policy is shown but not used, this is to show that other versions of policies were drafted, but not used. In most cases this was because there were other policy variants that fitted better with the options, in terms of being compatible with both the overall aim of the option and being compatible with the other policy variants in that option. These policy variants were retained in the spreadsheet, to illustrate the work undertaken on options so far and may be used following this consultation. For more information on policy compatibility and testing, please see section 4 of this report and Annex 2

5.1 Narrative for Option 1: The Balanced Option

Overall, this option achieves across all objectives through the inclusion of as many high strength policies as possible. Higher strength policies have led to relatively more certain outcomes as they guided decision makers more. More certain outcomes have meant more opportunity for change in the manner intended by the plans, from the situation that would exist without them. There have been exceptional cases though, which have stated a case for proceeding (for example where a new technology has come along) that is compelling enough for a proposal to be authorised, in contradiction of a policy. Because there are a large number of high-strength policies across sectors and topics, any new proposals have had a significant level of requirement on them, in terms of considering their impact on other sectors and topics. This increased consideration has led to more decisions, where authorised proposals have minimised their impact on other sectors and topics.

Climate Change

Activities within the South marine plan areas have increased their contribution to climate change mitigation, through the deployment of low-carbon and renewable technologies, intelligent design and location of proposals, and through mitigation of unavoidable carbon emissions. Increasing numbers of proposals have built in climate resilience beyond their projected lifespan, without harming the environment's resilience to the effects of climate change.

Negative effects on coastal change have been avoided, and coastal squeeze has been lessened overall, though in some places it is still an issue. Emphasis placed upon the importance of ecosystem services relating to carbon sequestration and flood defence has ensured the continued provision of these vital services, giving benefits particularly to coastal and estuarine areas, and helping to protect vulnerable communities from the effects of climate change. Beneficial opportunities arising from climate change have been seized, improving social and economic conditions without harming the resilience of the environment to climate change.

Marine Protected Areas

Overall, the ecological coherence of the Marine Protected Area network has been taken account of in proposals, ensuring that the network has been able to remain resilient to pressures placed upon it by new proposals. The ability of individual Marine Protected Areas to respond to adverse impacts from climate change has not been compromised. Where climate change has been identified as the cause for deterioration in site condition, site boundaries have been changed to improve resilience. A well-managed, ecologically coherent network is in place; shortfalls were able to be addressed by early safeguarding of areas outside of them that are important for the overall coherence of the network and halting habitat loss.

Good Environmental Status and Good Ecological Status

The achievement of good environmental status and good ecological status under the Marine Strategy Framework Directive and Water Framework Directive respectively has been assisted, with proposals incorporating factors that have helped achieve established targets. In particular, issues of cumulative impacts are considered more in decision making, and proposals are minimising impacts upon the ecosystem of the South marine plan areas with beneficial effects. Through adequate provision of facilities and support for additional activities, marine litter is reduced, whilst introduction of non-indigenous species by new structures and recreational boat fouling, amongst other vectors, is often being considered in decision making, This has resulted in fewer cases of non- indigenous species being introduced.

Ecology and Ecosystem Services

The importance of space for nature is better recognised in decision making. Adverse impacts upon biodiversity and upon habitats that provide ecosystem services have been limited to a great extent, with remaining impacts minimised and mitigated in all but exceptional circumstances. Habitats and species are more adaptable and resilient as allowances are made in most cases for the need for species to migrate, and the need to maintain connectivity between habitats. The extent of priority habitats has also increased, increasing levels of important ecosystem services.

The above outcomes have attendant benefits for sectors such as tourism that rely upon a healthy environment and also provide increased health and well-being benefits for the population that use the South marine plan areas. Fish in particular, are protected during spawning and nursery phases of their life cycles, with only exceptional cases being allowed to have an unmitigated negative impact on spawning and nursery grounds. Localised impacts on ecosystems of dredge spoil disposal are being minimised, ensuring the continued function of ecosystems in all but the most exceptional cases.

Disturbance

The adverse cumulative disturbance impacts of all proposals in the South marine plan areas is identified and avoided, minimised and mitigated in all but exceptional cases, ensuring the preservation of the unique environment of these areas. It is recognised that activities such as tourism and recreation, must be well managed to prevent adverse impacts on the healthy environment on which they rely. This is benefitting species that are sensitive to the level of noise that would otherwise have occurred as indicated by evidence on the species themselves, eg behaviour, as well on the activity. Proposals contribute to data collection, via submission to the Marine Strategy Framework Directive noise registry, increasing knowledge and understanding of noise levels and impacts. Full consideration of noise impacts by applicants and public authorities on ecosystems and other users is being achieved.

Water Quality

Water quality is improved across most of the South marine plan areas, through the identification, avoidance, minimisation and mitigation of impacts upon estuarine water quality (both at the individual proposal and at cumulative levels) and habitats and species that provide water filtration services. Only in exceptional cases have proposals with a negative impact been consented. Proposals have considered the

re-suspension of sediment, and taken steps to avoid, minimise and mitigate this risk. More activities that improve water quality are consented, due to support provided by the plans alongside other relevant measures.

Displacement of marine activities and Access

The social and economic benefits of new and existing marine activities have increased, through avoidance, minimisation and mitigation of displacement of other activities. This means that new proposals are, in most cases, only being supported where there is a clear demonstration of limiting impacts upon others, or mitigation of impacts. This has allowed new activities with a net benefit and minimal impact to proceed. Although this can lead to some growth in overall footprints as activities seek to avoid impacts on other activities, this is countered by positive support for co-location (see below). However, fishing, tourism and recreation, and aggregates extraction have been given strong support against disturbance and displacement by other activities, through:

- avoidance of non-compatible activities in aggregate exploration and option areas and encouragement of local use of aggregates
- mitigation of adverse impacts of proposals upon tourism and recreation activities
- avoidance, minimisation or mitigation of adverse impacts of displacement of fishing activity, encouragement of opportunities for diversification and increasing the resilience of the fishing industry

This has allowed for continued benefits to be derived from these economically and socially significant activities.

Recreational access is being managed to ensure that it is appropriate and impacts on access to the marine environment, particularly in relation to tourism and recreation, is included in proposals, supporting the continuation of tourism and recreation activities in most cases. Any negative impacts on access for tourism and recreation have been avoided, minimised or mitigated, with proposals containing negative impacts only being consented in exceptional circumstances.

Heritage Assets

Newly-discovered and non-designated heritage assets are often being protected through support for avoidance of impacts upon them. The knowledge of, and protection for, heritage assets in the South marine plan areas has been improved, through recommendation of archaeological surveys where heritage assets are known or discovered, and through avoidance, minimisation and mitigation of impacts.

Seascape

Adverse impacts upon seascape are being avoided, minimised and mitigated by proposals in most cases. In some cases, impacts upon seascape are occurring.

Co-location and mitigation of conflicts

Through the positive consideration of co-location in all proposals, and the requirement to avoid, minimise and mitigate for impacts upon the ability of other activities to use the same space, the overall footprint of proposals is being limited. Where exceptions arise co-location is not being considered. Particular activities have

been considered for a level of protection from the impacts of other activities, such that:

- defence activity should have been maintained
- adverse impacts from activities in tidal energy resource areas have been avoided, minimised and mitigated and only consented where the case for proceeding was stated and was compelling
- shipping routes are protected from activities that reduce under-keel clearance
- adverse impacts upon important commercial vessel and passenger ferry routes are not being supported in most cases
- adverse impacts on ports are not being supported, in most cases
- impacts of other proposals upon areas licenced for aggregates extraction, or where an application is in process are avoided, minimised or minimised , and where sub-sea infrastructure is proposed in areas of future opportunity for aggregates, any aggregate extraction should have taken place first
- avoidance or mitigation of impacts upon dredging (and disposal) access and enhancement opportunities
- adverse impacts upon the current and future ability of the aquaculture sector to maintain and expand production are avoided, minimised or mitigated
- adverse impacts upon saline aquifers with potential for carbon capture and storage have been avoided or minimised.

All of this means that steady economic growth across many sectors of the economy is being supported.

Infrastructure

The management of existing, and provision for new, infrastructure to support proposals in the South marine plan areas is being achieved. This infrastructure is in some cases vital to support the continued function and future growth of sectors such as renewables and telecoms and to help ensure future electricity distribution. In particular, support for proposals that help improve flood risk management on or adjacent to floodplains, or on natural features that play a role in coastal management, has had a positive effect on flood risk. There is adequate provision for infrastructure on land which supports activities in the marine area, and vice versa, giving clarity to industry (through better coordination of infrastructure requirements and decision making) and other users of the South marine plan areas. Support is being given for infrastructure that aids the aquaculture industry, allowing it to flourish in appropriate locations. Consideration is being given to avoiding sites identified for subsea cable landfalls for both the telecoms and power industries, though it is sometimes the case that those sites cannot be avoided. Where possible, burial of new cables has occurred to avoid impacts on other sectors and ensure economic benefits have been realised.

Support for regeneration and diversification of activities that improve socio-economic conditions

Employment opportunities for the local community have been created and enhanced, bringing social and economic benefits to the South marine plan areas and communities close to them. Skills development in particular has been a focus, preparing the workforce better for the changes that have happened whilst plans have been in place. The economic certainty of, and scope or diversity of social benefit from, offshore wind and tidal development has increased. Additional tourism and

recreation activities have developed, in particular where these have increased usage of facilities beyond typical usage patterns, extending and diversifying the tourism offer.

5.2 Narrative for Option 2: Flexible Option

Overall, this option aims to achieve across all objectives through the inclusion of medium and low strength policies. This leads to relatively certain outcomes, but does allow for more flexibility for applicants and decision makers in relation to how policies are applied, which has increased the scope for outcomes different to that anticipated in the objectives and policies. This has had both positive and negative impacts, for example some new, disruptive (but potentially more beneficial) technologies are being consented.

Climate Change

Activities within the South marine plan areas are minimising their contribution to greenhouse gas emissions, limiting negative climate change impacts. Negative effects on coastal change are, on the whole avoided, and coastal squeeze has been lessened overall. **There are some areas though where coastal squeeze is being exacerbated, with localised negative social and environmental effects.** There is an increase in the number of proposals that build in climate resilience and impacts on the environment's resilience to the effects of climate change are generally avoided, minimised or mitigated in proposals. **Some** beneficial opportunities arising from climate change have been seized, improving social and economic conditions without harming the resilience of the environment to climate change.

Emphasis placed upon the importance of ecosystem services relating to carbon sequestration and flood defence has ensured the continued provision of these vital services, giving benefits particularly to coastal and estuarine areas and helping to protect vulnerable communities from the effects of climate change. **However, in some cases, proposals have been authorised even though they have an impact on these ecosystem services, meaning that the ecosystems providing these services are not fulfilling these roles as effectively as they could.**

Marine Protected Areas

As some proposals have been authorised in close proximity to Marine Protected Areas, and activities continue to cause pressure to some features, individual Marine Protected Area and the network are less able to adapt to change and respond to adverse impacts (from for example, climate change). Particular attention is being paid to monitoring for loss or change in features, where climate change is identified as a potential cause.

Areas outside of Marine Protected Areas that are important for the overall coherence of the network have been considered and impacts upon them have been avoided, minimised and mitigated **wherever possible**. Appropriate weight has been attached to features that are important to address **overall** shortfalls in the network, however i**n a limited number of cases, features may be compromised and shortfalls have occurred, affecting the ecological coherence of the network.**

Good Environmental Status and Good Ecological Status

The achievement of good ecological status and good environmental status has been assisted , with proposals encouraged to **take account** of what is needed to achieve these **Cumulative impacts across proposals in the South marine plan areas, and adjacent terrestrial and marine areas, has occurred sometimes as, although they are considered, they cannot always be addressed**. Provision of facilities and support for additional activities are reducing marine litter **(though this is not uniform across the South marine plan areas)**.**Introduction of non-indigenous species has been constrained to an extent, through consideration of the effect of new structures and recreational boat fouling in decision making. This has meant impacts upon existing species and habitats remain.**

Ecology and Ecosystem Services

Adverse impacts upon coastal habitats have been minimised, and opportunities to enhance biodiversity, including through provision of opportunities for habitat migration have been pursued in some cases. This has left some habitats isolated and at risk of decline, whilst others have adapted to impacts more effectively and are flourishing.

The function of habitats is considered, and **overall levels of ecosystem service provision have been maintained, though protection for ecosystem services has not been uniform; some services have declined and some have increased**. This has brought limited benefits for sectors such as tourism and recreation that rely upon a healthy environment, as well as some health and well-being benefits for those that use the South marine plan areas. Fish in particular, **have benefited from consideration of the spawning and nursery phases of their life cycles, with only a few cases being allowed to have a negative impact on spawning and nursery activity**. **Some examples of re-use of dredge spoil disposal have occurred, reducing the impact of spoil upon ecosystems.**

Disturbance

The adverse cumulative disturbance impacts of proposals in the South marine plan areas has been identified and avoided, minimised and mitigated **in most cases**, ensuring the preservation of **much of** the unique environment of these areas. It is recognised that activities such as tourism and recreation, **should be** well managed to prevent adverse impacts on the healthy environment on which they rely.

Noise issues are proactively managed, with proposals avoiding, minimising or mitigating their impact on both ambient noise levels and impulsive noise **in most cases**. **There are regular, but not comprehensive contributions** to data collection, via submission to the noise registry. **Greater consideration of noise impacts in decisions on ecosystems and other users are encouraged, with all activities given the chance to contribute evidence of noise impacts.**

Water Quality

Water quality is **improving slowly in most places**, **through the identification and avoidance, minimisation and mitigation of impacts upon estuarine water quality, habitats and species that provide water filtration**. **Some proposals with a negative impact are being consented**. All proposals should consider the re-suspension of sediment, and should be taking steps to avoid, minimise and mitigate

this risk, **though in some cases a compelling case is being made for not taking these steps**. Activities that improve water quality are often consented, due to support provided by the plans.

Displacement of marine activities and Access

Occurrences and impacts of displacement have been reduced to an extent; however, as proposals have more scope to proceed despite possible impacts, the improvement in the social and economic benefits of marine activities is hindered. In particular, fishing, tourism and recreation and aggregates extraction have been given **some** support against displacement by other activities, through **encouragement, but not requirement** of:

- avoidance of non-compatible activities in aggregate exploration and option areas and encouragement of local usage of aggregates
- avoidance, minimisation or mitigation of adverse impacts of displacement of fishing activity, and encouragement of opportunities for diversification and increasing the resilience of the fishing industry
- avoidance, minimisation or mitigation of negative impacts of proposals upon tourism and recreation activities.

This means that although displacement is discouraged, it still occurs, with negative social and economic impacts on those sectors that are displaced and some negative environmental impacts. **Access to the marine environment is being maintained, with most changes only being temporary.**

Heritage Assets

Newly-discovered or non-designated heritage assets have been **protected to some extent so far through encouragement** of a full survey of any impacts and avoidance of harm to the elements which contribute to the significance of the heritage asset. Where harm cannot be avoided, it should be minimised, mitigated or the public benefits of the case for proceeding should be stated. **This is resulting in some small gains for heritage assets, where newly-discovered and non-designated assets are being understood better and in some cases are afforded better protection**.

Seascape

Adverse impacts upon seascape are being avoided, minimised and mitigated by proposals in most cases. In some cases, impacts upon seascape are occurring.

Co-location and mitigation of conflicts

As proposals are encouraged to consider co-location and avoid, minimise and mitigate impacts upon the ability of other activities to use the same space, **the overall footprint of proposals is growing at a low rate**. Where there is a rationale for doing so, co-location is not being considered, though this is the exception and not the rule. Particular activities have been considered for a level of protection from the impacts of other activities, such that:

- defence activity **should not have** been compromised
- impacts from activities in tidal energy resource areas **should not have been detrimental to existing and proposed tidal energy generation activity**

- shipping routes are **considered** by proposals and those that include static sea-surface infrastructure or reduce under-keel clearance **are not being authorised except in exceptional circumstances**
- commercial vessel safety should be respected and passenger ferry routes should be considered in proposals with negative impacts avoided, minimised or mitigated, **with approval where this cannot happen a compelling case exists**
- current activity and future opportunity for expansion of ports **have not been interfered with, except where there is a compelling case to do so**. **Impacts upon areas licenced for aggregates extraction, or where an application is in process, are being considered**
- **effects upon dredging and disposal activity from other proposals, are often being mitigated**
- impacts upon the current and future ability of the aquaculture sector to maintain and expand production have been avoided, minimised or mitigated and where this is not possible, **the case for proceeding has been stated**
- impacts upon saline aquifers with potential for carbon capture and storage have been avoided or minimised

This has led to economic growth in most sectors, but levels have been variable and harder to predict on a sector by sector basis. This has hit business confidence and meant investment overall have been less consistent than they might have been.

