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Review of marine plan monitoring indicators and their associated logic chains: review of logic models (MMO 1151)



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MMO1151: Review of marine Plan monitoring indicators and their associated logic chains

15 June 2018



LIVE Economics Ltd



Report prepared by: ICF Consulting Services Limited in association with Live Economics Limited and ABP Marine Environmental Research

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Acronyms

Defra	Department for Environment, Food and Rural Affairs
HLMO	High Level Marine Objectives
LM	Logic model
MCAA	Marine and Coastal Access Act
MMO	Marine Management Organisation
MNR	Marine Noise Registry
MPA	Marine Protected Area
S. 58	Section 58 (of the MCAA)

Executive Summary

ICF, Live Economics and ABPmer undertook a review of the MMO's logic model(s) and proposed indicators for the draft South Marine Plan^{1 2} and a review of the indicator gaps for the draft South Marine Plan and East Marine Plan³.

Review of the draft South Marine Plan logic model

The draft South Marine Plan has one overarching logic model for the marine plan. The model provides a framework used to guide the identification of monitoring indicators.

The review of the draft South Marine Plan logic model focused on the adequacy of the specification of the logic model. It examined opportunities to simplify the logic model and unpack steps within the model which were potentially irrelevant.

The draft South Marine Plan logic model included elements that were relevant for the policy decision to introduce marine plans themselves. This decision has been taken. It is recommended that these are removed into a separate logic model. This removes elements not relevant to ongoing monitoring and simplifies the draft South Marine Plan logic model.

We identified a number of activities, outputs and outcomes that are specific to proposals. These are taken forward at the local level whereby the relevant draft South Marine Plan policies are applied in the decision making processes. They are not about the application of the draft South Marine Plan as an enabler in the delivery process but about the delivery itself. We have removed these elements from the draft South Marine Plan logic model and integrated them into the objective/policy level logic models. This simplifies the draft South Marine Plan logic model significantly and provides a clear line of sight for its role in achieving the HLMOs.

Review of the draft South Marine Plan objective-level logic models

At the objective level the review found lack of clarity of the logical steps following through from the inputs to outcomes. The reasons were:

- Inputs are not sufficiently detailed at the level of those organisations and people on the ground who achieve outcomes (for example diversify the economy, provide access to the coast etc.)
- Key steps in policy application and project delivery are missing.

¹ Marine Management Organisation (2017) South Marine Plans. Available online at www.gov.uk/government/collections/south-marine-plans

² This review was conducted on the draft South Marine Plan, which has since been adopted on 17 July 2018. Adoption of the plan does not change the relevance of the findings presented in this report. References to the 'draft' South Marine Plan remain in this report to reflect the Plan's status at the time of the review.

³ Marine Management Organisation (2017) East Marine Plans. Available online at www.gov.uk/government/publications/east-inshore-and-east-offshore-marine-plans

These two shortcomings lead to a lack of line of sight between inputs and outcomes/ impacts. This results in confusion with respect to the key inputs, activities and outputs required for the delivery of outcomes.

To introduce line of sight, the policies were analysed and five distinct types⁴ identified:

- Type A: Policies supporting proposals which would achieve outcomes
- Type B: Policies assuring that harm to policy outcomes of type A were avoided
- Type C: One policy ensuring local authorities deal with litter
- Type D: One policy assuring a redrawing of marine protected area (MPA) boundaries
- Type E: One policy requiring proposals generating impulsive sound to contribute data to the Marine Noise Register.

Individual plan objectives include different types of policies. The fact that some plan objectives include different types of policies (i.e. policies of both Type A and Type B), means that the inputs are blurred, reducing or completely removing the potential for line of sight within a single logic model.

The review therefore designed logic models for each type of policy, working backwards from the impacts and policy outcomes. These logic models:

- kept in mind that a policy that supports a proposal (Type A, see Figure 3) will require different types of inputs, activities and outputs to deliver compared to a policy which ensures the avoidance of harm (Type B, see Figure 4)
- identified two levels of inputs required for Types A and B. One from the proposers and one from those reacting to and cooperating with them
- clarified that all proposals will be delivered through a supporting policy of Type A and will be assessed against other policies of Type B to ensure harm is avoided
- recognise that Type C and D policies (see Figure 5 and Figure 6) require inputs from specific parties, and have very specific activities with resulting outputs and outcomes. These are best drawn out in simple Type C and Type D logic models
- made clear that real world outcomes such as higher skills, protected heritage etc. arise out of the consideration of a number of policies, combining supporting and avoiding harm Type A and B policies e.g. where there is a policy which promotes aquaculture proposals and a policy which seeks to ensure non-aquaculture proposal don't impact on sustainable aquaculture areas, both seek the same real world outcomes related to the performance of the aquaculture sector
- enabled a monitoring system that allows measurement at the outcome level at the same time as ensuring that all relevant policies were considered according to S. 58 of the Marine and Coastal Access Act.

Implications for monitoring

The draft South Marine Plan monitoring framework sets out a target set of indicators. The review found that:

⁴ The published South Marine Plan includes a categorisation of policies (Table 2, p32). The categorisation has some similarities with the typology presented here. However the two differ as the categorisation in the plan documented was not designed for the purposes of supporting logic modelling.

- The current set of proposed indicators is large. It is likely to be overly burdensome, creating significant resource demands (particularly when recognised that there will be six marine plans in all (NE, E, SE, S, SW, NW)) and reducing the added value⁵ of individual indicators.
- There are significant gaps, inconsistencies and weaknesses in the current indicator set. A more focussed approach to monitoring would enable a more coherent set of indicators to be devised with stronger added value per indicator. This would both reduce the indicator management burden and ensure that indicators provide meaningful information on which to base future marine plan reviews.

The review of the logic models has implications for how monitoring of the draft South Marine Plan, and potentially other marine plans, should be done. Two main focal areas emerge:

- Understanding the extent to which the impact of the Marine Plan is effective through application in decision making, applying all policies which are relevant for each decision (S. 58). Decisions are taken for each proposal made under the draft South Marine Plan. This is the level at which measurement/monitoring happens. The results of monitoring decision making at proposal level can be aggregated to a Marine Plan effectiveness indicator. This matches the current focus on the role of S. 58 in the Marine Plan and in the current set of indicators.
- Policy effectiveness has to be measured at the outcome level. Outcomes in this context are the real world changes which deliver the HLMOs. For example have skills improved? Is the coastal area accessible? Have sustainable fisheries been established? This will be the result of the application of a number of individual policies supporting a project (or other action), and others ensuring that harm is avoided.