Infrastructure

The management of existing, and provision for new, infrastructure to support proposals in the South marine plan areas **has been achieved to a limited extent**. This infrastructure is in some cases vital to support the continued function and future growth of sectors such as renewables and telecoms and to help ensure future electricity distribution. In particular, the impacts of proposals on or adjacent to floodplains, or on natural features that play a role in coastal management, **are often considered** by decision makers, **with some decreased** risk of flooding. There is **often** provision for infrastructure on land which supports activities in the marine area, and vice versa, giving **some** clarity to industry (through **some** coordination of infrastructure requirements) and other users of the South marine plan areas. Support is **sometimes** given for infrastructure that aids the aquaculture industry, allowing **some projects to prosper**. Consideration is being given where possible to avoiding sites identified for subsea cable landfalls for both the telecoms and power industries, though it is sometimes the case that those sites cannot be avoided. Where possible, burial of new cables has often occurred to avoid impacts on other sectors and ensure economic benefits have been realised.

Support for regeneration and diversification of activities that improve socio-economic conditions

Wherever practical proposals have facilitated improved access to education and employment opportunities for the local community. Proposals increasing the economic certainty, scope or diversity of social benefit from, offshore wind and tidal development are often being supported. Proposals are considering ways to support, promote and facilitate existing tourism and recreation activities.

5.3 Narrative for Option 3: Prescriptive Option

Overall, this option aims to be more prescriptive than the other options. It does so through the inclusion of a mix of different strength policies. Higher strength policies lead to more certain outcomes (as they guide decision makers more); however in order to be more prescriptive (and even more certain), the ability for proposals to state their case and proceed in contradiction of the intent of the policy has been removed in some cases. Where this creates incompatibility between policies, choices have been made that allow for the inclusion of high strength policies relating to:

1. the protection of the environment (both for its intrinsic value, the ecosystem services it provides and to help sectors reliant upon it for some of their appeal, such as tourism and recreation),
2. a number of sectors of very high economic or social importance, namely:
    a. Tourism and recreation
    b. Shipping
    c. Fishing
    d. Aggregates
    e. Ports

This means a high certainty of outcome for some sectors and topics and a lower likelihood of authorisation for others, where they may have an impact on the sectors and topics above. This means that some sectors and topics have been prioritised, with resultant trade-offs for others.

Climate Change

Activities in the South marine plan areas have increased their contribution to climate change mitigation, through the deployment of low-carbon and renewable technologies, intelligent design and location of proposals, and through mitigation of unavoidable carbon emissions. There are increasing numbers of proposals that build in climate resilience beyond their projected lifespan without harming the environment's resilience to the effects of climate change.

Negative effects on coastal change have been avoided, and coastal squeeze has been lessened overall, though in some places it is still an issue. Emphasis placed upon the importance of ecosystem services relating to carbon sequestration and flood defence has ensured the continued provision of these vital services, giving benefits particularly to coastal and estuarine areas, and helping to protect vulnerable communities from the effects of climate change. Beneficial opportunities arising from climate change have been seized, improving social and economic conditions without harming the resilience of the environment to climate change.

Marine Protected Areas

Overall, the ecological coherence of the Marine Protected Area network has been taken account of in proposals, ensuring that the network has been able to remain resilient to pressures placed upon it by new proposals. The ability of individual Marine Protected Areas to respond to adverse impacts from climate change has not been compromised. Where climate change has been identified as the cause for deterioration in site condition, site boundaries have been changed to improve resilience. A well-managed, ecologically coherent network of Marine Protected Areas

is in place; shortfalls were addressed by early safeguarding of areas outside of Marine Protected Areas that are important for the overall coherence of the network and halting habitat loss.

Good Environmental Status and Good Ecological Status

The achievement of good environmental status and good ecological status under the Marine Strategy Framework Directive and Water Framework Directive respectively is assisted, with proposals incorporating factors that help achieve established targets. **There is an increased emphasis on the need to minimise cumulative impacts across proposals** and impacts upon the ecosystem of the South marine plan areas are being minimised, with beneficial effects. Through adequate provision of facilities and support for additional activities, marine litter is being reduced, introduction of non-indigenous species by new structures and recreational boat fouling, amongst other vectors, **is being minimised**, This has resulted in **very few** cases of species being introduced and has helped to protect the ecosystem of the South marine plan areas.

Ecology and Ecosystem Services

The importance of space for nature is recognised **to the highest extent** in decision making. Adverse impacts upon biodiversity and upon habitats that provide ecosystem services have been **limited in all cases, with remaining impacts minimised and mitigated.** Habitats and species are more adaptable and resilient as allowances are made in most cases for the need for species to migrate, and the need to maintain connectivity between habitats. The extent of priority habitats has also increased **quickly**, increasing levels of important ecosystem services.

The above outcomes have attendant benefits for sectors such as tourism that rely upon a healthy environment and also provide increased health and well-being benefits for the population that use the South marine plan areas. Fish in particular, are protected during spawning and nursery phases of their life cycles, with only exceptional cases being allowed to have an unmitigated adverse impact on spawning and nursery grounds. Localised adverse impacts on ecosystems of dredge spoil disposal are being minimised, ensuring the continued function of ecosystems in all but the most exceptional cases.

Disturbance

The adverse cumulative disturbance impacts of all proposals in the South marine plan areas is identified and avoided, minimised and mitigated in all but exceptional cases, ensuring the preservation of the unique environment of these areas. It is recognised that activities such as tourism and recreation, must be well managed to prevent adverse impacts on the healthy environment on which they rely. Noise issues are considered, with proposals **often minimising their impact on both ambient and impulsive noise levels**, **with some benefits for mobile and migratory species.** Proposals contribute to data collection and understanding of noise issues, via submission to the noise registry. **A high level of** consideration of noise impacts by applicants and public authorities on ecosystems and other users is being achieved.

Water Quality

Proposals have not been supported if they impact on estuarine water quality. As such, water quality has improved quickly, through the identification and avoidance, minimisation and mitigation (both at the individual proposal and at cumulative levels) of impacts upon estuarine water quality, and habitats and species that provide water filtration services. All proposals consider the re-suspension of sediment, and are taking steps to avoid, minimise and mitigate this risk. Activities that improve water quality are **often consented**, due to support provided by the plans.

Displacement of marine activities and Access

The social and economic benefits of new and existing marine activities have increased, through avoidance, minimisation and mitigation of displacement of other activities. This means that new **proposals are, in most cases, only being supported where there is a clear demonstration of limiting impacts upon others, or mitigation of impacts**. This has allowed new activities with a net benefit and minimal impact to proceed. Although this can lead to some growth in overall footprints as activities seek to avoid impacts on other activities, this is countered by positive support for co-location (see below). In particular, fishing, tourism, recreation, and aggregates extraction are given support against displacement by other activities, through:

- avoidance of non-compatible activities in aggregate exploration and option areas, **with no exceptions**
- avoidance, minimisation or mitigation of adverse impacts of proposals upon tourism and recreation activities, **with only exceptional examples of displacement being consented**
- avoidance, minimisation or mitigation of adverse impacts of displacement of fishing activity, **with no exceptions** and **support of all** opportunities for diversification and increasing the resilience of the fishing industry.

Recreational access is being managed to ensure that it is appropriate and impacts on access to the marine environment, particularly in relation to tourism and recreation, is included in proposals, supporting the continuation of tourism and recreation activities **in most cases**. Any negative impacts on access for tourism and recreation have been avoided, minimised or mitigated, **with proposals containing negative impacts only being consented in exceptional circumstances**.

Heritage Assets

Newly-discovered and non-designated heritage assets are often being protected through support for avoidance of impacts upon them. The knowledge of, and protection for, heritage assets in the South marine plan areas has been improved, through recommendation of archaeological surveys where heritage assets are known or discovered and avoidance, minimisation and mitigation of impacts.

Seascape

Adverse impacts upon seascape are being avoided, minimised and mitigation by proposals in most cases. In some cases, impacts upon seascape are occurring.

Co-location and mitigation of conflicts

As some sectors (such as tourism and shipping) have been given a higher level of priority, the requirement for all proposals to consider co-location and their footprint has been reduced. This amounts to an increase in footprint size for some sectors and a decrease for others, where they are competing with a priority sector. Particular activities have been considered for a level of protection from the impacts of other activities, such that:

- defence activity **has** been maintained
- impacts from activities in tidal energy resource areas **should not have been detrimental** to proposed and existing tidal energy generation activity
- shipping routes have been protected from activities that reduce under-keel clearance, important commercial vessel and passenger ferry routes are considered in proposals (with those that have an overall negative impact only being approved in exceptional circumstances)
- **adverse impacts on ports are not being supported, in most cases** areas licenced for aggregates extraction, or where an application is in process **are protected for aggregates extraction and compatible proposals**
- where sub-sea infrastructure is proposed in areas of future opportunity for aggregates**, any aggregate extraction should have taken place first**
- **effects upon dredging and disposal activity from other proposals, are often being mitigated, impacts upon the future ability of the aquaculture sector to maintain and expand production have been avoided**
- impacts upon saline aquifers with potential for carbon capture and storage have been avoided, minimised or mitigated.

This further limits the amount of co-location which is occurring, with an overall increase in the amount of space needed for proposals.

Infrastructure

The management of existing, and provision for new, infrastructure to support proposals in the South marine plan areas is being achieved. This infrastructure is in some cases vital to support the continued function and future growth of sectors such as renewables and telecoms and to help ensure future electricity distribution. In particular, support for proposals that help improve flood risk management on or adjacent to floodplains, or on natural features that play a role in coastal management, has had a positive effect on flood risk. There is now **often** provision for infrastructure on land which supports activities in the marine area, and vice versa, giving some clarity to industry (through **some** coordination of infrastructure requirements) and other users of the South marine plan areas. Support is being given for infrastructure that aids the aquaculture industry, allowing it to flourish in appropriate locations. **Sites identified for subsea cable landfalls for both the telecoms and power industries are being avoided, which has resulted in economic benefits for these sectors.** Where possible, burial of new cables has occurred to avoid impacts on other sectors and ensure economic benefits have been realised

Support for regeneration and diversification of activities that improve socio-economic conditions

All proposals are demonstrating measures to create and enhance employment opportunities for the local community**, though this is working more effectively for**

those sectors that have been prioritised, as they have the most opportunity. Although national policies continue to drive offshore wind and tidal energy generation, there has been limited additional support through the plans to steer infrastructure developments at the local level. Support, promotion and facilitation of additional tourism and recreation activities, in particular where this increases usage of facilities beyond typical patterns have been supported, resulting in an increase in the length of the tourist season and the diversity of tourism and recreation activities that are being undertaken in the South marine plan areas. This is having significant economic and social benefits, reducing seasonality of some jobs, increasing job security in the process and increasing prosperity in areas that have high levels of tourism and recreation activity.

6. Next Steps

Consultation is taking place on the options as set out in this report. Following the consultation and consideration of responses and other inputs (see below), the Marine Management Organisation will select a preferred option. The preferred option could be one of the options as it stands, or an amended version, that could, if deemed compatible, include elements form other options presented here, or entirely new policies.

In making this decision the Marine Management Organisation will take into account feedback received from stakeholders as a result of this consultation, as well as comments received in the course of the Options workshops. Stakeholder feedback is an important part of this process and the Marine Management Organisation rely on this to ensure that the preferred option is a result of informed deliberation. The questions set out in Section 1 of the report are designed to elicit consistent responses from stakeholders and will be used both in choosing the preferred option and in further developing and amending this option.

In addition, the options will be appraised as part of the Sustainability Appraisal (SA), which is being carried out by consultants commissioned by the Marine Management Organisation.

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

The requirement to undertake a Sustainability Appraisal reflects the fact that, although marine plans will be developed to reflect the principles of sustainable development, it is important that there is an independent check. The Sustainability Appraisal ensures that sustainability issues are considered in a clear and transparent manner. In particular, the process ensures a structured and systematic consideration of sustainability issues through its focus on testing and comparing the merits of different plan alternatives as well as consultation with key stakeholders.

This contributes to the iterative nature of the plans' development and takes place in parallel to the plans development. The Sustainability Appraisal contributes to the marine plans at appropriate intervals; this will include an appraisal of the options presented within this report and assessing their potential impacts, both positive and negative, before recommending a preferred option.

Once a preferred option has been selected the Marine Management Organisation will refine it to reflect the comments received from stakeholders and through the Sustainability Appraisal. At this stage plan policies will undergo further refinement to ensure clarity and consistency in their wording. The consultation currently taking place is to consider the plan options, and the intent and direction of the policies presented under each option rather than to focus on wording of individual policies.

Annex 1 – Draft Vision and Objectives

The Vision and Objectives below have been further developed following consultation as outlined in section 3 above. They may be subject to further change throughout the process and should still be considered as draft.

1. Vision

As stated in the marine policy statement, the United Kingdom vision for the marine area is for "clean, healthy, safe, productive and biologically diverse oceans and seas". The South Inshore and South Offshore Marine Plan Areas will play their part in delivering this vision. The South plan areas' vision for the next 20 years covers the significant issues identified in the South Plan Area Analytical Report. It aims, through sustainable, effective and efficient use of the South marine plan areas, to manage competing priorities between economic growth, environmental conservation and social benefits, whilst considering the distinctive characteristics of the South plan areas.

The vision for the South marine plan areas in 2036

"Beautiful, busy and beneficial for all"
The South marine plan areas are distinctive for their dynamic and rapidly changing nature both in terms of the natural and man-made influences and activities. The natural beauty and busyness stand out as qualities that make the South distinctive from other areas. Developments in sustainable economic growth, enhanced protection of the natural and historic environment and improvements in health and well-being are beneficial to those who live, work and visit the South Coast. In 2036, the area's iconic, unique qualities and characteristics will be conserved and, where needed, enhanced through the clear and balanced use of its marine space.

How will this look in 2036?[4]

Environment

By 2036, the marine and coastal environment is being conserved and enhanced, both for its intrinsic value and for the important role it plays in providing natural resources. Effective protection and management of the natural environment has improved resilience and halted loss of biodiversity, leading to recovery of areas currently adversely impacted. Development takes place in accordance with the environmental capacity and biodiversity of the areas. Impacts of marine development on the natural environment are being managed, with reduced impacts on birds, fish, cetaceans and seals from pressures such as collision, disturbance, pollution, underwater noise and cumulative effects. Improved protection of species and habitats has enhanced their resilience, and capacity to adapt to, the effects of climate change. The important role that the marine environment can play in mitigating climate change has been harnessed, particularly in coastal areas.

Economy

By 2036, sustainable economic development is being achieved by new and existing marine activities. The South marine plan areas have benefited predominantly, but not exclusively, in the inshore area through sectors such as ports, tourism and recreation. Other opportunities are being achieved along the coastline and in the offshore area mainly through fishing, aggregate extraction, shipping and energy production. The competition for space required for new or growing activities is being managed and potential for displacement of existing activities is being reduced. Integration between land based and marine planning is promoted

[4]Not listed in order of priority or preference.

helping to enhance the infrastructure supporting sustainable growth. Opportunities for employment for those who work at the coast or at sea has improved. Marine developments in the commercial and service sectors have provided opportunities for employment and improvements to the health, well-being and aspirations of local communities. Diversification of existing activities such as fisheries and ports provides opportunities for employment and growth where appropriate. Across marine sectors steps have been taken to adapt to and manage the effects of climate change.

Social

By 2036, those who live, work and visit the South marine plan areas continue to have a sense of ownership of the marine area through all of its attributes. A clean, diverse marine environment alongside improved access enables enjoyment and reduced vulnerability of the marine area for local communities and visitors, which in turn improves health, well-being and enjoyment. Existing employers in ports, defence, tourism and local governance sectors continue to be major employers in the South marine plan areas. Development of some seaside towns has helped to attract investment for regeneration increasing tourism and recreation activities and stimulating local economies. Awareness of coastal communities to the negative and positive effects of climate change, and the communities' capacity to reduce vulnerability, has been enhanced.

2. Objectives

Unless stated otherwise, the objectives apply to both the South inshore and offshore marine plan areas.

2.1 Objective 1 – Climate Change – contributory drivers

Objective	To reduce contributory drivers[5] of climate change resulting from human activities through specific action to minimise and mitigate emissions of greenhouse gases
Marine Plan Objective Context section	The climate is fundamental to the functioning of almost all human activities as well as of marine ecosystems. It has long been established that climate can vary over time. Historically, climate changes have occurred over very long periods of time. Observations from the last 50 years have recorded an unprecedented rate of change that is considered very likely to have been influenced by human activities emitting greenhouse gases into the atmosphere[6].The overwhelming majority of projections and evidence indicates that the climate will continue to change throughout the twenty-first century[7]. Action taken to mitigate against climate change will be of benefit for almost all sectors as identified within the South Plan Analytical Report. The UK government have acknowledged that a certain amount of change is inevitable and are taking steps to manage this[8]. Responding to United Nations consensus on the need for action on climate change, the Climate Change Act commits the government to reduce greenhouse gas emissions. The government's United Kingdom Low Carbon Transition Plan set out the UK's approach to reducing emissions by 2020. The approach taken in objective 1 supports the transition to a low carbon future, informed by the National Planning Policy Framework (S95) as well as the Marine Policy Statement (2.6.7). The magnitude of the effects resulting from climate change sea level rise, increased likelihood of changeable weather, temperature rises, invasive species and physico-chemical ocean changes[9] and

[5] Contributory drivers are defined as the human controlled influences that contribute towards a rapidly changing climate. Specifically, those contributions originating from marine activities and their associated terrestrial infrastructure (eg port operations).
[6] Intergovernmental Panel on Climate Change IPCC, 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
[7] Marine Climate Change Impacts Partnership MCCIP (2013). Marine Climate Change Impacts Report Card 2013 (Eds. Frost M, Baxter JM, Bayliss-Brown GA, Buckley PJ, Cox M, Withers Harvey N) Summary Report, MCCIP, Lowestoft, 12pp.
[8] Climate Change Risk Assessment: CCRA (2012) UK Climate Change Risk Assessment: Government report pp48.ISBN:9780108511257 Crown Copyright
[9] South Plan Analytical Report, 2.1 Climate change Adaptation and Mitigation pp11-23

	their impacts on human activities can be limited through mitigation efforts. To maximise effectiveness, efforts should be focused on the most significant human drivers of climate change (principally carbon dioxide emissions). For some activities within the South marine plan areas, climate change mitigation policies are already in place eg MARPOL Annex VI amended regulations. Marine planning can make a contribution to climate change mitigation and adaptation in line with the UK's national legislation and policy supporting a low carbon economy. The advantage of considering climate change mitigation within marine planning is that it enables decision makers to strategically assess net greenhouse gas contributions of marine activities across the plan area, rather than considering them as isolated proposals[10]. The focus on reducing 'contributory drivers' provides scope for objective 1 to consider land-based interactions with marine activities, and is principally driven by greenhouse gas contributions from activities within and adjacent to the south marine plan areas arising from new proposals. It is important to consider both direct[11] (including lifecycle emissions) and indirect emissions[12] (eg increases in journey length to safely navigate) when assessing minimising and mitigation steps, as this can inform decision makers where proposals that have the lowest net contributions at a plan scale. This approach aligns with Greenhouse Gas (GHG) protocols and with the reporting requirements of the Climate Change Act. It will provide scope for a wide range of minimising and mitigation measures to be enacted including: • Employing new low-carbon technologies • Maximising combustion efficiency • Intelligent design and placement of infrastructure • Consideration of life cycle carbon contributions • Consideration of the impact an activity may have on measures already in place as part of reducing GHG emissions (for example carbon offsetting. Objective 1 applies to both the inshore and offshore South plan areas. However, outcomes resulting from the application of objective 1 should be proportionate and targeted in their approach, as the relative emissions of an activity and the ability of that activity to apply all available mitigation measures will vary considerably based on the scale, complexity and sensitivity of the activity.

[10] http://report.mitigation2014.org/spm/ipcc_wg3_ar5_summary-for-policymakers_approved.pdf
[11] Emissions from sources that are owned or controlled by the reporting entity
[12] Emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity

2.2 Objective 2 – Climate Change – vulnerability

Objective	To reduce the environmental, social and economic risks of climate change, activities should take account of adaptation and mitigation measures, that reduce (net) vulnerability and/or improve resilience to climate and coastal change
Marine Plan Objective Context section	As a result of climate change, by 2040 sea temperature, storm surge, air temperature and sea level are all projected to increase throughout the South marine plan areas[13]. Increases in these variables are projected to continue until at least the end of the twenty-first century with the projected changes likely to impact, to varying degrees, upon all activities occurring in and adjacent to the plan areas[14]. Given the high population densities on the South coast, and the high levels of activity within the plan area it is essential that coastal communities and activities are able to reduce their vulnerability to climate change. Opportunities for mitigation exist, for example through determining the most suitable locations for renewable energy projects in the South plan areas. The best available, UK specific data (UK Climate Projections, 2009) underlies the projections informing the Marine Planning evidence base for the South marine plan areas (MMO1077). The accuracy and reliability of climate projections applied to National and International policy has improved rapidly over recent years however, projections are not yet 100% accurate, and will continue to do so through projects such as MINERVA[15]. Although it is still not possible to predict the exact consequence of climate change to individuals businesses. It is therefore imperative to be proactive in order to minimise risk and reduce vulnerability. The UK government have highlighted the importance of climate mitigation and adaptation in legislation and policy, including the Climate Change Act (2008), Renewable Energy Directive, and the Climate Change Risk Assessment. Marine planning can facilitate adaptation within the marine environment through enacting the Marine Policy Statement and the mechanisms of the National Adaptation Programme. Objective 2 gives effect to the Marine Policy Statement, (2.6.7 and 2.6.8) through facilitating adaptation throughout the marine plan areas to climate and coastal change. Although marine planning itself will not be directly affected by

[13] MMO Project No: 1077 Potential Spatial effects of climate change in the South and East Marine Plan Areas. In Press January 2015.
[14] Some outputs are available to view in the MMO South Inshore and Offshore Marine Plan Areas: South Plans Analytical Report (SPAR). MMO, June 2014
[15] Maritime Industries- Environmental risk and Vulnerability Assessment (MINERVA) - ME5213 Is a Defra funded project with a primary aim of enhancing the evidence-base on marine climate change impacts, ahead of the next UK Climate Change Risk Assessment in 2017. It will provide inputs to the UK Marine Climate Change Impacts Partnership (MCCIP) as well as picking up on many of the most pressing risks or opportunities identified in the October 2012 MACCAP report. Marine risks are often overlooked in national or international assessments (including the IPCC 4th Assessment).

	climate change, the content of marine plans may be affected, as consideration is given to climate change effects such as sea level rise and surge, flooding, and coastal erosion on marine developments and other activities. Objective 2 seeks to contribute to a number of the delivery mechanisms within the National Adaptation Programme, including use of natural infrastructure. The Marine Policy Statement (2.6.7) sets out that decision-makers should account for climate change projections and ensure that the design and operation of a given marine activity and/or proposed management measure are 'adaptation-proofed' as much as is possible in order to increase their resilience to the effects of climate change, such as coastal change and flooding. If good management practices are adopted early on, the economic losses as a result of climate change may be reduced by a ratio of 4:1[16]. It is therefore productive to be proactive in taking steps to mitigate and adapt to climate change as this will allow optimum use of resources and maintain natural capital within the South marine plan areas. It is not practical to include all adaptation measures relevant to each sector within this objective as some may be more appropriate to implement than others for a given location, period or activity. A range of potential impacts of climate change, risks and possible benefits for consideration by marine sectors were identified in the South Plan Analytical Report. Objective 2 aims to address issues across a number of activities, however some issues are best addressed via other objectives as follows: • a number of issues relate to reducing the vulnerability of man-made and natural infrastructure and are addressed through mechanisms such as managed realignment, hard defences and beach nourishment (see objective 13) • sea level rise is expected to exacerbate coastal squeeze. This is of pressing concern with respect to the need for compensatory habitat in response to new development, particularly in and around the already highly developed Solent (see objective 5) • management of ecosystems can contribute as part of climate change adaptation measures too, eg through maintenance or enhancement of habitats like saltmarsh that provide ecosystem services such as natural coastal protection. Where detrimental impacts on the provision of such services are identified, evidence should be provided as to how the proposal will reduce such impacts. The resilience of ecosystems to the effects of climate change is

[16] Murphy J.M. et al. (2009) UK climate projections Science Report: Climate change projections. Met Office, Hadley Centre, Exeter

	given further consideration under objectives 3 and 5. In some cases a changing climate may bring benefit to an activity; eg an increased need for aggregate materials for hard defences brought on by a rise in sea level could be a benefit for the aggregate industry. Higher air and sea temperatures could also improve tourism or recreation prospects. When implementing objectives within the South Plans, for example in relation to access, regeneration and diversification (objectives 9 and 14), consideration should be given to the potential effects of climate change.

2.3 Objective 3 – Marine Protected Area (MPA) network

Objective	To support the delivery of an ecologically coherent network of Marine Protected Areas by ensuring enhanced resilience and the capability to adapt to change
Marine Plan Objective Context section	As part of an ecosystem-based approach[17] to nature conservation the UK administrations are committed to having a well-managed network of Marine Protected Areas by 2016; under international agreements including the Convention on Biological Diversity and the OSPAR Convention. A Marine Protected Area network is a key measure towards achieving Good Environmental Status as required by the Marine Strategy Framework Directive. The sites in the network will work together to provide more benefits than an individual conservation area could on its own. All those areas established under international, European and national legislation with a marine component will contribute to this network and include: • Special Areas of Conservation (SAC) designated under the Habitats Directive • Special Protection Areas (SPA) classified under the Birds Directive • Sites of Special Scientific Interest (SSSI) with marine components designated under the Wildlife and Countryside Act 1981(as amended) • Marine Conservation Zones (MCZ) designated under Marine and Coastal Access Act 2009 • Ramsar sites (wetlands of international importance) designated under the Ramsar Convention on Wetlands, 1971. In addition, areas beyond the boundaries of designated Marine Protected Areas that are important to features for which an Marine Protected Area has been designated are also afforded protection under the Birds and Habitats Directives and MCAA. The South marine plan areas have a large number of protected areas including 9 MCZs, 11 SPAs, 40 SACs and 267 coastal SSSIs, thus highlighting the importance of marine protection to the area. The Marine Protected Area network is still expanding, with further designations of MCZs planned in the future. The number and type of future designations will depend on ongoing work being undertaken at OSPAR to help determine what an ecologically coherent network of Marine Protected Areas looks like.

[17] Marine Policy Statement (1.1): A practical interpretation of the ecosystem approach is set out in regulation 5 of the Marine Strategy Regulations 2010 which transpose the Marine Strategy Framework Directive. An ecosystem-based approach to the management of human activities means an approach which ensures that the collective pressure of human activities is kept within the levels compatible with the achievement of good environmental status; that does not compromise the capacity of marine ecosystems to respond to human-induced changes; and that enables the sustainable use of marine goods and services.

	Marine planning has a role in delivering the requirements of the Marine Policy Statement and in supporting the coherence of the Marine Protected Areas network in general. The Marine Policy Statement requires that appropriate weight[18] is attached to designated sites and protected species and also to habitats and species of principal importance for the conservation of biodiversity[19] beyond the boundaries of Marine Protected Areas. To deliver a coherent network, both designated areas and non-designated areas and species need to be afforded some level of protection. The Marine Policy Statement[20] also requires that marine plans build in sufficient flexibility in the marine protected area network to take account of climate change impacts, for example by introducing criteria for the selection or de-selection of marine protected areas, changing or moving current uses and spatial allocation, or safeguarding areas for future uses. Adaptation could be via recovery (if already impacted), opportunity for habitat migration if necessary (eg due to sea level rise) or amendment to site boundaries. In the South Inshore marine plan area the incremental loss of coastal habitats and transitional communities is an issue due to anthropogenic pressure and the effects of climate change. Coastal habitats can, and do, adapt to change, however if for example development or hard defences prevent migration, squeeze is inevitable. The loss of coastal habitats could also have a direct effect on species such as bird populations that are protected under a SPA. Sea level rise is already affecting little terns in Langstone Harbour,[21] this risk being mitigated by beach recharge in order to maintain their habitat. This is of particular relevance for sensitive habitats that are not formally protected but are important to the coherence of the network, and/or may be required to fill gaps in the network in future. The related issue of the need to provide space for habitats to continue to function is addressed in objective 5. The effects on habitats and migration of species as a result of climate change, pose a challenge to securing and sustaining favourable condition of these habitats over the long term. Adaptive

[18] 'Appropriate' should be judged by reference to the Marine Policy Statement, existing requirements and information provided through the on-going development of the South marine plans
[19] HM Government, 2011, Marine Policy Statement, paragraph 2.6.1.5.
[20] HM Government, 2011, Marine Policy Statement, paragraph 2.6.7.8 and 3.1.7
[21] http://www.rspb.org.uk/community/ourwork/b/southeast/archive/2014/03/31/what-climate-change-means-for-little-terns-at-rspb-langstone-harbour.aspx

	management is essential for continuing protection and enhancement of these dynamic areas, species and habitats so as to maintain the unique and valuable nature of the marine environment in the South plan areas. Despite legislation being in place, there is little evidence of practical management to provide protection for habitats and species with a changing spatial distribution due to climate change or natural processes. The condition monitoring and review, already under taken by Statutory Nature Conservation Bodies, could be the basis for strategic decisions to move current boundaries of marine protected areas, and/or to safeguard areas for future protection. One example of such practical management comes from the East inshore marine plan area where the Eastern Inshore Fisheries and Conservation Authority (EIFCA) have introduced a flexible bylaw. This enables them to close and open areas to specific fishing activity as the Sabellaria reef the bylaw is protecting naturally moves. This objective focuses on the Marine Protected Area network and specifically enhancing resilience to change. The objective also highlights the value of the areas beyond site boundaries to those protected within the network and the need to ensure flexibility, such as the ability to move boundaries of designated sites or ensure fringing habitat is offered some form of protection for future potential as a designated protected area.

2.4 Objective 4 – Contribute to Good Environmental Status

Objective	Activities within and adjacent to the South marine plan areas must take account of the achievement or maintenance of Good Environmental Status (GEnS) and Good Ecological Status (GEcS) under the Marine Strategy Framework Directive and Water Framework Directives respectively.
Marine Plan Objective Context section	The South marine plan areas have a particularly high biological diversity as a result of the variety of habitats, geophysical features and processes present. The wide range of habitats include reefs, mixed sediments, bays, estuaries, open water, different rock types and a variety of coastal habitats types such as shingle beaches, mudflats, salt marshes, dunes and cliffs. 13 species of cetacean are found in the South marine plan areas, with harbour porpoise and bottlenose dolphin being the principal species. 12 of UK breeding seabird species use the plan areas for breeding grounds along with several notable breeding assemblages of waterbirds. However not all of the habitats and species in the South marine plan areas occur within designated sites or are subject to statutory protection. Some habitats and species in the South marine plan areas are under cumulative pressure from human activities. Habitat loss is occurring, affecting resident species and species dependent on prey found within them. Furthermore, physical changes are occurring in benthic habitats, particularly due to activities causing abrasion, in turn affecting species associated with these habitats. Shallow and shelf sub-tidal sediments are under pressure in all areas and condition is generally on a level trend. Widespread fishing is the activity contributing the most pressure on these habitats with pollution, invasive non-native species and aggregate extraction also considered a concern. Development in coastal areas can result in a squeeze on habitats and disturb species through reduction of physical space and quality of wetland habitats such as saltmarsh and sand dunes. These habitats are considered to be in poor condition and declining, due to historic and ongoing land claim, coastal defence structures, pollution, die back and lack of sediment supply or removal of sediment from the system for example via dredging. Bait digging can also be an issue affecting intertidal areas, particularly throughout the muddy estuaries of the South Inshore Plan area. An ecosystem-based approach to the management of human activities should ensure that the collective pressure of human activities: • is kept within the levels compatible with the achievement of Good Environmental Status (GEnS), as defined by the

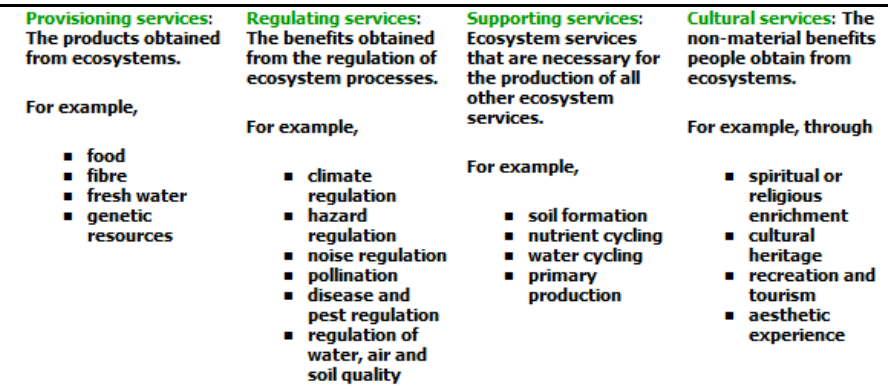
	Marine Strategy Framework Directive (MSFD); • does not compromise the capacity of marine ecosystems to respond to human-induced changes; and • enables the sustainable use of marine goods and services. Industries should be encouraged to grow in a manner that enhances environmental benefits , such as through the beneficial use of dredged material. Through doing so, industry can contribute to the achievement of GEnS within the marine environment. Marine planning can add value to meeting the 11 qualitative descriptors for determining GEnS (listed below), particularly descriptors 1, 2, 4, 6 and 7. 1. Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions. 2. Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems. 3. Populations of commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock. 4. All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity. 5. Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algal blooms and oxygen deficiency in bottom waters. 6. Sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected. 7. Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems. 8. Concentrations of contaminants are at levels not giving rise to pollution effects. 9. Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards. 10. Properties and quantities of marine litter do not cause harm to the coastal and marine environment. 11. Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment. MSFD is a relatively new Directive so relevant signposting, to decision-makers and applicants, is essential to address information or institutional failure. Issues specific to the South marine plan area, and which have the potential to affect MSFD

	descriptors, can be addressed through marine planning with policies linking to the decision-making process, in a proportionate way. Within coastal areas there is an overlap between the Water Framework Directive (WFD) and the MSFD, which is explicitly recognised within MSFD. In coastal waters, MSFD is only intended to apply to those aspects of GEnS which are not already covered by WFD (eg noise, litter, aspects of biodiversity). Where this overlap exists MSFD will be reliant on the WFD for delivery of certain aspects of GEnS. This objective will ensure collective pressures are considered in line with MSFD in turn contributing to the management of cumulative impacts in both inshore and offshore areas.