Proposed Marine Plan Indicators and Remaining Indicator Gaps

Each of the proposed draft South Marine Plan monitoring indicators⁶ was reviewed by undertaking a critique of the MMO's existing indicator descriptions. On the basis of the MMO descriptions and ICF critique, report cards were then developed for each indicator. The critique found that the proposed indicators often comprised of multiple sub-indicators under a common indicator theme. As such, each indicator report card includes a headline indicator title, but may present multiple specific indicators. In total 24 indicator report cards were prepared providing details on over 80 specific indicators. In some cases recommendations are provided at the end of the report card on further work that could be carried out to address weakness or further develop the indicator(s). The critique and report cards are not included in this report.

For both the draft South Marine Plan and East Marine Plan there remain a number of policies for which it has not been possible to identify appropriate specific indicators. A review was undertaken of these policies and, where feasible to do so, suggestions

⁵ Each indicator will reflect a number of impacts of policy. All indicators put together draw a picture of a current state or situation, e.g. the socio-economic and environmental state of a coastal region. Adding more indicators to an almost complete picture will mean that the additional indicator adds less value than the first.

⁶ Excluding those which are to be derived from primary survey work

made for approaches which may be further investigated to attempt to fill some of these gaps.

Review of Marine Plan Logic Models and Indicators

1 Introduction

This report provides a review of the individual elements of the Marine Planning Logic Model and its links to policy making and monitoring, as well as the proposed indicators and indicator gaps.

The Marine Management Organisation (MMO) is responsible for the development of marine plans in English waters according to the Marine and Coastal Access Act (MCAA) 2009. This act includes a duty on the MMO to “... *agree and clarify our marine objectives and priorities for the future and to steer sea users and decision-makers towards more efficient, sustainable use and protection of our marine resources.*”⁷ Section 58 (henceforth S. 58) (Decisions affected by Marine Policy Documents) and Section 61 (Monitoring of, and periodical reporting on, implementation) are of particular importance for this review which focuses on the Logic Models of the (draft) Marine Plan itself as an enabling tool for decision making and the indicators to monitor its success⁸.

The marine plans are being prepared on a regional basis. The first marine plan - East Inshore and Offshore Marine Plans - was published in April 2014. The MMO launched a public consultation on the draft South Marine Plan in November 2016⁹. Work to develop plans for the remaining marine plan areas – North East, North West, South East and South West commenced in spring 2016.

The first part of the review is focussed on the logic models that have been constructed for the draft South Marine Plan and applies its recommendations to the East Marine Plan. It refers to the review of the *Review of the Marine Planning Monitoring and Evaluation Framework and Development of Baselines* (MMO1087) published by the MMO in 2016, and has been informed by MMO1087. The recommendations presented as a result of the review are transferable to other plan areas including the East Marine Plan and can support the MMO in enhancing its approach to logic modelling, and hence plan monitoring.

The second part of the review is focussed on the indicators proposed for the draft South Marine Plan and the indicator gaps of the draft South Marine Plan and East Marine Plan. This included a review and preparation of report cards for a sub-set of the indicators proposed for monitoring the South Marine Plan. It then considered the existing gaps in the indicator framework – for both the draft South and East Marine Plans. In conducting the review and report card work, the study drew directly on the monitoring framework for the South Marine Plan set out in MMO (2017)¹⁰.

⁷ JNCC (2010). Marine and Coastal Access Act 2009. Available online at www.jncc.defra.gov.uk/page-5230

⁸ HM Government (2009). Marine and Coastal Access Act 2009. Available online at www.legislation.gov.uk/ukpga/2009/23/section/61

⁹ This review was conducted on the draft South Marine Plan, which has since been adopted on 17 July 2018. Adoption of the plan does not change the relevance of the findings presented in this report. References to the ‘draft’ South Marine Plan remain in this report to reflect the Plan’s status at the time of the review.

¹⁰ MMO (2017). Draft South Marine Plan Approach to Monitoring Annex of Indicators. June 2017

This document is structured as follows:

- Section 2 provides a headline review of the draft South Marine Plan logic model.
- Section 3 looks in further detail at the components of the draft South Marine Plan logic model.
- Section 1 reviews the draft South Marine Plan objective level logic models.
- Section 5 reconstructs alternative draft South Marine Plan objective level logic models.
- Section 6 draws out the implications of the draft South Marine Plan logic model review for monitoring.
- Section 7 considers the relevance of the review findings for the East Plan.
- Section 8 provides a short overview of the draft South Marine Plan indicator review and report card development task (it does not include the outputs of the task).
- Section 9 provides a review of the existing gaps in 'policy-specific indicators' and sets out initial ideas (where feasible) that could be further explored to fill these gaps.

1.1 The objectives and mechanics of marine planning

Marine plans are a new plan-led system for managing marine activities. Marine plans are being prepared and adopted in line with the MCAA and contribute towards achieving the High Level Marine Objectives (HLMOs)¹¹. The HLMOs reflect the Government's objectives for the marine space and coastal areas. They include environmental, social and economic objectives as well as governance and science objectives. Marine plan policies are applied by decision-makers to guide activities within the marine plan areas. These policies influence a wide range of activities, using resources from all relevant stakeholders.

The draft South Marine Plan was published in November 2016. The draft South Marine Plan has 12 plan objectives, which are linked to and will help to deliver the HLMOs. To achieve this, 53 draft South Marine Plan policies have been designed and will be implemented following adoption of the draft South Marine Plan (although the draft Plan is a material consideration in decision-making).

The draft South Marine Plan sets out objectives and policies and can be used as an information and communication tool to enable all parties to access the same information. In doing so, it provides members of coastal communities with information about their role in the design and implementation of projects and the potential to input into consultations. During development of the plan, a Statement of Public Participation guided engagement with a wide range of stakeholders.

Marine plans increase transparency and enable coordinated decision making even in the absence of face to face contact. By doing this, the plans should deliver increased efficiency in the form of time saving and avoidance of resource waste due to lack of

¹¹ Defra (2009). Our seas: a shared resource, high level marine objectives. Available online at www.gov.uk/government/publications/our-seas-a-shared-resource-high-level-marine-objectives

clarity or failure to coordinate. The plans may increase compliance with existing legislation as they provide a source of reference for the main pieces of legislation applying in the area. This is expected to improve policy delivery. There may be cases where the increase in clarity of policy and responsibilities may result in additional new projects or proposals.¹²

¹² This argument has been developed based on work by Policy Research Corporation (2010). Study on the economic effects of Maritime Spatial Planning. European Commission; and Department for Communities and Local Government (2012). National Planning Policy Framework Impact Assessment

2 Headline review of the draft South Marine Plan logic model(s)

The reason for having a Logic Model is to:

- ensure that every required step to achieve a policy or plan objective is thought through and is linked to an event/action or similar that causes it
- be able to explain to others how the policy or plan objective can be achieved. In doing this the logic models identify the key points for monitoring policy implementation and impact.

The draft South Marine Plan logic models are complex and are currently difficult to understand. For the purpose of simplification, for both the reasons highlighted above, it is important to describe only one objective in a logic model while including all major steps in policy delivery. This is considered good practice as part of clear and transparent policy making.¹³

For example, objective 6 aims to improve access to the marine environment. This is achieved on the one hand by supporting policies that enhance access, and on the other by a policy which requires other proposals not to reduce access. When considering the elements in a logic model required to achieve both, these are quite different. The policy supportive of enhanced access is there to support proposals improving access, while the other one ensures that all other proposals do not negatively affect access. As quickly becomes apparent, the people preparing proposals are likely to be different and the activities required are different. Proposals which might harm access (but achieve other policies of Type A and are supported by them) impact on existing access provision – such as the extension of a port area that reduces access for walkers to the beach – while proposals that enhance access could include the building of a new footpath. Trying to tie these different starting points into one logic model leads to lack of clarity and inconsistencies in terms of the activities, outputs and outcomes.

The criteria that have guided this review are set out in Box 1 (it should be noted that the review output is not structured in line with these. A more holistic view is provided):

¹³ This insight is based on a number of sources: The Institute for Government states: "...the [policy] goals should be specific and clearly communicated." (IfG, Hallsworth and Rutter, Making Policy Better, IfG, 2011) A Logic Model reads as an "if Then" description of moving from inputs to outcomes/impact (see Kellogg Foundation, Logic Model Development Guide, 2004. Combining this with the good practice for SMART objectives for policy and communicability of policy making leads to the insight that one logic model per policy is good practice as long as links between policies are brought out elsewhere. In the case of the Marine Plans, these are the overarching or higher level logic models. (SMART: Specific, Measurable, Achievable, Relevant and Time-bound)

Box 1 Logic model review criteria

- **Level** – whether the logic models are articulated at an appropriate level given the marine plan review questions and needs (e.g. by locality, policy, plan objective, plan, high level objective). This will ensure that the logic models are informative and relevant for those using them in decision making or communication at local and regional level.
- **Adequacy** – whether the theory of change adequately describes the expected impact of marine plans, and the context and external factors that are also relevant.
- **Coherence** – whether the logic model coherently maps out the theory of change. This criterion will play an important role in establishing a causal chain between marine planning and outcomes as described in objectives.
- **Line of sight and influence** – whether the logic models give sufficient attention to those elements more under and less under marine plan control. This criterion will address whether the change described in the logic model may be interrupted by other influences from external factors or potential unintended consequences caused by the implementation of marine plans.
- **Consistency** – a check for consistency in how logic model components (e.g. the outputs) are specified within individual and across multiple logic models. Consistency across logic models is an important step to gain buy in of stakeholders to marine planning, and to ensure consistency in the three yearly reviews across each marine plan.
- **Communicable** – clarity for stakeholders and non-technical audiences – what is to be achieved and how it is to be achieved. This may also highlight potential barriers.

2.1 Comment on the structure and general content

As currently drafted (see Figure 1 in the draft South Marine Plan Approach to Monitoring, 2017) the plan level logic model combines a number of **levels**:

- The logic for the creation of the plan itself (top left of the logic model).
- The individual activities which are part of implementing the plan (bottom left of the logic model).
- The outcomes of having a functioning plan and successful implementation (bottom right of the logic model).
- The effects of the policies contained within the plan (top right of the logic model).

As explained above this is contrary to good practice that sets out that there should only be a single objective/policy per logic model. The current logic model reduces the clarity of line of sight from inputs to impact (see Section **Error! Reference source not found.** above).

Including all of these elements into the same logic model creates a number of conflicting and problematic issues:

- The **levels** of logic model steps are not sufficiently consistent. The logic model contains elements of marine plan development as well as its use. This means that some of the steps in the draft South Marine Plan logic model are not part of achieving the draft South Marine Plan objectives but rather of achieving the wider

objective of having a marine planning system as prescribed in the Act (for example 'Adopt draft South Marine Plan'). This reduces clarity.

- The logic model includes summary boxes for the environmental, social and economic outcomes. However, it does not include the project level actions¹⁴ required to deliver these. This leads to reliance on assumptions which are not clearly evidence based, reducing the **coherence** of the theory of change from input to impact.
- A marine plan and its policies only have effect once they are in place, and MMO monitoring/review obligations focus on the effects once a plan and policies are in place. Inclusion of the plan making process in the logic model is both unnecessary and also unhelpful to the **consistent** definition of logic model components.
- The inputs which deliver outcomes for the HLMOs such as improved employment outcomes are not clearly specified in the current structure of the logic model. This means that there is no **line of sight** from input to impact.
- The plan level logic model and the objective level logic models are complex and hence not easily **communicated** to those outside of the MMO.

Box 2 Recommendation: Split the logic model into three

Split the logic model for plan implementation into two: One covering the policy of having a marine plan and a second covering the implementation of policies using the marine plan as an enabler. (Without policies there is no impact of the plan).

Remove the plan making elements of the logic model: They form a third logic model, which is no longer relevant for future decision making but reflects the outcome of past decisions to establish marine plans.

2.2 Recommended revised structure and terminology

Following the recommendations in Box 2, Box 3 provides an overview of the recommended logic model structure and terminology.

¹⁴ Project level actions include activities such as those required to build a new port facility or renewable energy, to train people etc. i.e. these are the activities necessary to implement projects which achieve the final HLMOs.

Box 3 Recommended logic model structure and terminology

There are three levels of logic model:

- **The Plan Making Logic Model**, i.e. the model underlying the policy of introducing plans (the Marine and Coastal Access Act).
- **The Marine Plan Logic Model**, i.e. the model that describes the role of the marine plans
- **The Objective or Policy Logic Model**, i.e. the model that describes the logic for the individual objective or policy.



This structure can be described as a nested set of logic models. This terminology refers to their dependence on each other as well as the need to be consistent across logic models as well as within.

2.3 Logic model for plan making

We recommend to design a separate logic model for the process of marine planning itself i.e. a logic model that has as its outcome a completed marine plan. It is useful to keep the processes of designing the plan and then implementing it as a tool separate. The impact of the making of the plan itself is the decision to dedicate resources to it which become the Input into the Marine Plan logic model.