2.5 Objective 5 – Space for Ecosystem Goods and Services

Objective	To safeguard space for the natural marine environment to enable continued provision of ecosystem goods and services
Marine Plan Objective Context section	Biodiversity has intrinsic value and plays an essential role in healthy, functioning ecosystems, provision of ecosystem services, supporting sustainable development and enhancing quality of life. For example, wildlife and habitats adjacent to and within marine plan areas are important factors attracting tourists to the region. The UK Government is committed to halting the loss of biodiversity and restoring it so far as is feasible. It aims to ensure the halting and, if possible, reversal of biodiversity loss with species and habitats operating as a part of healthy, functioning ecosystems. It also promotes the general acceptance of biodiversity's essential role in enhancing the quality of life, with its conservation becoming a natural consideration in all relevant public, private and non-governmental decisions and policies The Natural Environment White Paper sets the objective of achieving no net loss of biodiversity. This is also reflected in the Natural Environment and Rural Communities Act, and through a wider commitment to the European Union Biodiversity Strategy, which highlights the need to 'protect, value and appropriately restore biodiversity for its intrinsic value and essential contribution to human well-being and economic prosperity'. Ecosystem goods and services are defined as the benefits provided by ecosystems that contribute to making human life both possible and worth living[22]. Examples of ecosystem services include products such as food, or minerals, regulation of floods, prevention of soil erosion and disease outbreaks, and non-material benefits such as recreational and spiritual benefits in natural areas. The term is usually used to encompass the tangible and intangible benefits that humans obtain from ecosystems. Ecosystem goods and services can be classified further under the following headings:

[22] Ecosystem Assessment: http://uknea.unep-wcmc.org/EcosystemAssessmentConcepts/EcosystemServices/tabid/103/Default.aspx

	 Although the goods and services provided by the natural marine environment are typically experienced by those that live by or visit the coast, many, such as renewable energy and food, both directly and indirectly benefit much of the UK's society. People directly on the coast gain many other social benefits from ecosystem services (such as clean air and bathing water providing healthier places to live and use of the environment for tourism and recreation providing employment and revenue locally). Climate change is producing significant issues for such benefits. There are a variety of important habitats in the South, reflected by the number of local authorities that have used their local plans to aid habitat protection, such as Chichester Harbour Conservancy. The attraction of the South coast of England for many marine activities is largely due to the quality of the natural marine environment. People want to 'access' the area for recreational reasons and utilise the natural resources for jobs and income, but this in turn can pose a risk to the very environment drawing people to the coastline. Finding the balance between enhancing and improving access for social benefits (see objective 9) while protecting the natural environment is a challenge, and will be key to the sustainable development of the South marine plan areas. Degradation of the natural environment can affect a number of sectors, most notably the commercial fishing, aquaculture, recreation and tourism sectors. For example, fishing and aquaculture depend on maintaining the carrying capacity of environment to support stocks, along with a high level of water quality. Many tourism based activities also depend on good water quality for example blue flag beaches. Degradation of water quality has led to the restricted use of some beaches, which lowers visitor numbers and therefore reduces revenues within the tourism sector and reduces the health and well- being benefits associated with visiting the coast. Marine Protected Areas[23] are

[23] See objective 1 for more on MPAs

	currently seen as a key tool for enhancing the quality of the UK marine environment (see objective 3). There is some evidence of the potential benefits of Marine Protected Areas to commercial fishing, recreation and tourism. There are often trade-offs in which ecosystem goods or services are valued, which can change spatially or temporally. For example dredging in the English Channel provides aggregates but can restrict or remove key spawning and nursery grounds for fish and shellfish, with knock on effects for provision of other goods such as fish. As described under objective 7, coastal squeeze due to development is already affecting non-protected habitats such as saltmarsh and sea grass. Sea level rise as a result of climate change will add to this particularly along the coast and within estuaries. These low-lying areas are at increasing risk of flooding due to climate change, with adverse social and economic effects (especially the Solent due to the concentration of industry and infrastructure, and the value of its economic development). Developments need to be resilient to climate and coastal change and consideration should be given to how to reduce vulnerability to future changes through adaptation and mitigation measures (see objectives 13 and 3). In turn, developments need to ensure they do not have an unacceptable impact on natural coastal change processes or exacerbate these processes. Habitats such as saltmarsh, mudflats and sand dunes can act as natural flood defences, coastal squeeze may reduce their ability to do this, adding to the requirement and cost for manmade defences. The regional habitat creation programme in the North Solent has identified the need to safeguard more area for managed realignment and compensatory habitat, however, there are difficulties and barriers to be overcome. There is a risk that if identified in other areas on an ad hoc basis the resulting compensatory habitat may not be of adequate quality to continue to provide essential ecosystem goods and services. The marine plans can play a role, for example, by helping to identify suitable locations and managing the use of space by developments more effectively (objective 9). Many authorities, such as Exeter City Council and Dorset County Council for the Dorset Area of Outstanding Natural Beauty are developing plans for the conversion and management of coastal land to salt marsh and mudflats in line with the Regional Habitat Creation Programme. This includes the Medmerry managed realignment scheme, the largest open coast managed re-alignment scheme in the UK. Due to the intensity of activity, there are already collective pressures affecting habitats and species protected for their

	environmental importance, as well as those that are not protected, but which play an important role in providing environmental goods and services, and which have an intrinsic value. The loss of biodiversity and habitat needs to be halted by managing the space requirements of activities effectively (see objective 12) to enable sustainable development, preventing encroachment so as to provide space and ensure the health of the marine environment. There are locations within and adjacent to the South marine plan areas which have potential for growth in existing and new marine industries. For example, areas of the Solent naturally lend themselves to port expansion to support increased ship movements, there are renewable energy opportunities off the coast of Brighton and the Isle of Wight, and aquaculture is a growing industry with much potential. Growth also poses direct challenges to the natural environment such as limiting available areas for compensatory habitat (often used as mitigation for development) and managed realignment processes. Although the Marine Policy Statement covers wider environmental matters and the need to give consideration to the social and economic benefits that the enhancement of marine ecosystems can provide[24], this has not been utilised to its full potential with regards to maintaining space specifically for goods and services. Objective 5 therefore needs to focus specifically on ensuring space is retained for the environment to enable continued provision of ecosystem goods and services, resilience to climate change, and suitable areas for compensatory habitat and managed realignment. There are a range of policies and measures already in place that address environmental protection in decision making processes including the Marine Policy Statement, Marine Strategy Framework Directive, Water Framework Directive and Strategic Environmental Assessment and Environmental Impact Assessment. This objective will apply to the Inshore and offshore plan areas, but will need specific consideration in coastal areas and around estuaries such as the Solent. Estuaries are often the focus of multiple activities within restricted space, while ecosystem services including water quality maintenance, coastal flood and erosion protection (eg by salt marsh), and the provision of food sources via fish and shellfish, are all important to the estuaries of the inshore South marine plan area

[24] Marine Policy Statement 2011 paragraph 2.5.6

2.6 Objective 6 –Disturbance on marine species

Objective	Disturbance impacts on mobile species, within or reliant on the South marine plan areas, resulting from new proposals and existing activities must be avoided, minimised or mitigated.
Marine Plan Objective Context section	Ecological disturbances are events of intense environmental stress occurring over a relatively short period of time that cause changes in the affected ecosystem. Disturbance can result from natural causes such as storm events or from the activities of humans. In the South Plans areas human disturbance sources are of particular concern and include noise, recreational pressure and pollution. Highly mobile species are particularly vulnerable to human disturbances and are thus indicators of the health of the natural marine environment. Mobile species, like Brent geese for example, exhibit strong migration and territorial habits. They consequently may encounter many sources of disturbance and are less able to adapt to resulting habitat disruption by shifting to new areas[25],[26]. While individuals disturbances rarely cause death, multiple disturbances can lead to chronic pressure eg direct feeding effects through displacement from optimal feeding grounds, indirect feeding effects from loss of prey, increased energy expenditure blocking most efficient migration paths, or reducing reproductive success cumulatively increase impacted species energy demands and reduce the productivity of the population [27,28,29,30,31,32]. Many mobile species are afforded protection from direct

[25] Hallam, D. (2013). Bob Chapman (Hampshire & Isle of Wight Wildlife Trust), Langstone Harbour site visit [meeting] (Personal communication, 10 July 2013).

[26] King, D. (2010) Solent Waders and Brent Goose Strategy 2010. Hampshire and Isle of Wight Wildlife Trust

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[31] Mueller-Blenkle, C., McGregor, P.K., Gill, A.B., Andersson, M.H., Metcalfe, J., Bendall, V., Sigray, P., Wood, D.T. & Thomsen, F. (2010) Effects of Pile-driving Noise on the Behaviour of Marine Fish. COWRIE Ref: Fish 06-08, Technical Report 31st March 2010

[32] Neo, Y.Y., Seitz, J., Kastelein, R.A., Winter, H.V., ten Cate, C., Slabbekoorn, H. (2014) Temporal structure of sound affects behavioural recovery from noise impact in European seabass, Biological Conservation 178: 65-73

	disturbance, unlawful killing and capture under a range of existing measures including the Wildlife and Countryside Act 1981 and Conservation of Habitats and Species Regulations 2010. However, despite existing measures, mobile species remain vulnerable to impact for a number of reasons: • poor understanding of the distribution of mobile species in time and space that presents a significant challenge identification of those impacted • distributions are likely to change under even most probable climate change scenarios • information on the sensitivity to pressures is limited, a particular exemplar being sensitivity thresholds to noise • not all activities causing disturbance taking place in or impacting the marine area are licenced. Many highly mobile species make use of the acoustic properties of water that allow sound to travel farther and faster to communicate over large distances, to navigate, or to detect prey. Ambient and or impulsive noises generated by marine activities including vessel traffic, construction or utilisation of marine resources and can negatively impact on these mobile species. Effects include damage to hearing, disrupting navigational ability, disorientation and avoidance of breeding or feeding grounds[33].Further information is required in order to confirm effects and measures in response. Implementation of the Marine Strategy Framework Directive Descriptor 11 is the main mechanism through which underwater noise (and other sources of energy based disturbance eg thermal) is considered at a strategic level. A 'noise registry' is being established, headed by Joint Nature Conservation Committee to record, assess, and manage the distribution and timing of anthropogenic impulsive sound sources. Current proposals also plan to monitor trends in the ambient noise level. Marine and coastal access, bait digging, coastal tourism and recreation can also be sources of disturbance, particularly to birdlife and may restrict or alter natural behaviours particularly nesting and foraging eg increased energy expenditure on vigilance and taking flight in avoidance [34]. These issues are particularly concentrated on the coastal areas above low water. Disturbance

[33] OSPAR Commission, 2009 Overview of the impacts of anthropogenic underwater sound in the marine environment, Biodiversity Series Publication Number: 441/2009, pp133, ISBN 978-1-906840-81-5

[34] Linaker, R. (2012) Recreational Disturbance at the Teesmouth and Cleveland Coast European Marine Site. Bird disturbance field work Winter 2011/2012. Available at http://www.teescoast.co.uk/wp-content/uploads/2013/02/Tees-EMS-1112-disturbance-report-FINAL-VERSION-0313.pdf (accessed 05/01/15)

	occurring through activities are often unlicensed and unregulated. Diadromous fish that undertake migrations between marine and freshwater systems through estuarine and lagoon systems are particularly vulnerable to pollution disturbances. This may result from coastal development, sewage overflow, slurry and manure runoff or simply during periods of heavy rain. This demonstrates the inherent link between upstream catchments and the activities that go on in them and the impact it can have further downstream in coastal and transitional waters. A number of initiatives (including those associated with the Water Framework Directive) are helping to improve the physical and chemical quality of rivers and estuaries. Steps taken in objective 7 on water quality in estuarine environments will be the primary mechanism by which pollution based disturbance are to be addressed. Objective 6 therefore seeks to minimise disturbance impacts in the South Plans areas through the following: • An mechanism for information gathering to define to both ambient and impulsive noise levels • Manage increases in noise in already noisy areas to reduce disturbances • Enhance discussion among sectors that generate or are impacted by noise. • Signpost or otherwise illustrate the mechanisms existing legislative or management options for example byelaws or codes of practice for disturbance management. • Policies located under other objectives either directly eg Objective 7 – water quality or indirectly eg Objective 4 – Good Environmental or Ecological Status contribute to the fulfilment

2.7 Objective 7 – Cumulative Effects

Objective	Cumulative impacts affecting estuarine water quality within the South Inshore Plan area should be addressed through strategic management addressing terrestrial and marine drivers.
Marine Plan Objective Context section	As set out in the Marine Policy Statement, marine plans should contribute to considering cumulative impacts, eg 'Marine plans should ... identify how the potential impacts of activities will be managed, including cumulative effects' (2.3.1.6). There is an expectation that more is done than currently provided for in existing measures, to ensure that the collective pressure of human activities is kept within levels compatible with achievement of Good Environmental Status under the Marine Strategy Framework Directive. Each of the 11 descriptors has a number of associated targets and work is underway to determine appropriate delivery measures. Through Objective 4 the South marine plans will play a role in the implementation of the Marine Strategy Framework Directive, in relation to specific issues and pressures within the plan areas, such as the poor condition of shallow sediment habitats in the English Channel due to abrasion pressure. The South marine plan areas are busy with a large and diverse range of human activities occurring, which exert pressure to varying degrees. Cumulative effects can arise from a range of pressures; the effect of such pressures and whether or not they have an impact will depend on the sensitivity of the components of the ecosystem that are affected and the level of exposure to those pressures. This objective focuses specifically on the range of pressures which are evident in the estuaries of the South Inshore Plan area, which are likely to increase over the lifetime of the plan and be exacerbated by the effects of climate change. Specifically the South Plans Analytical Report highlighted water quality and coastal squeeze. Many of the most economically and culturally important activities in the South plan areas including tourism, recreation and fishing rely upon a healthy, functioning marine ecosystem including good water quality. However, poor water quality is already an issue in the South Inshore Marine Plan area with some estuaries failing to meet Good Environmental Status under WFD, and many failing to meet shellfish standards, issues posing issues for future aquaculture potential. Contributing issues such as provision of adequate and effective waste water treatment are likely to be exacerbated by the growth of populations and increased need. Increased storminess as a result of climate change may lead to more frequent storm overflows, resulting in release of pollutants, and re-suspension of sediment (increasing turbidity and releasing contaminants). Re-suspension of sediments also occurs through dredging and disposal activities. A combination of these issues are

	particularly noticeable in the Solent, Dart and Exe. As described under objective 5, coastal squeeze due to development, industrial expansion and provision of hard sea defences is already affecting non-protected habitats such as saltmarsh and sea grass; sea level rise as a result of climate change will add to this particularly along the coast and within estuaries. The regional habitat creation programme in the North Solent has identified the need to safeguard more area for managed realignment and compensatory habitat, however, there are difficulties and barriers to be overcome. There is a risk that if identified in other areas on an ad hoc basis the resulting compensatory habitat may not be of adequate quality to continue to provide essential ecosystem goods and services. The marine plan can play a role, for example, by helping to identify suitable locations (see objective 5) and managing the use of space by developments more effectively (objective 12). Although addressed under separate objectives this issue is flagged here due to the important role fringing habitats provide in regulating water quality. There are a number of existing measures, such as Environmental Impact Assessment and Strategic Environmental Assessments which consider cumulative effects through the need to avoid, minimise or mitigate impacts. This also is reflected in the principles of the National Planning Policy Framework and the Marine Policy Statement (2.6.1.3) on conserving and enhancing the natural environment. In relation to water quality the range of statutory instruments includes EU directives: Water Framework Directive (including River Basin Management Plans) , and those for shellfish, bathing waters, and waste water treatment. There are also non-statutory instruments including Estuary Management Plans, and Shoreline Management Plans. Through signposting this objective highlights what needs to be done by public authorities, predominantly those determining applications, and the marine planning authority to put those expectations into practice. Despite the existing measures, which are seeking improvements, good water quality standards are not being met in many parts of the inshore plan area. Despite the existing measures, which are seeking improvements, good water quality standards are not being met in many parts of the marine plan areas. This may be due to a lack of information or institutional or market failure. Just as in the example of regional habitat creation programmes, strategic long-term assessments of cumulative effects across estuaries are required to tackle cumulative effects in relation to water quality, recognising that drivers may originate beyond the South plan areas (eg terrestrial run off). For example, an Environment Agency pilot initiative, Sea View 2027, is currently exploring issues in the Solent; such initiatives could be extended to other estuaries experiencing similar issues.