Whilst a plan making logic model and associated monitoring may be of interest for an evaluation of the Marine and Coastal Access Act, or of the Maritime Spatial Planning Directive, this is not a priority for the MMO – given that the plan making process is either complete or partially complete in all instances, and the MMO have no obligations to evaluate the plan making process.

Table 1 sets out a simplified view of a plan making logic model. This is not expanded on further in this report and only included to provide a complete picture.

Table 1: Plan making logic model

Input	Activities	Output	Outcome	Impact
MMO staff	Stakeholder engagement	Draft Marine Plan for sign-off by Ministers	Agreed plan	Link to the Marine Plan logic model
DEFRA staff	Workshops			

3 Review of the plan and policy implementation and effects components of the draft South Marine Plan logic model

This section provides further comment and recommendations on the draft South Marine Plan logic model (excluding the components on plan making which were excluded via the previous recommendation – see Section 2.2).

This section addresses each of the stages of the logic model in turn, from inputs to impacts.

3.1 Inputs

In the current version of the Marine Plan logic model the inputs are aggregated and include an “etc.” While it may not be possible to identify all the inputs it will be useful to break them down. This will be particularly important for the Objective Level logic models.

The Marine Plan logic model for example will have mainly the MMO staff and other MMO resources as inputs. The Activities within this logic model will mobilise resources from other partners. These other partner resources can therefore not be part of the inputs to the Marine Plan logic model. However, their increased engagement is one of the outcomes of the Marine Plan logic model and one of the inputs into the Objective/Policy Logic Models. The figure previously shown in Box 3 describes the links between the three logic models.

Box 4 Recommendation

To split inputs up into the main actors¹⁵ and sources of resources for the Marine Plan logic model

3.2 Activities

The links as well as the difference between the Marine Plan logic model and individual Objective/Policy Logic Models need to be clearer at the activity level. Some of the activities listed in the Marine Plan logic model only occur to implement specific policies and achieve specific objectives, especially in a post plan-making phase. For example, Stakeholder Engagement will occur during the process of deciding on a specific proposal such as building a new port. It is unlikely that stakeholder engagement occurs without the need to discuss a specific proposal or need.¹⁶ Whilst “Promote Marine Plans” is an activity that clearly falls only under the Marine Plan logic model.

Those activities which have been identified in the review (see bullets below) as not appropriate for the Marine Plan logic model should be removed. Not doing so would

¹⁵ The MMO as the organisation responsible for preparing marine plans; and Defra as the marine plan authority for England.

¹⁶ Stakeholder engagement may also occur if an event such as a pollution incidence, coastal erosion or similar has occurred and action needs to be taken. This action is likely to require a decision which will need to take account of Marine Planning policies.

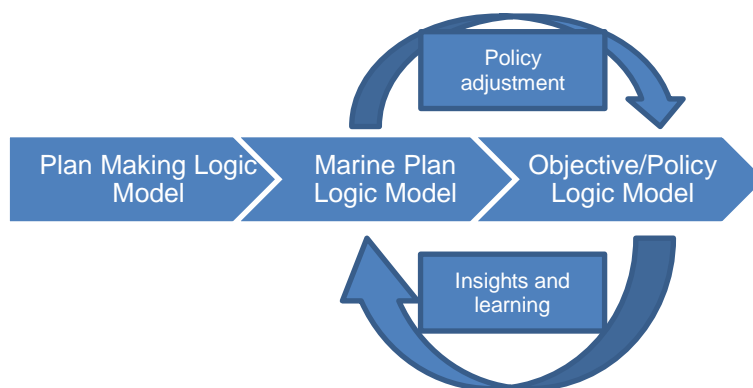
lead to a lack of coherence in the theory of change described by the logic model. It is suggested that these objective specific activities are:

- **Stakeholder Engagement:** this has to happen on a more policy focused level. Stakeholder engagement has to focus on the activities required when a project is taken forward.
- **Capacity building of users:** users of marine plans are likely to require capacity building when they need to deliver a project within a particular policy. Each policy area has particular knowledge requirements and it is unlikely every user needs to learn about every area. We, therefore, think that this activity is more relevant for individual Objective/Policy Logic Models.
- **Evidence generation and research:** while some evidence will be relevant for more than one policy and/or objective, it is highly unlikely that there is general evidence applicable for all. In some cases, policy implementation does not require additional evidence generation or research.

These activities may be considered by the MMO to be generic functions. However, with regard to logic modelling, they are specific to the delivery of plan policies and objectives. Conceptually they, therefore, need to be included in the Objective/Policy Logic Models rather than the Marine Plan logic model to ensure that the models are consistent and coherent. The Marine Plan logic model should not be an aggregated view of common elements of the Objective/Policy Logic Models.

Moving these activities into the Objective/Policy Logic Models does not mean that evidence collected under individual policies or objectives cannot flow back into the Marine Plan logic model. Rather, within the MMO relevant learning and evidence from individual policy implementations contribute to future decision making and policy design. This is illustrated in Figure 1.

Figure 1: The feedback loop of learning and evidence collection



Box 5 Recommendation

To identify which activities relate to the enabling function of the Marine Plan logic model and which to the Objective/Policy Logic Models. Remove those activities that are mainly for individual objective logic models. Table 2 shows the resulting part of the Marine Plan logic model.

One of the anticipated outcomes of marine planning is that the community using the coastal space of an area comes together and contributes to the consultation processes that lead to a better understanding of other’s needs. The activities as set out at the moment do not reflect this sufficiently. They are activities that the MMO does to others rather than an enabling activity empowering others to act in a variety of ways beyond the standard stakeholder engagement process.

Box 6 Recommendation
 To include a “community building activity”. This will also have a “Community related” output etc.

Table 2: Inputs and Activities in the Marine Plan Logic Model

Input	Activity
MMO and DEFRA staff	Promote Marine Plans
MMO staff	Develop tools and Frameworks
	Promote Standards and data sharing
	Community building

3.3 Outputs

The recommendations made with respect to the inputs and activities will feed directly through to the outputs. This means that outputs such as “*Evidence increased*” are no longer included in the Marine Plan Logic Model, but instead form part of the Objective/Policy Logic Models.

Box 7 Recommendation
 To move the following outputs to Objective/Policy Logic Models:

- **Evidence Increased** – Evidence is collected for projects under individual objectives or policies, not in general.