	This objective supports the aim of integration across and between different plans in referring to the impacts of marine activities on terrestrial and marine ecosystems and vice-versa. It also draws attention to, and reinforces, the role of authorities in and adjoining the South marine plan areas to work together to identify and manage cumulative impacts, including through other relevant plans or programmes, such as River Basin Management Plans. This objective signals to interested parties, including applicants subject to decisions, that public authorities will look to ensure that current and future guidance as it becomes available is clearly highlighted, applied, and reviewed (where required), working with, for example, the Joint Nature Conservation Committee and Natural England, The Crown Estate and industry.

2.8 Objective 8 – Marine activities providing social benefits

Objective	Displacement of marine activities should be avoided, minimised or mitigated in order to achieve a net gain in social benefits (especially to coastal communities).
Marine Plan Objective Context section	The South marine plan areas, and the activities they support, provide social benefits for the health and well-being of communities on the adjacent coast and inland. These include industrial activities, such as ports, shipping and tourism (that provide income and employment), recreation (such as leisure boating), and the ability to engage and interact with the seascape and a well-managed marine environment (both natural and historic). Many people gain pleasure from the knowledge that the natural and historic environment exists and is being sustained over time, without even the need to visit the places concerned. Where a certain activity has taken place in an area for a long time (such as fishing in Hastings), it can become a strong feature of that community's identity and sense of place and of greater significance relative to other areas. The social networks that are generated between long-term workers and residents can help to build community cohesion. Activities, and their potential future growth, need to be managed sustainably. This will be achieved through ensuring that in making decisions public authorities fully consider the social costs and benefits alongside those for the economy and the environment. Encouragement will be given to the achievement of a net gain in benefits (by considering the characteristics of the beneficiary communities) when comparing the effects of the existing with those of the proposed activities. As coastal communities generally have greater dependence on the marine area for their social and economic benefits than those away from the coast, it is important to consider the potential for displacement of activities when making decisions about proposals for new, or growth in existing, activities. The policy framework to follow will allow for analysis of both across the various social, economic and environmental benefits offered by the proposal together with a comparison with those of existing and authorised activities. Decisions that deliver a net gain in benefits should be supported.

2.9 Objective 9 – Access

Objective	Maintenance and enhancement of access to, and within, the South plan areas appropriate to its setting and equitable to users will be supported.
Marine Plan Objective Context section	Many people choose to live at, and visit, the coast because of an appreciation for the marine and coastal environment and the services it provides, for example opportunities for recreation and tourism and improved health and well-being. Opportunities to access and interact with the marine environment is particularly important due to the relatively high density of people living in the South plan areas combined with the high number of visitors from outside coastal communities. The marine environment can also provide social benefits without direct access, through an existence value, in that people value that the marine environment is there and can be accessed for a range of activities. As such, access for social benefit, does not rely solely on 'physical' access that uses infrastructure located within and adjoining the marine plan areas (such as paths and slipways, see Objective 13). It also recognises the importance of interpretative access (such as signage) and 'virtual' access (such as film, literature and web-based interpretation tools) that increase awareness of the South marine plan areas. This increased awareness can improve stewardship within coastal communities and beyond, and also enhance sustainable development and employment by equipping communities at the coast with more knowledge of their area in order to take advantage of marine-related opportunities. A number of specific issues with access provision have been identified. Increased access for tourism and recreation can impact on the very environment that draws visitors to a location. For example, disturbance can impact on achievement of the conservation objectives of Marine Protected Areas, harming biodiversity (see objective 6) and heritage assets (see objective 10). Heritage guidance notes and codes of practice can assist. Conflicts can arise between multiple recreational uses such as swimming, sailing and jetskis. Too much tourism development (and increased infrastructure and visitation) can lead to friction with local people and their customary recreational use, and a perception of adverse effects on marine character. Offshore renewable energy projects can also adversely affect existing access, recreational use, and create visual impacts. Coastal erosion can result in loss of beach access and coastal paths[35].

[35] Separately from the work of marine planning, Natural England is working on ensuring a right of access around all our open coast of England (http://www.naturalengland.org.uk/ourwork/access/coastalaccess/default.aspx#background). This right of access underpins an England coast path. As this is being managed by another agency and

	The objective aims to enhance social benefits through provision of new physical and virtual access where appropriate, while emphasising the need to manage or enhance existing access, recognising that not all existing access remains appropriate due to the issues outlined above. Principles underpinning this objective, therefore, are: firstly that provision of new recreation/tourism access that limits access by an existing user group should be discouraged; and secondly that access needs to be appropriate to its setting. This is important due to the myriad of considerations at the coast that need to be factored-in to allow any management and enhancement of existing or development of new access. This is set out in the National Planning Policy Framework which emphasises the need to take the opportunities available for improving the character and quality of an area and the way it functions. Furthermore, it outlines that efforts should be made to maintain the character of the undeveloped coast. There is a need to protect and enhance the marine environment, distinctive landscapes of the South Inshore plan area, (particularly in nationally designated areas defined as national parks, areas of outstanding natural beauty or heritage coast) and improve public access to, and enjoyment of, the coast. An assumption made here is that as part of any consideration relating to access, provision for safety will be made as guided by prevailing standards.

principally relates to space above mean high water springs, this should not be a focus for marine planning, though as it will increasingly play an important role in how people access the coast, the development of the path should be highlighted by the plans for consideration by those carrying out activity at the coast

2.10 Objective 10 – Heritage Assets

Objective	Features significant to the historic environment of the South marine plan areas, that are not designated as heritage assets, should be identified and conserved.
Marine Plan Objective Context section	The historic environment and heritage assets are important for their intrinsic value, and contribution to nationally protected landscapes, their setting and seascapes. They are also of socio-economic value for tourism and recreation; and for the health, well-being and enjoyment of local people and visitors. Heritage assets can assist in strengthening social capital through engagement activities that help to become a focal point for community events, engendering a sense of belonging to a place and way of life and, as such, help foster support to safeguard these features. The historic environment includes all aspects of an area resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged. Those elements of the historic environment such as buildings, monuments, or landscapes that have been positively identified as holding a degree of significance meriting consideration, are called “heritage assets” (Marine Policy Statement 2.6.6.1). The Marine Policy Statement states that “some heritage assets have a level of interest that justifies statutory designation, the purpose of which is to ensure that they are protected and conserved...” (Marine Policy Statement 2.6.6.4 and 2.6.6.5). Not all heritage assets are subject to formal designation measures, but still help to shape the character of an area and should be treated as being of equivalent significance as designated assets. They should be conserved and managed in recognition of their contribution to the overall historic environment. The significance of heritage assets must be considered in terms of the values the asset holds for current and future generations, and how any proposed changes may affect the significance of the asset or its setting, which may be archaeological, architectural, artistic or historic. The South marine plan areas contain a unique and diverse historic environment both along the coastline and beneath our seas. Past human activities range from early human occupation stretching back some 80,000 years to more modern military, commercial and cargo wreck sites of the twentieth century. Strong historic associations to iconic landscapes such as the white cliffs of Dover form part of our national identity when leaving and returning to England by sea. To the west of the plan areas the Jurassic Coast covers 95 miles of coastline from East Devon to Dorset, with rocks

	recording 185 million years of the Earth's history. In relation to the significance of any identified heritage assets (or the potential for such assets to be discovered), consideration must be given to the available evidence, including information and advice from the relevant regulator and advisors and how they are managed. It should also take into account the historic character of the marine plan areas, with particular attention paid to the landscapes, seascapes and groupings of assets that give it a distinctive identity. Designated heritage assets can be found at figure X. It should be noted that figure X does not demonstrate an exhaustive representation of wreck data in the South marine plan areas, as such data is incomplete. Also, wrecks in the offshore area are not able to benefit from statutory designation. Further information can be obtained from United Kingdom Hydrographic Office (UKHO). More information regarding the designation of historic wrecks, can be found in the English Heritage Designation Selection Guide. Existing marine activities coupled with their predicted growth may impact on the historic environment, heritage assets and the services they provide. Activities that disturb the sea bed such as mobile gear and beam trawling fisheries, dredging and disposal activities and anchorages can threaten heritage assets on and beneath the sea bed. This objective recognises that while designated assets are generally considered by decision-makers, there is a need to ensure non-designated assets receive equal consideration (in accordance with their value and risk of harm) when considering the effects of existing and proposed activities (see Marine Policy Statement 2.6.6.5). Elements which contribute to the significance of the asset should not be compromised or harmed. Where practical, enhancement of the condition of assets should also be encouraged. For proposals, and (where feasible) existing and authorised activities, consideration should be given by relevant authorities to the need to identify any non-designated heritage assets and then seek (in order of preference) to avoid, minimise or mitigate adverse effects on them. In regard to fishing this is considered to be best achieved through development of a voluntary code of practice with industry organisations. It is also necessary to support provision of public access by the responsible authorities in a way that considers the need to avoid or minimise harm to all heritage assets. This objective (and related signposts) will maintain heritage assets for their intrinsic value and for the services provided to tourism and recreation and for wider social benefits to health, well-being and enjoyment.

2.11 Objective 11 –Seascape

Objective	Decisions should consider the seascape of an area, and its constituent marine character and visual resource.
Marine Plan Objective Context section	**Seascape** The Marine Policy Statement states: “In the context of this document, references to seascape should be taken as meaning landscapes with views of the coast or seas, and coasts and the adjacent marine environment with cultural, historical and archaeological links with each other.” The following sections clarify the scope and application of seascape in the South Inshore and Offshore Plan areas by separating visual and character aspects, distinguishing description, measures and, if required, plan policies that appropriately apply to only one or other of visual or character aspects. **Visual Resource** Visual resource can be interpreted primarily as views of the coast and sea from the land. Views from the sea to land, and sea to sea, could also be relevant. Consideration of potential impacts should take into account visibility, weather conditions, angle of views and the temporal or permanent nature of a structure (including its scale and design or activity). Whilst the above issues are relevant to marine planning, there are a range of policies and measures already in place to address the issues outlined above. Proposals should have regard to nationally designated areas, namely National Parks, Areas of Outstanding Natural Beauty and the World Heritage Site. **Character** In the marine environment ‘character’ relates to the perception of an area, and the combination of characteristics at the surface, within the water column and on the seabed. In a study carried out for the Marine Management Organisation the South marine plan areas have been divided into individual marine character areas (see figure XXX). It should be noted that figure XXX does not relate to the visual element of seascape. In 2012 the Marine Management Organisation undertook an informal consultation to clarify the key characteristics identified in the East seascape study produced by Natural England. The seascape character area assessment should be viewed as an update and a record of development towards the revision of the key characteristics identified in the pilot study. Each of these areas is determined by their own individual character derived from both

	visual and non-visual elements, including underwater processes which reflect activities on the surface. They include areas that fall within the Marine Policy Statement definition of seascape as viewed from the land and other areas further offshore. The pilot study and updated key characteristics are available to assist decision-makers and others when considering proposals. The South Inshore and Offshore marine plan areas contain rich and diverse coastlines and marine environments. The coast includes a range of communities, both urban and rural, which vary in wealth and opportunities. The South marine plan areas are strongly associated with the defence of Britain and benefits from unique coastlines including iconic landscapes such as the white cliffs of Dover, grey cliffs of Portland stone and the fossil rich cliffs of the Dorset and East Devon World Heritage Site (Jurassic Coast). Other prominent landmarks such as The Needles (Isle of Wight) and lighthouses at Anvil Point and Portland Bill have been used for generations as navigational marks for commercial and recreational shipping and contribute to a sense of place. The South offshore marine plan area is dominated by commercial shipping activity and is one of the busiest shipping channels in the world. There are a number of statutory designations and non-statutory categories protecting England's important landscapes under both national and international law. Many of these designated areas have marine elements. In the South inshore area these comprise: • National Parks; • Areas of Outstanding Natural Beauty; • Dorset and East Devon Coast World Heritage Site ('Jurassic Coast'); • Heritage Coasts (non-statutory). Designated areas can bring direct economic benefits to the tourism and recreation industry through visitor footfall. These designations help provide income to local communities, create jobs and promote health and well-being through maintaining high quality coastal and marine environments (Marine Policy Statement 3.11.2). Signposts are provided below to the areas, their statutory purposes and the authorities directly responsible for their management. The effects of infrastructure development (such as through wind and tidal energy projects, port development, coastal defences, cable landings and pipelines) on marine character and the visual resource, should be considered. This is not only important for individual character areas, but also often for any contribution they make to nationally designated areas, and their setting. Increased footfall brought about by tourism and recreation activities can raise awareness of visitors, but can also change marine character and

	the visual resource. Signposting will ensure this is considered by the relevant authorities when planning and managing public access (see also Objectives 9, 10 and 13). Coastal erosion can threaten the natural features and heritage assets and change the marine character and the visual resource that are important for the nationally designated areas and the wider seascape (see Objectives 1 and 2).

2.12 Objective 12 – Sustainable development (spatial requirement)

Objective	To provide space to support existing, and facilitate future sustainable economic activity through the encouragement of co-location, mitigation of conflicts and minimisation of development footprints
Marine Plan Objective Context section	This objective relates to the need to support sustainable economic growth whilst recognising spatial requirements and associated future needs as outlined in section 2.5 of the Marine Policy Statement. Within the South marine plan areas there is competition for space and significant levels of activity. This objective anticipates that space is required for the growth of a number of existing and emerging marine activities, including, but not limited to: aquaculture, ports (and related dredging activities), shipping (and shipbuilding/maintenance), aggregate extraction, tourism and recreation, and the development of renewable energy. Maintenance of existing activities such as fishing is also important. Space is required for hard infrastructure and also for activities to function. For example, shipping requires space for transit and anchorage, and fishing requires access to grounds (see also objectives 8 and 9). Some activities may operate in the same space, whereas some may require exclusive use of an area, for example for navigational safety. The objective also conveys the requirement to balance the demands of activities and promote [their] sustainable management. To manage the available space effectively, and maximise the economic, social and environmental benefits of access to space, there is a need to minimise development footprints, consider co-located activities where possible, and look for synergies of use. This will enable activities to continue to function and potentially grow, whilst minimising conflict, in order to meet local, regional and national policy aims including economic development, with associated benefits for local and national economies. As well as the need to manage spatial interactions with other marine users, there is also the potential to interact with heritage sites, Marine Protected Areas and other sectors. In the case of a number of these, industry already has adopted a range of best practice measures – including heritage guidance notes /reporting protocols, fisheries liaison codes of practice and a Biodiversity Action Plan strategy – together with adoption of regional approaches to assessment, monitoring and management through the regional dredging associations and the associated Marine Aggregate Regional Environmental Assessments. All of these

	issues influence and help to shape the sustainability of the sectors activities. Finally, there is a requisite to ensure that proper consideration is given to the environmental effects of development along with the economic and societal benefits (including as part of Strategic Environmental Assessment and Environmental Impact Assessment). The spatial needs of a healthy, functioning marine environment should also be considered, and encroachment minimised (see objectives 4 and 5).