We further recommend to change the following outputs:

- **Training and guidance:** There are two levels of training and guidance. The one relevant to the Marine Plan Logic Model concerns the use and reach of the Marine Plan. We recommend to change this output to **Guidance on how to use the Marine Plan**.
- **Tools and frameworks:** We recommend to add a quality and usefulness characteristics and call this output: **Tools and frameworks fit for purpose**.

The Marine Information System is an important element which cuts across all policies. We recommend to include it as an output of the “Develop tools and Frameworks” activity.

- **Marine Information System**
 We recommend including an output that relates to the community building activity.
- **Improved community cohesion**

Table 3 below summarises the activities and outputs.

Table 3: Activities and outputs of the Marine Plan Logic Model

Activity	Output
Promote Marine Plans	Increased awareness and understanding of plans Guidance how to use the Marine Plan
Develop tools and Frameworks	Tools and frameworks, fit for purpose Marine Information system
Promote Standards and data sharing	Data Standards and Sharing
Community building	Improved community cohesion

3.4 Intermediate outcomes

The changes to the outputs described above have an impact on the intermediate outcomes in the Marine Plan Logic Model.

In addition, evidence and learning will flow into the Marine Plan Logic Model at this point to enable changes to future decision making and policy reform. The Marine Information System will also receive input from the individual policy implementation processes.

Box 8 Recommendation

To remove or change the following intermediate outcomes from the Marine Plan Logic Model:

- **Improved signalling and direction** – This partly overlaps with other outputs and intermediate outcomes. It could even be seen as a pre-output to Increase Awareness. We therefore consider it redundant.
- **Assessment of key issues:** Key issues emerge out of individual project and programmes as partners in coastal areas apply the policies in the marine plans. While a useful feedback loop we recommend to include it in the Objective/Policy Logic Model.
- **Improved Evidence base**, “Improved data quality and access” and “Frameworks, evidence/data used by decision makers / applicants” has been summarised to “Increased use of evidence” to capture the generic nature of the intermediate outcome.
- **Better Design, Incorporation and Implementation** is on the one hand very policy specific and on the other also captures a lot of what is encapsulated in the Intermediate Outcome “Decisions made in accordance with S. 58 of MCAA”. We therefore recommend to delete this from the list of Intermediate Outcomes.
- **Cohesion and integration:** We propose to link this Intermediate Outcome with the community based output with “Increased knowledge of the needs of partners in the coastal area” to reflect the need for integrated approaches to marine planning across all partners.

Table 4 summarises the outputs and intermediate outcomes in the new Marine Plan Logic Model.

Table 4: Outputs and Intermediate Outcomes in the Marine Plan Logic Model

Output	Intermediate Outcomes
Increased awareness and understanding of plans	Decisions made according to S. 58 Increased certainty
Guidance how to use the Marine Plan	Increased certainty
Tools and frameworks, fit for purpose	Decisions made according to S. 58
Marine Information system	Increased use of evidence
Data Standards and Sharing	Improved data quality
Increased knowledge of the needs of partners in the coastal area	Increased certainty Cohesion and Integration

3.5 Outcomes

The economic, environmental and social policy outcomes are delivered via the policies introduced and summarised under the 12 objectives¹⁷. The Marine Plan is an enabler to achieve this.

Box 9 Recommendation

Following the changes to Intermediate Outcomes, a number of Outcomes can be removed from the Marine Plan Logic Model or changed. We recommend that these are:

- “Economy & social policy effects” and “Econ, env & social policy objectives”: These will only be delivered via the activities etc. under individual policies. The Marine Plan as such does not contribute to these¹⁸. Indirectly the increase in efficiency means that more resources are available to do more, but this is an indirect effect of the increase in efficiency.
- “Reduced transaction costs for investors” and “Reduced admin costs” were merged into “Increased Efficiency”.
- “Acceleration of policy promoted activities”: this might more readily be part of the arrow between “decisions made in accordance.” and “policy effects” and therefore removed from the logic model.
- “Reduced conflict and increased compatibility”: This is covered by the intermediate outcome of “Cohesion and Integration”.

¹⁷ Also the process of developing a marine plan may also have economic, environmental and social effects.

¹⁸ Real world changes which contribute to achieving the HLMOs will only occur if proposals such as a new port, the introduction of sustainable aquaculture etc. are taken forward bearing in mind the marine plan policies. Without the proposals the Marine Plan is only a document with no impact.

- The Outcome “More resilient activities, infrastructure & business” reflects a number of policy objective outcomes and will be reflected in the Objective/Policy Logic Models.

Box 10 Recommendation

We recommend to include an Outcome which reflects the fact that the more transparent and evidence based process may lead to more projects coming forward. This is likely to happen because potential proposers currently discouraged (e.g. by a lack of information or understanding of the policy context and licencing process) will be able to quickly access the necessary information and engage with the requirements. This reduces barriers to bringing proposals forward and is likely to lead to more proposals.¹⁹ We call this here “Avoided Omissions’.

If applied, the result of our recommendations is that there are only two outcomes: Increased efficiency and avoided omissions. All other outcomes have either been covered by Intermediate Outcomes, the Logic Model for the making of the plan, or the Objective/Policy Logic Models.

Table 5: Intermediate Outcomes and Outcomes in the Marine Plan Logic Model

Intermediate Outcomes	Outcomes
Decisions made according to S 58	Increased Efficiency
Increased certainty	Avoided Omissions
Increased use of evidence	Increased Efficiency
Improved data quality	Increased Efficiency
Cohesion and Integration	Avoided Omissions Increased Efficiency