2.13 Objective 13 – infrastructure support for economic development

Objective	To manage existing, and where appropriate facilitate the provision of new, infrastructure supporting marine and terrestrial activity incorporating resilience to the effects of climate change where appropriate.
Marine Plan Objective Context section	This objective aims to highlight the need for the provision of marine and coastal infrastructure to support sustainable development and the integration of marine plans and land-based planning systems. This could be in the form of (but is not limited to) landing, storage and processing facilities for catch or freight, aggregates handling, slipways, boat repair facilities, coastal paths, passenger transfer or electricity transmission. This objective in turn highlights to decision makers and applicants the requirements of section 58 (3) of the Marine and Coastal Access Act 2009 and Paras 105 to 108 of the National Planning Policy Framework for any developments which may have an impact on the South plan areas despite being located in the terrestrial or another plan area. The objective highlights the need to manage existing infrastructure and, where appropriate, facilitate new infrastructure in order to support activities. In so doing it recognises that in some cases the existing infrastructure may no longer be appropriate (ie should not be maintained in its current form or may requirement enhancement). The aim is to maximise opportunities and reduce risk through consideration of the best locations for future infrastructure, compatible and consistent with the pattern of ongoing use while minimising impacts on other users. This is particularly important to tourism and recreation where the character of the coast is vital in drawing visitors and maintaining related employment. This objective should be viewed in light of the need for inter-modal transport infrastructure at the coast as part of optimising activity through related planning and authorisations. Approaches to infrastructure development should be long-term, recognising that some decisions will have longer-term impacts than others on any given space eg different types of development at the coast vary in terms of intended lifespan of use, creating an opportunity cost for other uses. Infrastructure will need to consider the risks of the potential impacts of climate change, including sea level rise, increased storminess and coastal change and flooding, and take steps to reduce their vulnerability (see also objective 2, and Marine Policy Statement 2.6.7.8). This objective relates to both artificial and natural infrastructure. The effect a development may have on natural infrastructure is to be considered by proposals and decision makers, which could

	include terrestrial development and what impact this would have on the marine area. Development on natural infrastructure may have consequences to the provision of ecosystem good and services, with knock on effects on society and the economy. For example, natural infrastructure plays a role in mitigating climate change is in the form of flood plains and wetlands storing and purifying water which can alleviate flooding and erosion (see objective 5). Careful management of natural infrastructure) can have economic benefits by mitigating the requirement to find expensive and complex manmade solutions to combat the effects of climate change. The objective also encourages the management of infrastructure (manmade or natural) to provide defence for communities against the effects of climate change which could include (but is not limited to) flood or sea defence, managed realignment and beach nourishment, taking account of existing measures such as Shoreline Management Plans.

2.14 Objective 14 – promotion of activities which improve socio-economic conditions

Objective	Regeneration and investment in, and diversification of, activities which improve socio-economic conditions in south plan coastal communities will be supported.
Marine Plan Objective Context section	There are parts of the south plan area that are in decline, or are vulnerable to economic shocks due to overdependence on one or two sectors of the economy. This could be an issue, for example, where the local economy is dominated by an over dependency on traditional industries such as seasonal 'seaside' tourism or fishing. This objective highlights the need to balance specialisation in, and regeneration of, existing sectors whilst also encouraging diversification and unlocking the economic potential of new sectors, such as tidal energy and the expansion of the aquaculture sector, to maximise the socio economic benefit associated with the plan areas. Development needs to be balanced against the needs of existing sectors, such as recreational boating or tourism, which are already important economic contributors yet could be affected by the development of new sectors, for example through visual impacts. The added value from marine planning for this objective comes through promoting opportunities that encourage regeneration and diversification of the existing economy. There is a strong connection to objective 13 as investment in infrastructure is vital to ensuring that activities on land are connected to the marine plan area and can realise their economic benefits. Activities will need to be aligned with existing and planned regeneration on land to maximise the socio-economic gains. This means that the linkage to activities undertaken or governed by local authorities and other initiatives is important to ensure that there is support in place for implementation to help achieve this objective. Opportunities exist through existing frameworks, such as Local Enterprise Partnerships, to secure funding for development and regeneration of coastal communities. There are five Local Enterprise Partnerships in the South Plan Area: • South East • Solent • Coast to Capital • Dorset • Heart of the South West There is also potential for the exploitation of recreational and educational benefits offered by existing industries such as port services and research institutions. For example, viewing platforms could be added to shipyards to allow visitors to witness the

	construction and launching processes or, research institutions could also be opened up for educational and recreational visits. This would increase the draw of the plan area and provide attractions that could be utilised year round to increase visitor numbers, improve economic resilience and diversify the local economy. In conjunction with objective 1, this objective needs to consider the effects of climate change, which will bring risks and potential opportunities. Examples include warmer weather leading to increased footfall and natural expansion of the tourist season but may also lead to an increase in extreme weather events causing tourists to holiday elsewhere.

2.15 Objective 15 – Support for opportunities for employment, investment, regeneration

Objective	To support marine activities that create and enhance employment opportunities at all skills levels, particularly where this reflects existing or developing skills among the workforce of coastal communities using the South marine plan areas.
Marine Plan Objective Context section	The South marine plan areas support a range of activities, and have potential to provide access to employment for coastal communities. Yet a busy marine area does not guarantee local employment and the quality of local jobs, skills deficits and poor transport connectivity can impact on economic growth within the south marine plan areas. A lack of investment or demand stalls development of emerging technologies, leads to dereliction of existing infrastructure and results in businesses relocating, depleting the job market. In turn, a continued decline in skillsets is likely as people move further away to increase their prospects. Investment in a particular industry can also impact on opportunities for other industries, while increased spatial pressures can force market locations out of the plan area, removing both economic and employment benefits to sectors. For example sterilisation of sites suitable for aquaculture may lead to processing plants re-locating or future developments re-considered being in the area. Opportunities presented by development and associated supply channels (eg manufacturing for marine industries) can bring benefits which may be particularly important to areas currently experiencing deprivation. Opportunities for improving access to direct and indirect employment exist in the South marine plan areas through development of sectors such as tourism, fisheries and port related activities, as well as through realisation of the employment potential provided by aquaculture, fisheries and renewable energy for research and development. Marine planning has a role in supporting growth in new and existing industries and this objective links closely with objectives 12 and 14, which also help contribute to this. Appropriately planned and sited development can help to encourage investment and stimulate demand for marine products and services. Marine development can create job opportunities which bring associated economic benefits through high levels of employment in an area and associated spending of wages which lead to secondary economic benefits. Skills development that can benefit communities adjacent to the south Inshore plan area should be linked to growth of new sectors and further development or existing industries. An example of this

	is the potential expansion to the aquaculture industry, that may lead to an increase in training needs and job opportunities. Research laboratories such as National Oceanography Centre at Southampton University, Centre for Environment, Fisheries and Aquaculture Science at Weymouth and the Solent Energy Forum on the Isle of Wight can also help contribute through identifying and developing new skills sets for coast communities within the south marine plan areas. Marine planning can highlight where skills for particular marine developments already exist, could be/or are being developed, and could signal to decision makers where the most appropriate sites for development are to maximise local economic benefit. Plan policies will establish a clear connection between marine and terrestrial social and infrastructure planning to ensure the workforce on land are able to access marine development opportunities.

Annex 2 – Further Information on Approach to Options and Detailed Methodology

Introduction

In developing the approach described in this report, a number of different approaches were considered and tested and these are described in further detail below. Once an approach had been decided upon, the option was further developed into a detailed methodology which is outlined in section five of the report. Further detail on this methodology and its development is set out here.

Different Approaches to Options

In order to be sure options were being developed in the most appropriate way for marine planning, six approaches were initially developed. The major challenge was to design a process for building coherent sets of plan policies for a set of cross-cutting objectives, in as simple, clear and efficient a manner as possible. An internally coherent set of plan policies is one where all policies can be implemented alongside each other and that deliver a combination of solutions to the issues identified through the planning process to date. This could mean that some issues are dealt with more thoroughly than others in one set of policies, though a different set of policies could be developed that deal with the issues differently**.**

The approaches were 'tested' by using a combination of objectives and sector-level issues to see what was produced, how results differed and what implications this had for the approach. All the approaches used the objectives, core issues and sector or topic-level issues as inputs to the options process.

In summary, the six approaches are as follows:

1. **Theme up!:** For each theme, identify the specific issues for each activity under each core issue (there may not be an issue for every theme/core issue). Draft plan policies which support or positively address these issues ie strong policies, but that do so with regard to other objectives and issues under that theme.
2. **The Mixing Desk:** Draft plan policies of varying strength to address the issues under the themes. Plan policies for one theme will be much stronger, clearly prioritising that theme. All policies must be developed with regard to the full range of objectives and issues, so that the needs of other sectors and topics can be taken into account.
3. **Draft policies of varying strength** (low, medium, high strength to address the issue) for all issues for each sector or topic under the relevant objectives.
4. **Draft solely prescriptive policies** that take the interpretation of relevant national and local policy as far as possible in addressing the core issues and specific issues.
5. **Draft plan area policies that address the issues** and that are relevant across the whole plan area. These could be criteria based (like in the East), but would have to be able to be used across the whole plan area (and therefore may be weaker in order to be applied uniformly).
6. **Draft sub-area policies that address the issues**, but do so in a way that fits the evidence for a sub-area. Note, the sub areas should be reflected in the

evidence for the core issues and the specific issues a policy is trying to address.

Selected approach

The key piece of learning from this development and testing phase is that there was not as much variation in the results (the plan policies) produced from applying the different approaches as may have been expected. This comparison of the approaches has also shown that some are not exclusive and that some of the approaches, (such as the level of prescription or sub-area approach) could be used as tools to help develop policies to address the issues under other approaches. It appears that the objectives of the plan and the issues being addressed have more of a bearing on the policy responses than the approach taken. The approaches do differ in some respects though, relating primarily to:

a) the point at which they test one policy vs another, to ascertain how realistic it would be to group particular policies together.
b) the way that they provide an overall coherent narrative and justification for developing an option in a particular way (which will also potentially affect decisions about which policies have priority should policies conflict during development of an option).

To illustrate this, although all approaches start by looking at the objectives and the issues, followed by drafting of plan policies to try and address them, approaches 1 and 2 both require a level of testing of policies against each other as the policy is being developed. This means that some of the policies will need changing as they are tested against each other, as not all policies can be given priority, particularly where they may be competing for space. This results in a fully tested set of policies covering the issues relating to all objectives (prioritised by a theme) for the mixing desk and sets of policies tested across one theme (and related objectives) only (but assuming that theme has priority) for the theme up! approach.

The other approaches wait until after the plan policies have been drafted (according to the requirements of that approach) before testing them. It is not however, possible to develop sets of plan policies (different plan options) that all fit together and are coherent (ie all plan policies can be delivered alongside all others in the set) without testing the plan policies against each other.

In all approaches there is a step, which looks at testing the policies against each other, to see how they fit as a coherent whole. This step means that different variations on policies are needed in order to develop more than one set that addresses all the issues, but that does not lead to conflicting policies.

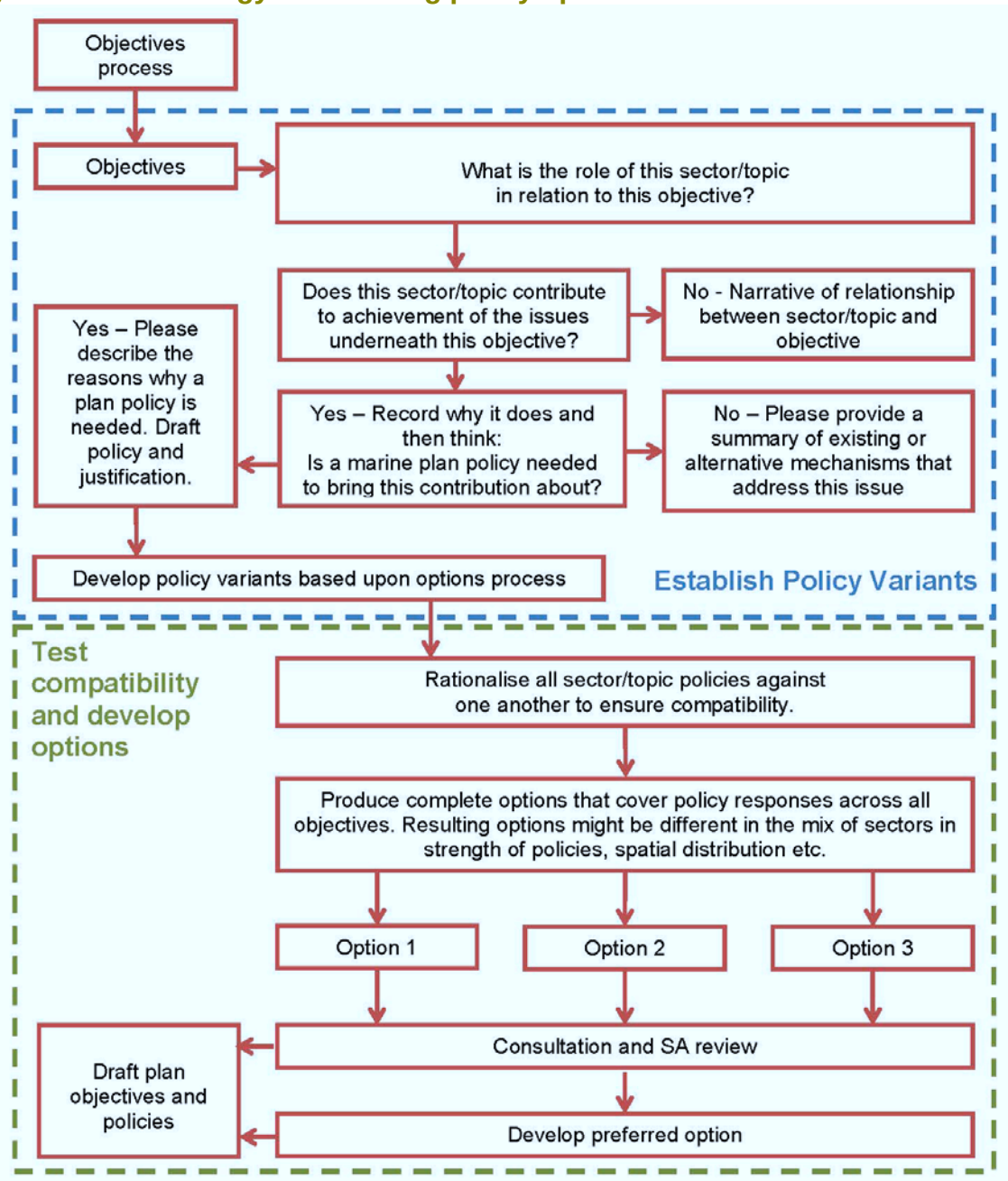
In testing the different approaches, it became clear that although the end result was similar, they varied in terms of their complexity and the amount of work that was needed in any one stage of development. Approaches 1 and 2, primarily because they relied upon the themes, are those which needed most explanation. Approach 3 seems the most intuitive, particularly to those who have been involved in that policy area. Approaches 4, 5 and 6 are clear, but because not every issue needs to be dealt with in the same way, need more explanation and are not so easy to develop polices to address every issue.

Therefore approach 3 (draft strong, medium and weak policies) was taken. This approach gives the best balance of deliverability and clarity as well as producing a quality result to develop into a marine plan.

Detailed Methodology for Selected Approach

Once an approach had been decided upon the methodology for devising policy options was developed further and is set out in the diagram below (figure 2).

Figure 2: Methodology for devising policy options



This process was undertaken for each sector or topic and appropriate policy variants devised through the methodology outlined in phase one of this diagram. Where policies were not necessary or could not realistically be designed to address an issue, a justification and signposting narrative was produced. Where it was decided that a policy was needed to address the issues identified, authors attempted to draft

a ‘high’, ‘medium’ and ‘low’ strength policy variant. Under some policies it was then policy to identify monitoring indicators to assist in the implementation of these policies. However, at this early stage in policy development this was not possible for every policy and in some cases, this will be developed as the policies are further refined.