3.6 Impacts

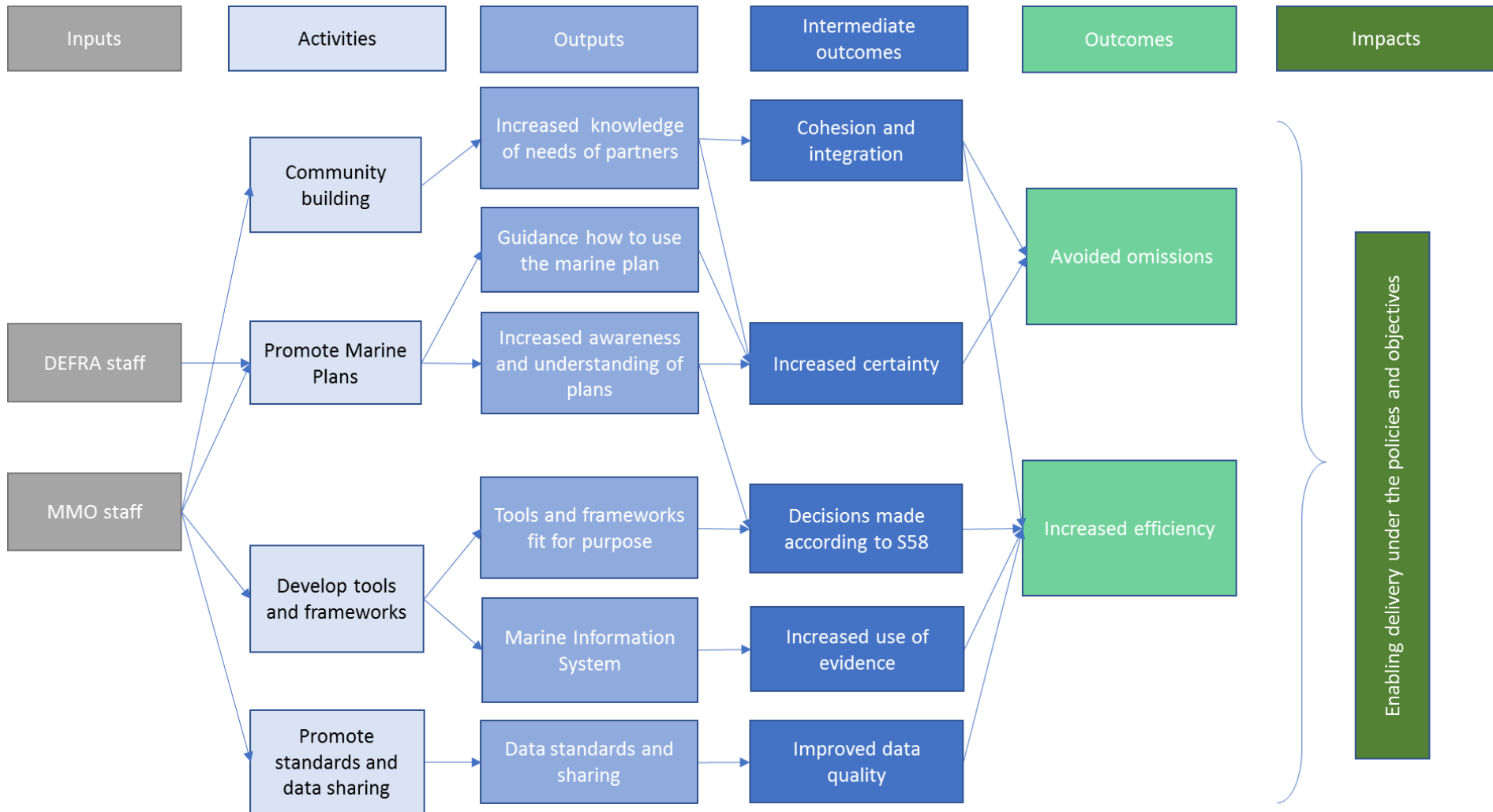
The impact section is the point at which the Marine Plan Logic Model links up with the individual Objective/Policy Logic Models. The draft South Marine Plan’s impact is to become an enabler and input in Objective/Policy Logic Models. The impacts currently in the draft South Marine Plan logic model are the HLMOs – however, it is recommended that these are not the impact of the plan level logic.

3.7 Revised Marine Plan Logic Model

Figure 2 provides a revised logic model that takes account of the recommendations stated throughout this section.

¹⁹ Note that this may mean more work for the MMO as more proposals will require licenses.

Figure 2: Revised Marine Plan Logic Model



4 Review of the Objective/Policy Logic Models

4.1 Summary

We recommend:

- The Objective/Policy Logic Models are redrawn, starting from the actual proposals that deliver the outcomes and HLMOs, and simplified.
- Objective/Policy Logic Models once fully developed²⁰ could be used as a communication tool with external stakeholders as well as internally.

4.2 Review

4.2.1 Identification of different types of policies

Our review of the logic models for the plan objectives and policies indicates that there are two main types of policies and three exemptions to these main types (see Annex 1 for a classification of all policies by one of these five types)²¹:

- Type A: policies actively supporting particular proposals contributing to the HLMOs i.e. they have a positive effect.
- Type B: policies requesting that proposals do not adversely impact on the plan objectives or HLMOs. This request is drafted relating to specific policies and asking proposals to avoid, minimise or mitigate negative impacts.

Plan objectives (barring a small number of exceptions) include policies of only one type – Type A or Type B. This allows for development of two types of objective/policy logic models – one for objectives including Type A policies and one for objectives including Type B policies:

The exceptions include two instances where a single policy under an objective is different in type from the other policies under that objective; and three policies that do not conform to either type (we have labelled these as Types C, D and E). These are:

- Policies different in type to others under the same objective e.g.:
 - Policy S-OG-1: *support for oil and gas activities* is a Type A policy. It is currently part of Objective 1 and is the only Type A policy under this objective (the others are all Type B).
 - Policies – S-ACC-1 and S-ACC-2: *proposals should avoid, minimise, mitigate adverse impacts on access, and support for proposal that enhance access*, which are Type B and Type A policies respectively. These policies are both included under Objective 6.

²⁰ The objective level logic models are currently internal working documents that have not been finalised.

²¹ The published South Marine Plan includes a categorisation of policies (Table 2, p32). The categorisation has some similarities with the typology presented here. However the two differ as the categorisation in the plan documented was not designed for the purposes of supporting logic modelling.

- Policy S-BIO-2: *support for proposals that enhance natural habitat etc.* is a Type A policy. This policy is included under Objective 12. All other policies under Objective 12 are Type B policies.
- Individual policies that include two distinct elements – one part Type A and one part Type B. They are each arguably two distinct policies which should be addressed using two different logic models:
 - For example: Policy S-AQ-1: *support for sustainable aquaculture in sustainable aquaculture areas, AND proposal within sustainable aquaculture areas should avoid/minimise/mitigate impact, or state the case for proceeding.*

As such, there is a lack of consistency in the structure of the objectives i.e. they do not consistently include only policies of one type. Because policies of different types work in different ways, the mechanics of their logic models are different. Creating single logic model flows that merge two policy types under one objective means that the inputs are blurred, reducing or completely removing the potential for line of sight within a single logic model.

This structure also means it is inappropriate to monitor at the objective level only. An objective level model sitting over the relevant policy-level logic chains gives better insight into progress being made.

This makes it difficult to have a coherent framework of logic models and supporting monitoring system. However, the objectives can still be useful by focusing the users of the draft South Marine Plan on its overall aim.