Each policy then underwent a process of compatibility checking as part of phase 2 of this process. This sought to answer two questions,

- **“Would it be possible to make a decision in line with my policy variant as well as other policy variants developed for other sectors within the objective?”**
- **“Could a decision be made using this policy alongside others in the option?”**

In order to answer the first of these questions it was necessary to complete a table that assessed how a policy variant could be used to make decision and whether this was compatible with being able to make decisions using variants of other policies. The conclusions of this assessment resulted in one of the following codes being applied to each policy variant when compared to variants for other policies:

C	Policy variants are **compatible**.
PC	**Possibly Compatible** – Policy variants appear to be compatible with one another but clarification is required.
CC	**Conditionally Compatible** – Policy variants are compatible with one another but only where certain conditions apply.
NC	**Not Compatible** – Policy variants are not compatible with another.

Each code was accompanied by explanatory text setting out why conclusions had been reached. The following table illustrates the format used with one section completed to demonstrate the categorisation process.

Objective X	L	M	H	L	M	H	L	M	H
L				C	C	NC			
M				C	C	CC			
H				C	PC	NC			
L									
M									
H									
L									
M									
H									

Once tables were completed for each objective, a cross comparison and consistency check was undertaken which considered, and where appropriate revised, codes for each policy variant. The outcome of this process was a simple indication of which policy variants:

- Could be used together for development of an option;

- Could be used providing conditions were in place (these were considered compatible on the assumption that conditions would be described in more detail in any final plan;
- Could not be used in the same option.

All the different policy variants under each objective were reviewed to ensure they responded to the core issues identified in the South Plan Analytical Report and therefore were appropriate in terms of delivering the objective. Any gaps identified were filled at this point with development of new policy variants as necessary.

Designing Options

With policy variants confirmed and compatibility checked against each of the other sectors or topics under an objective, development of the constituent parts of options was complete. Three plan options were then designed, each delivering the draft marine plan objectives as a whole but distinct from one another in terms of how the different combinations of policies achieve this.

In identifying distinct options; we applied the following characteristics in each case when selecting combinations of policy variants:

1. A high strength option, one that includes the highest possible number of high-strength policies but in so doing includes clauses in some policies, allowing an applicant to state the case for proceeding with a proposal even when it does not conform with a policy. There is no guarantee that if a case is stated, it will be successful, particularly as the high-strength polices require a greater level of consideration across all policies than for medium and low-strength policies, which means that greater weight may be attached to any impacts identified. This leads to a greater degree of certainty that the intent of the policy and its desired outcome are more likely to be realised in most, but not all, cases.

2. An option that looks to find the middle ground across objectives (and therefore contains primarily medium strength policies). This option most closely resembles the East Inshore and Offshore Marine plans, in terms of phrasing and strength of policies and in terms of the likelihood of the outcomes gained from the policies. Because the requirements in the policies are less strong, there is more chance that a case can be made to proceed with a proposal or activity even if it is not in line with a policy, therefore outcomes from the policies are less certain and there may be more scope for variation in how they are applied.

3. An option that seeks to be more prescriptive and looks to achieve more certain outcomes for issues that have been highlighted as particularly important for the South marine plan areas. These primarily relate to:
    a. the protection of the environment (both for its intrinsic value, the ecosystem services it provides and to help sectors reliant upon it for some of their appeal, such as tourism and recreation),
    b. a number of sectors of very high economic or social importance, namely:
        i. Tourism and recreation
        ii. Shipping
        iii. Fishing
        iv. Aggregates

This option provides more certainty by removing in the policies for the sectors and topics above, the room for cases to be stated to go against a policy. This provides the highest degree of certainty that an outcome for a policy will be achieved for these sectors or topics. In so doing, it means that for other sectors and topics, they can only be compatible with the above sectors and topics through a lower-strength policy that allows for room for the policy to be discounted in a decision. This option is therefore and mix of strengths of policy and involves a degree of trade-offs between sectors and topics.

These options were developed using experience from engagement with stakeholders and knowledge of the issues relevant to the South Marine Plan areas. To illustrate this, option 3 takes those sectors and topic which are reflected in the issues as being characteristic and of primary important to the future of the plan areas. This is based on evidence of economic and social value presented in the South Plan Analytical Report, plus assessment of the state of the environment of the plan areas and the importance of a healthy environment that is apparent in national and local policy as well as in the views of stakeholders. Option 2 represents a plan which is similar to the East Marine Plans and reflects the need for flexibility that is a response to the uncertainty attached to the predicted development of sectors and topics shown in the South marine plan areas futures analysis[36]. Option 1 represents the desire raised by some stakeholders to have a plan that required a greater level of consideration of the needs of other sectors and topics in decision-making that results in a greater level of certainty of outcome with a consequent loss of flexibility in decision-making.

The options were then built, policy by policy, from Objective 1 through to Objective 15, according to the three rationales above. Before putting a policy into an option, it was tested against all other policies in the option to see if it was compatible with them.

- **"Could a decision be made using this policy alongside others in the option?"**

This question was used to test whether the policy that was being added to the option was compatible with those already in it. If a policy was not able to be used, then a different strength version was selected and tested in the same manner until a compatible one was reached. This ensured that the options were compatible overall and ensured that options were compatible across all objectives.

This process was iterative and in some cases a policy that had already been added to an option, would be removed and replaced with a different strength variant. This ensured that the most appropriate mix of polices was included for that option and avoided any bias towards the earlier objectives, as these were the policies that were tested and added to an option first.

As the options policy is iterative, the policies themselves may change as a result of engagement with stakeholders and feedback received through the sustainability appraisal. It should be noted that at this stage, those policies presented are in draft

[36]http://webarchive.nationalarchives.gov.uk/20140108121958/http:/www.marinemanagement.org.uk/evidence/1039.htm

format and once a preferred option is selected, the policies within that option will undergo significant refinement. Feedback received from this consultation will assist in selection of a preferred option, which will form the basis of the South Marine Plans.

Annex 3 – Table of options narratives

Area addressed	Option 1	Option 2	Option 3
Climate Change	Activities within the South marine plan areas have increased their contribution to climate change mitigation, through the deployment of low-carbon and renewable technologies, intelligent design and location of proposals, and through mitigation of unavoidable carbon emissions. Increasing numbers of proposals have built in climate resilience beyond their projected lifespan, without harming the environment's resilience to the effects of climate change. Negative effects on coastal change have been avoided, and coastal squeeze has been lessened overall, though in some places it is still an issue. Emphasis placed upon the importance of ecosystem services relating to carbon sequestration and flood defence has ensured the continued provision of these vital services, giving benefits particularly to coastal and estuarine areas, and helping to protect vulnerable	**Activities within the South marine plan areas are minimising their contribution to greenhouse gas emissions, limiting negative climate change impacts.** Negative effects on coastal change are, on the whole avoided, and coastal squeeze has been lessened overall. **There are some areas though where coastal squeeze is being exacerbated, with localised negative social and environmental effects.** There is an increase in the number of proposals that build in climate resilience and impacts on the environment's resilience to the effects of climate change are generally avoided, minimised or mitigated in proposals. **Some** beneficial opportunities arising from climate change have been seized, improving social and economic conditions without harming the resilience of the environment to climate change. Emphasis placed upon the	Activities in the South marine plan areas have increased their contribution to climate change mitigation, through the deployment of low-carbon and renewable technologies, intelligent design and location of proposals, and through mitigation of unavoidable carbon emissions. There are increasing numbers of proposals that build in climate resilience beyond their projected lifespan without harming the environment's resilience to the effects of climate change. Negative effects on coastal change have been avoided, and coastal squeeze has been lessened overall, though in some places it is still an issue. Emphasis placed upon the importance of ecosystem services relating to carbon sequestration and flood defence has ensured the continued provision of these vital services, giving benefits particularly to coastal and estuarine areas, and helping to protect vulnerable

Area addressed	Option 1	Option 2	Option 3
	communities from the effects of climate change. Beneficial opportunities arising from climate change have been seized, improving social and economic conditions without harming the resilience of the environment to climate change.	importance of ecosystem services relating to carbon sequestration and flood defence has ensured the continued provision of these vital services, giving benefits particularly to coastal and estuarine areas and helping to protect vulnerable communities from the effects of climate change. **However, in some cases, proposals have been authorised even though they have an impact on these ecosystem services, meaning that the ecosystems providing these services are not fulfilling these roles as effectively as they could.**	communities from the effects of climate change. Beneficial opportunities arising from climate change have been seized, improving social and economic conditions without harming the resilience of the environment to climate change.
Marine Protected Areas (MPAs)	Overall, the ecological coherence of the Marine Protected Area network has been taken account of in proposals, ensuring that the network has been able to remain resilient to pressures placed upon it by new proposals. The ability of individual Marine Protected Areas to respond to adverse impacts from climate change has not been compromised. Where climate change has been identified as the cause for deterioration in site condition, site	**As some proposals have been authorised in close proximity to Marine Protected Areas, and activities continue to cause pressure to some features, individual Marine Protected Area and the network are less able to adapt to change and respond to adverse impacts (from for example, climate change).** Particular attention is being paid to monitoring for loss or change in features, where climate change is	Overall, the ecological coherence of the Marine Protected Area network has been taken account of in proposals, ensuring that the network has been able to remain resilient to pressures placed upon it by new proposals. The ability of individual Marine Protected Areas to respond to adverse impacts from climate change has not been compromised. Where climate change has been identified as the cause for deterioration in site condition, site

Area addressed	Option 1	Option 2	Option 3
	boundaries have been changed to improve resilience. A well-managed, ecologically coherent network is in place; shortfalls were able to be addressed by early safeguarding of areas outside of them that are important for the overall coherence of the network and halting habitat loss.	identified as a potential cause. Areas outside of Marine Protected Areas that are important for the overall coherence of the network have been considered and impacts upon them have been avoided, minimised and mitigated **wherever possible**. Appropriate weight has been attached to features that are important to address **overall** shortfalls in the network, however i**n a limited number of cases, features may be compromised and shortfalls have occurred, affecting the ecological coherence of the network.**	boundaries have been changed to improve resilience. A well-managed, ecologically coherent network of Marine Protected Areas is in place; shortfalls were addressed by early safeguarding of areas outside of Marine Protected Areas that are important for the overall coherence of the network and halting habitat loss.
Good Environmental and Good Ecological Status	The achievement of good environmental status and good ecological status under the Marine Strategy Framework Directive and Water Framework Directive respectively has been assisted, with proposals incorporating factors that have helped achieve established targets. In particular, issues of cumulative impacts are considered more in decision making, and proposals are minimising impacts	The achievement of good ecological status and good environmental status has been assisted , with proposals encouraged to **take account** of what is needed to achieve these **Cumulative impacts across proposals in the South marine plan areas, and adjacent terrestrial and marine areas, has occurred sometimes as, although they are considered, they cannot always be addressed**. Provision of	The achievement of good environmental status and good ecological status under the Marine Strategy Framework Directive and Water Framework Directive respectively is assisted, with proposals incorporating factors that help achieve established targets. **There is an increased emphasis on the need to minimise cumulative impacts across proposals** and impacts upon the

Area addressed	Option 1	Option 2	Option 3
	upon the ecosystem of the South marine plan areas with beneficial effects. Through adequate provision of facilities and support for additional activities, marine litter is reduced, whilst introduction of non-indigenous species by new structures and recreational boat fouling, amongst other vectors, is often being considered in decision making, This has resulted in fewer cases of non- indigenous species being introduced.	facilities and support for additional activities are reducing marine litter **(though this is not uniform across the South marine plan areas)**.**Introduction of non-indigenous species has been constrained to an extent, through consideration of the effect of new structures and recreational boat fouling in decision making. This has meant impacts upon existing species and habitats remain.**	ecosystem of the South marine plan areas are being minimised, with beneficial effects. Through adequate provision of facilities and support for additional activities, marine litter is being reduced, introduction of non-indigenous species by new structures and recreational boat fouling, amongst other vectors, **is being minimised**, This has resulted in **very few** cases of species being introduced and has helped to protect the ecosystem of the South marine plan areas.
Ecology and Ecosystem Services	The importance of space for nature is better recognised in decision making. Adverse impacts upon biodiversity and upon habitats that provide ecosystem services have been limited to a great extent, with remaining impacts minimised and mitigated in all but exceptional circumstances. Habitats and species are more adaptable and resilient as allowances are made in most cases for the need for species to migrate, and the need to maintain connectivity between habitats. The extent of priority habitats has also	**Adverse impacts upon coastal habitats have been minimised, and opportunities to enhance biodiversity, including through provision of opportunities for habitat migration have been pursued in some cases. This has left some habitats isolated and at risk of decline, whilst others have adapted to impacts more effectively and are flourishing.** The function of habitats is considered, and **overall levels of ecosystem service provision**	The importance of space for nature is recognised **to the highest extent** in decision making. Adverse impacts upon biodiversity and upon habitats that provide ecosystem services have been **limited in all cases, with remaining impacts minimised and mitigated.** Habitats and species are more adaptable and resilient as allowances are made in most cases for the need for species to migrate, and the need to maintain connectivity between habitats. The extent of priority habitats has also increased **quickly**,

Area addressed	Option 1	Option 2	Option 3
	increased, increasing levels of important ecosystem services. The above outcomes have attendant benefits for sectors such as tourism that rely upon a healthy environment and also provide increased health and well-being benefits for the population that use the South marine plan areas. Fish in particular, are protected during spawning and nursery phases of their life cycles, with only exceptional cases being allowed to have an unmitigated negative impact on spawning and nursery grounds. Localised impacts on ecosystems of dredge spoil disposal are being minimised, ensuring the continued function of ecosystems in all but the most exceptional cases.	**have been maintained, though protection for ecosystem services has not been uniform; some services have declined and some have increased**. This has brought limited benefits for sectors such as tourism and recreation that rely upon a healthy environment, as well as some health and well-being benefits for those that use the South marine plan areas. Fish in particular, **have benefited from consideration of the spawning and nursery phases of their life cycles, with only a few cases being allowed to have a negative impact on spawning and nursery activity**. **Some examples of re-use of dredge spoil disposal have occurred, reducing the impact of spoil upon ecosystems.**	increasing levels of important ecosystem services. The above outcomes have attendant benefits for sectors such as tourism that rely upon a healthy environment and also provide increased health and well-being benefits for the population that use the South marine plan areas. Fish in particular, are protected during spawning and nursery phases of their life cycles, with only exceptional cases being allowed to have an unmitigated adverse impact on spawning and nursery grounds. Localised adverse impacts on ecosystems of dredge spoil disposal are being minimised, ensuring the continued function of ecosystems in all but the most exceptional cases.
Disturbance	The adverse cumulative disturbance impacts of all proposals in the South marine plan areas is identified and avoided, minimised and mitigated in all but exceptional cases, ensuring the preservation of the unique environment of these areas. It is recognised that activities such as	The adverse cumulative disturbance impacts of proposals in the South marine plan areas has been identified and avoided, minimised and mitigated **in most cases**, ensuring the preservation of **much of** the unique environment of these areas. It is recognised that activities	The adverse cumulative disturbance impacts of all proposals in the South marine plan areas is identified and avoided, minimised and mitigated in all but exceptional cases, ensuring the preservation of the unique environment of these areas. It is recognised that activities such as

Area addressed	Option 1	Option 2	Option 3
	tourism and recreation, must be well managed to prevent adverse impacts on the healthy environment on which they rely. This is benefitting species that are sensitive to the level of noise that would otherwise have occurred as indicated by evidence on the species themselves, eg behaviour, as well on the activity. Proposals contribute to data collection, via submission to the Marine Strategy Framework Directive noise registry, increasing knowledge and understanding of noise levels and impacts. Full consideration of noise impacts by applicants and public authorities on ecosystems and other users is being achieved.	such as tourism and recreation, **should be** well managed to prevent adverse impacts on the healthy environment on which they rely. Noise issues are proactively managed, with proposals avoiding, minimising or mitigating their impact on both ambient noise levels and impulsive noise **in most cases**. **There are regular, but not comprehensive contributions** to data collection, via submission to the noise registry. **Greater consideration of noise impacts in decisions on ecosystems and other users are encouraged, with all activities given the chance to contribute evidence of noise impacts.**	tourism and recreation, must be well managed to prevent adverse impacts on the healthy environment on which they rely. Noise issues are considered, with proposals **often minimising their impact on both ambient and impulsive noise levels**, **with some benefits for mobile and migratory species.** Proposals contribute to data collection and understanding of noise issues, via submission to the noise registry. **A high level of** consideration of noise impacts by applicants and public authorities on ecosystems and other users is being achieved.
Water Quality	Water quality is improved across most of the South marine plan areas, through the identification, avoidance, minimisation and mitigation of impacts upon estuarine water quality (both at the individual proposal and at cumulative levels) and habitats and species that provide water filtration services.	Water quality is **improving slowly in most places**, **through the identification and avoidance, minimisation and mitigation of impacts upon estuarine water quality, habitats and species that provide water filtration**. **Some proposals with a negative impact are being consented**. All proposals	**Proposals have not been supported if they impact on estuarine water quality. As such, water quality has improved quickly,** through the identification and avoidance, minimisation and mitigation (both at the individual proposal and at cumulative levels) of impacts upon estuarine water