In addition, there are three policies which are not Type A or B. These are:

- Type C: Policy S-ML-1: requesting that Local Authorities have measures in place to reduce litter in coastal areas
- Type D: Policy S-MPA-3: requiring the redrawing of boundaries of the MPAs should they be deteriorating.
- Type E: Policy S-UWN-1: requiring proposals generating impulsive sound to contribute data to the Marine Noise Register.

4.3 Recommendations

4.3.1 Redrafting the logic models

We recommend that the objective level logic models are redrawn, starting from the actual proposals that deliver the outcomes and HLMOs as inputs rather than the introduction of policies as it is currently the case.

These Objective/Policy Logic Models are constructed so as to relate to policies of one type only. Focussing logic models on only one type of policy allows us to draw up more consistent logic models at the objective/policy level which have a clear line of sight from inputs to outcomes, including a proposal delivery element.

Section 5 presents generic versions for the five types of logic models for objectives/policies of Types A to E – and hence for objectives consisting of only Type A to E policies.

Outcomes and impacts will only be achieved if proposals are taken forward and in doing so people in local authorities, in organisations making proposals and

elsewhere are considering the full set of marine policies. This means, that each proposal has to go through more than one Objective/Policy Logic Model to contribute to the objectives of the marine plan and to the HLMOs. While the logic models are separate at the objective/policy level each proposal goes through more than one logic model, being supported on the one hand and considered for potential harm on the other.

Use of the logic models as communication tools

Redrafting the logic models in this way means that they become a useful communication tool with stakeholders. This will enable MMO staff and other stakeholders to have a line of sight between their proposal or area of decision making and the HLMOs, and the role of marine plans within it.

It further “future-proofs” the models by making them more accessible for new members of staff in the MMO and others working with them.

Refocusing of monitoring on core indicators

The recommendation to redraw the logic models has two consequences for monitoring:

- The consideration of policies can be evidenced at one point within each objective/policy logic model. This is the intermediate outcome: decisions being taken taking account of S. 58. The data can then be aggregated to provide a measure indicating whether the Marine Plan has increasing impact.
- Changes to outcomes (and HLMO achievement) and overall impact of the objectives/policies can be monitored at the outcome level, data permitting.

Section 6 provides the recommendations and the justification in more detail.

5 Proposals for Objective/Policy Level Logic Models

5.1 Type A Objective/Policy Level Logic Model

Type A	Objectives and policies (or parts thereof) that are supportive of activities that promote a positive change
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This type of objectives and policies has as its main characteristic the aim to promote a positive change. This means that the logic model elements are steps to achieve the delivery of a positive effect.

Inputs: There are two levels of inputs in achieving policies:

- **Input 1:** The proposals made by private and public sector organisations supported by decision makers because they achieve objectives. Examples are infrastructure, employment etc. The marine plan enables and informs the proposals.
- **Input 2:** Resources in other organisations including the MMO and stakeholders flow into the decision.
 - Note: In case of objective 6 (Access) there is one additional input 2, Natural England resources to restore and maintain the coastal path. This feeds directly into the outcome delivery.

Activities: Once a proposal has been made (formally or informally) there will be activity in informing and engaging stakeholders, working with the community, enabled by the Marine Plan.

Arrows: We have included two arrows to demonstrate where the draft South Marine Plan exerts its enabling function. This is mainly between the first and second input level, and the second input level and activities. It is at these points that proposals need to bear in mind which harms to avoid and which information to include. They are not the only point of influence, but are considered to be the most important ones.

Output: The activities lead to a revised proposal. This revised proposal should now take into consideration all other relevant policies and stakeholder positions as appropriate. The result of this is the Intermediate Outcome.

Intermediate Outcome: Decisions being made in accordance with the S. 58.

There is a group of intermediate outcomes which are not directly contributing to the outcome delivery at this point. They flow back into the MMO. These are: Evidence generation, feedback of key issues and avoided unsuitable proposals. Some unsuitable proposals may be refined and re-enter the Logic Model. These proposals will contribute to MMO policy and decision making and, therefore, will be recycled into the logic model process. We have indicated this in the Objective/Policy Logic Models as an outflow²² to information systems which are not within this logic model, i.e. external to the model and not as a second order feedback process as guidance, evidence etc. is update, impacting on future proposals.

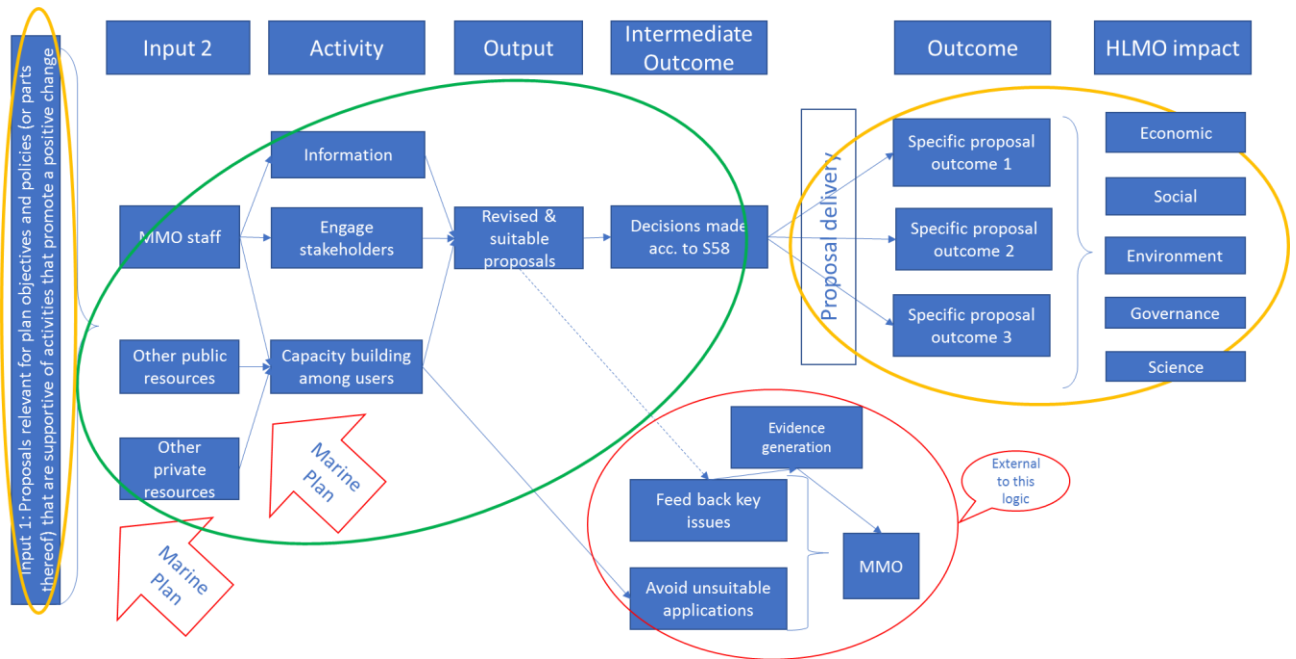
²² We call an “outflow” a link to the external world from the logic model where information flows into a different logic model. It is not quite a feedback loop into the logic model at the level above, but close to.