Area addressed	Option 1	Option 2	Option 3
	Only in exceptional cases have proposals with a negative impact been consented. Proposals have considered the re-suspension of sediment, and taken steps to avoid, minimise and mitigate this risk. More activities that improve water quality are consented, due to support provided by the plans alongside other relevant measures.	should consider the re-suspension of sediment, and should be taking steps to avoid, minimise and mitigate this risk, **though in some cases a compelling case is being made for not taking these steps**. Activities that improve water quality are often consented, due to support provided by the plans.	quality, and habitats and species that provide water filtration services. All proposals consider the re-suspension of sediment, and are taking steps to avoid, minimise and mitigate this risk. Activities that improve water quality are **often consented**, due to support provided by the plans.
Displacement of marine activities and Access	The social and economic benefits of new and existing marine activities have increased, through avoidance, minimisation and mitigation of displacement of other activities. This means that new proposals are, in most cases, only being supported where there is a clear demonstration of limiting impacts upon others, or mitigation of impacts. This has allowed new activities with a net benefit and minimal impact to proceed. Although this can lead to some growth in overall footprints as activities seek to avoid impacts on other activities, this is countered by positive support for co-location (see below). However, fishing, tourism and recreation, and aggregates	**Occurrences and impacts of displacement have been reduced to an extent; however, as proposals have more scope to proceed despite possible impacts, the improvement in the social and economic benefits of marine activities is hindered**. In particular, fishing, tourism and recreation and aggregates extraction have been given **some** support against displacement by other activities, through **encouragement, but not requirement** of: • avoidance of non-compatible activities in aggregate exploration and option areas and encouragement of local	The social and economic benefits of new and existing marine activities have increased, through avoidance, minimisation and mitigation of displacement of other activities. This means that new **proposals are, in most cases, only being supported where there is a clear demonstration of limiting impacts upon others, or mitigation of impacts**. This has allowed new activities with a net benefit and minimal impact to proceed. Although this can lead to some growth in overall footprints as activities seek to avoid impacts on other activities, this is countered by positive support for co-location (see below). In particular, fishing, tourism,

Area addressed	Option 1	Option 2	Option 3
	extraction have been given strong support against disturbance and displacement by other activities, through: • avoidance of non-compatible activities in aggregate exploration and option areas and encouragement of local use of aggregates • mitigation of adverse impacts of proposals upon tourism and recreation activities • avoidance, minimisation or mitigation of adverse impacts of displacement of fishing activity, encouragement of opportunities for diversification and increasing the resilience of the fishing industry This has allowed for continued benefits to be derived from these economically and socially significant activities. Recreational access is being managed to ensure that it is	usage of aggregates • avoidance, minimisation or mitigation of adverse impacts of displacement of fishing activity, and encouragement of opportunities for diversification and increasing the resilience of the fishing industry • avoidance, minimisation or mitigation of negative impacts of proposals upon tourism and recreation activities. This means that although displacement is discouraged, it still occurs, with negative social and economic impacts on those sectors that are displaced and some negative environmental impacts. **Access to the marine environment is being maintained, with most changes only being temporary.**	recreation, and aggregates extraction are given support against displacement by other activities, through: • avoidance of non-compatible activities in aggregate exploration and option areas, **with no exceptions** • avoidance, minimisation or mitigation of adverse impacts of proposals upon tourism and recreation activities, **with only exceptional examples of displacement being consented** • avoidance, minimisation or mitigation of adverse impacts of displacement of fishing activity, **with no exceptions** and **support of all** opportunities for diversification and increasing the resilience of the fishing industry. Recreational access is being managed to ensure that it is appropriate and impacts on access

Area addressed	Option 1	Option 2	Option 3
	appropriate and impacts on access to the marine environment, particularly in relation to tourism and recreation, is included in proposals, supporting the continuation of tourism and recreation activities in most cases. Any negative impacts on access for tourism and recreation have been avoided, minimised or mitigated, with proposals containing negative impacts only being consented in exceptional circumstances.		to the marine environment, particularly in relation to tourism and recreation, is included in proposals, supporting the continuation of tourism and recreation activities **in most cases**. Any negative impacts on access for tourism and recreation have been avoided, minimised or mitigated, **with proposals containing negative impacts only being consented in exceptional circumstances**.
Heritage Assets	Newly-discovered and non-designated heritage assets are often being protected through support for avoidance of impacts upon them. The knowledge of, and protection for, heritage assets in the South marine plan areas has been improved, through recommendation of archaeological surveys where heritage assets are known or discovered, and through avoidance, minimisation and mitigation of impacts.	Newly-discovered or non-designated heritage assets have been **protected to some extent so far through encouragement** of a full survey of any impacts and avoidance of harm to the elements which contribute to the significance of the heritage asset. Where harm cannot be avoided, it should be minimised, mitigated or the public benefits of the case for proceeding should be stated. **This is resulting in some small gains for heritage assets, where newly-discovered and non-designated assets are being understood better and in**	Newly-discovered and non-designated heritage assets are often being protected through support for avoidance of impacts upon them. The knowledge of, and protection for, heritage assets in the South marine plan areas has been improved, through recommendation of archaeological surveys where heritage assets are known or discovered and avoidance, minimisation and mitigation of impacts.

Area addressed	Option 1	Option 2	Option 3
		some cases are afforded better protection.	
Seascape	Adverse impacts upon seascape are being avoided, minimised and mitigated by proposals in most cases. In some cases, impacts upon seascape are occurring.	Adverse impacts upon seascape are being avoided, minimised and mitigated by proposals in most cases. In some cases, impacts upon seascape are occurring.	Adverse impacts upon seascape are being avoided, minimised and mitigation by proposals in most cases. In some cases, impacts upon seascape are occurring.
Co-location and mitigation of conflicts	Through the positive consideration of co-location in all proposals, and the requirement to avoid, minimise and mitigate for impacts upon the ability of other activities to use the same space, the overall footprint of proposals is being limited. Where exceptions arise co-location is not being considered. Particular activities have been considered for a level of protection from the impacts of other activities, such that: • defence activity should have been maintained • adverse impacts from activities in tidal energy resource areas have been avoided, minimised and mitigated and only consented where the case for proceeding was stated	As proposals are encouraged to consider co-location and avoid, minimise and mitigate impacts upon the ability of other activities to use the same space, **the overall footprint of proposals is growing at a low rate**. Where there is a rationale for doing so, co-location is not being considered, though this is the exception and not the rule. Particular activities have been considered for a level of protection from the impacts of other activities, such that: • defence activity **should not have** been compromised • impacts from activities in tidal energy resource areas **should not have been detrimental to existing and proposed tidal energy**	**As some sectors (such as tourism and shipping) have been given a higher level of priority, the requirement for all proposals to consider co-location and their footprint has been reduced. This amounts to an increase in footprint size for some sectors and a decrease for others, where they are competing with a priority sector.** Particular activities have been considered for a level of protection from the impacts of other activities, such that: • defence activity **has** been maintained • impacts from activities in tidal energy resource areas **should not have been detrimental** to proposed and existing tidal energy

Area addressed	Option 1	Option 2	Option 3
	and was compelling • shipping routes are protected from activities that reduce under-keel clearance • adverse impacts upon important commercial vessel and passenger ferry routes are not being supported in most cases • adverse impacts on ports are not being supported, in most cases • impacts of other proposals upon areas licenced for aggregates extraction, or where an application is in process are avoided, minimised or minimised , and where sub-sea infrastructure is proposed in areas of future opportunity for aggregates, any aggregate extraction should have taken place first • avoidance or mitigation of impacts upon dredging (and disposal) access and enhancement opportunities • adverse impacts upon the	**generation activity** • shipping routes are **considered** by proposals and those that include static sea-surface infrastructure or reduce under-keel clearance **are not being authorised except in exceptional circumstances** • commercial vessel safety should be respected and passenger ferry routes should be considered in proposals with negative impacts avoided, minimised or mitigated, **with approval where this cannot happen a compelling case exists** • current activity and future opportunity for expansion of ports **have not been interfered with, except where there is a compelling case to do so**. **Impacts upon areas licenced for aggregates extraction, or where an application is in process, are being considered**	generation activity • shipping routes have been protected from activities that reduce under-keel clearance, important commercial vessel and passenger ferry routes are considered in proposals (with those that have an overall negative impact only being approved in exceptional circumstances) • **adverse impacts on ports are not being supported, in most cases** areas licenced for aggregates extraction, or where an application is in process **are protected for aggregates extraction and compatible proposals** • where sub-sea infrastructure is proposed in areas of future opportunity for aggregates**, any aggregate extraction should have taken place first** • **effects upon dredging and disposal activity from other proposals, are often being mitigated, impacts upon**

Area addressed	Option 1	Option 2	Option 3
	current and future ability of the aquaculture sector to maintain and expand production are avoided, minimised or mitigated • adverse impacts upon saline aquifers with potential for carbon capture and storage have been avoided or minimised. All of this means that steady economic growth across many sectors of the economy is being supported.	• **effects upon dredging and disposal activity from other proposals, are often being mitigated** • impacts upon the current and future ability of the aquaculture sector to maintain and expand production have been avoided, minimised or mitigated and where this is not possible, **the case for proceeding has been stated** • impacts upon saline aquifers with potential for carbon capture and storage have been avoided or minimised **This has led to economic growth in most sectors, but levels have been variable and harder to predict on a sector by sector basis. This has hit business confidence and meant investment overall have been less consistent than they might have been.**	**the future ability of the aquaculture sector to maintain and expand production have been avoided** • impacts upon saline aquifers with potential for carbon capture and storage have been avoided, minimised or mitigated. This further limits the amount of co-location which is occurring, with an overall increase in the amount of space needed for proposals.
Infrastructure	The management of existing, and provision for new, infrastructure to	The management of existing, and provision for new, infrastructure to	The management of existing, and provision for new, infrastructure to

Area addressed	Option 1	Option 2	Option 3
	support proposals in the South marine plan areas is being achieved. This infrastructure is in some cases vital to support the continued function and future growth of sectors such as renewables and telecoms and to help ensure future electricity distribution. In particular, support for proposals that help improve flood risk management on or adjacent to floodplains, or on natural features that play a role in coastal management, has had a positive effect on flood risk. There is adequate provision for infrastructure on land which supports activities in the marine area, and vice versa, giving clarity to industry (through better coordination of infrastructure requirements and decision making) and other users of the South marine plan areas. Support is being given for infrastructure that aids the aquaculture industry, allowing it to flourish in appropriate locations. Consideration is being given to avoiding sites identified for subsea cable landfalls for both the telecoms and power industries, though it is sometimes the case that those sites	support proposals in the South marine plan areas **has been achieved to a limited extent**. This infrastructure is in some cases vital to support the continued function and future growth of sectors such as renewables and telecoms and to help ensure future electricity distribution. In particular, the impacts of proposals on or adjacent to floodplains, or on natural features that play a role in coastal management, **are often considered** by decision makers, **with some decreased** risk of flooding. There is **often** provision for infrastructure on land which supports activities in the marine area, and vice versa, giving **some** clarity to industry (through **some** coordination of infrastructure requirements) and other users of the South marine plan areas. Support is **sometimes** given for infrastructure that aids the aquaculture industry, allowing **some projects to prosper**. Consideration is being given where possible to avoiding sites identified for subsea cable landfalls for both the telecoms and power industries, though it is sometimes the case that	support proposals in the South marine plan areas is being achieved. This infrastructure is in some cases vital to support the continued function and future growth of sectors such as renewables and telecoms and to help ensure future electricity distribution. In particular, support for proposals that help improve flood risk management on or adjacent to floodplains, or on natural features that play a role in coastal management, has had a positive effect on flood risk. There is now **often** provision for infrastructure on land which supports activities in the marine area, and vice versa, giving some clarity to industry (through **some** coordination of infrastructure requirements) and other users of the South marine plan areas. Support is being given for infrastructure that aids the aquaculture industry, allowing it to flourish in appropriate locations. **Sites identified for subsea cable landfalls for both the telecoms and power industries are being avoided, which has resulted in economic**

Area addressed	Option 1	Option 2	Option 3
	cannot be avoided. Where possible, burial of new cables has occurred to avoid impacts on other sectors and ensure economic benefits have been realised.	those sites cannot be avoided. Where possible, burial of new cables has often occurred to avoid impacts on other sectors and ensure economic benefits have been realised.	**benefits for these sectors.** Where possible, burial of new cables has occurred to avoid impacts on other sectors and ensure economic benefits have been realised
Support for regeneration and diversification of activities that improve socio-economic conditions	Employment opportunities for the local community have been created and enhanced, bringing social and economic benefits to the South marine plan areas and communities close to them. Skills development in particular has been a focus, preparing the workforce better for the changes that have happened whilst plans have been in place. The economic certainty of, and scope or diversity of social benefit from, offshore wind and tidal development has increased. Additional tourism and recreation activities have developed, in particular where these have increased usage of facilities beyond typical usage patterns, extending and diversifying the tourism offer.	Wherever practical proposals have facilitated improved access to education and employment opportunities for the local community. Proposals increasing the economic certainty, scope or diversity of social benefit from, offshore wind and tidal development are often being supported. Proposals are considering ways to support, promote and facilitate existing tourism and recreation activities.	All proposals are demonstrating measures to create and enhance employment opportunities for the local community**, though this is working more effectively for those sectors that have been prioritised, as they have the most opportunity**. **Although national policies continue to drive offshore wind and tidal energy generation, there has been limited additional support through the plans to steer infrastructure developments at the local level**. **Support, promotion and facilitation of additional tourism and recreation activities, in particular where this increases usage of facilities beyond typical patterns have been supported, resulting in an increase in the length of the tourist season and the diversity**

Area addressed	Option 1	Option 2	Option 3
			of tourism and recreation activities that are being undertaken in the South marine plan areas. This is having significant economic and social benefits, reducing seasonality of some jobs, increasing job security in the process and increasing prosperity in areas that have high levels of tourism and recreation activity.

Annex 4 – Definitions, adapted from Defra (2009) and Planning Advisory Service guidance

High Level Marine Objectives – are for the marine area as a whole as set out in the Marine Policy Statement and Defra (2011), sometimes labelled as "principles" or "benefits", with the overall aim of contributing to delivering sustainable development. For example, "Achieve integration between different objectives", "greater certainty for developers" and "ensuring use of resources is 'within environmental limits". After consultation these have been adopted as the goals for the South marine plans.

Issues - Issues are opportunities or threats that affect achievement of the UK Vision and the Marine Policy Statement HLMOs in the South marine plan areas.

Themes – broad groupings derived from the HLMOs and used to categorise issues.

Core Issues – The core issues are those arising from the present, or potential future, situation that are influencing major changes in the plan areas and which can be addressed partly or wholly by marine planning in some way.

Vision – is a statement about what will characterise an area at a given point in the future: what will the area look like (once plan policies have been applied and goals and objectives achieved)?

Goal – a high-level statement of a general desired outcome that is intended to be achieved. Goals provide the umbrella for development of objectives and reflect the principles upon which subsequent objectives are based. In terrestrial planning goals are sometimes referred to as "strategic objectives". In the South marine plans goals are derived from the South Plans Analytical Report themes.

Objective – a more detailed statement of desired outcomes or observable behavioural changes that the plans are seeking to achieve. Objectives represent achievement of a Goal, and identify where marine plans are able to "add value" in terms of initiating or complementing responses to core issues. They are (as far as practicable) specific, measurable, achievable, relevant and time-bound ("SMART"). Objectives can include targets, such as interim steps to achieving the outcome and goal. They provide a framework within which policies are to be set out. In the South marine plans objectives are derived from the South Plans Analytical Report core issues.

Non-Marine Plan Matters – plans, decisions and management measures that affect the marine plan area, and are already existing, in development or required without need for an operative marine plan. Such activities, together with the marine plan objectives, contribute to achievement of the goals.

Plan policy – supports the delivery of the marine plan objectives and addresses the issues outlined.

Signpost – Explicit links to the non-marine plan matters. This avoids replication of policies and ensures new marine plan policies and supporting information focus on issues where they can add value or are not otherwise addressed.