At this point the proposers will start acting on their proposal. This is included as an additional box in the logic model (named “project delivery” – or “Infrastructure delivery” etc.). Without this action the outcome and impact would not be realised.

Outcome: The outcome resulting from the left hand side of the logic model, plus project delivery, is the increased infrastructure, employment, skills, access etc. i.e. the subject matter being promoted by the policy and plan objective.

Figure 3 summarises this in a logic model, not specific to a policy/objective.

Figure 3 Generic Logic model for objectives/policies in Type A



Amber circles: Logic model elements specific to an objective or policy

Green circle: Elements of the logic model common to all objective level Logic Models in this Type. But note the actors behind activities, and content of outputs etc. differ.

Red circle and arrows: Elements of the logic model relevant to the MMO and the marine plans. Generic in description, but actual content differs

Definitions:²³

- Avoiding unsuitable applications: The process included in the green circle, enabled by the draft South Marine Plan, can help those applying for a licence to judge whether their application is likely to be successful or not. If the information and guidance provided works well, this means that those applications which have no realistic chance of getting approved will not be put forward. This frees up time for the MMO to do other things and is therefore outside of the objective/policy level logic model.
- Feedback key issues: The process of decision making which use the draft South Marine Plan will have elements of learning and proposals for improvement in many areas. These could be around the coastal environment, particular groups of stakeholders or how the MMO interacts with applicants. Any learning which improves the MMO’s work can be fed into the MMO itself. This is outside of the Objective/policy level logic model.

²³ These definitions also apply to Figure 3, Figure 4, Figure 5 as appropriate

- Specific proposal outcomes: These are the outcomes such as improved access to the coast or a training facility raising skills which contribute to the HLMOs. They have their own delivery logic models (sitting with the “Proposal delivery” box. This logic chain would include inputs such as land, building material, trainers (in the case of skills improvement) etc. The policy/objective described in the Objective/Policy level logic model enables these other logic chains to work their way through.
- The dotted arrow indicates a weaker link than other arrows.

5.2 Type B: Objective/Policy Logic Model

Type B	Objectives and policies (or parts thereof) that seek to avoid negative change
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This type of objectives and policies has as its main characteristic the aim to avoid, minimise or mitigate a negative impact. This means that the logic model elements are steps to achieve the avoidance or reduction of harm.

Inputs: There are two levels of inputs in achieving policies:

- **Input 1:** The proposals made by private and public sector organisations either in the marine and coastal areas subject to marine planning or nearby potentially harming marine and coastal areas or activities within them. These go through the process described in the logic model to ensure all relevant marine policies addressing potential harm are considered.
- **Input 2:** Resources in other organisations including the MMO and stakeholders flow into the decision.

Activities: Once a first proposal has been made (formally or informally) there will be activity in informing and engaging stakeholders, enabled by the Marine Plan. Compared to Type A, these will be activities to ensure that harm is avoided, minimised or mitigated. The Types involved, or the people representing them, might be different. Resources may also include mitigation measures which then allow a proposal to go forward.

Output: The activities lead to a proposal ensuring that all relevant policies are considered and acted on, risks are avoided, minimised or mitigated. The effect of this is the Intermediate Outcome.

Intermediate Outcome: Decisions being made in accordance with the S. 58.

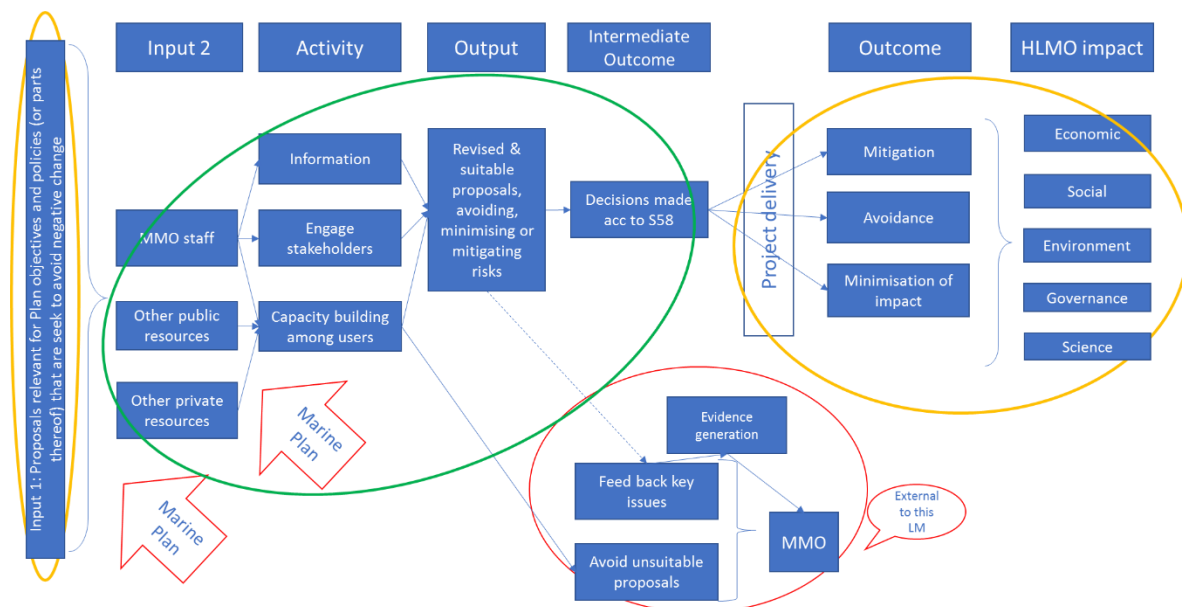
There are also intermediate outcomes which are not directly contributing to the outcome delivery at this point. They flow back into the MMO. These are: Evidence generation, feedback of key issues, avoided unsuitable proposals, new evidence on potential negative impacts etc. As in the case of Type A, we have not included this feedback loop via the Marine Plan Logic Model into the charts of the logic models.

At this point the proposers will start acting on their proposal considering the other policies with which their proposal has to comply i.e. in this case avoiding, minimising or mitigating harm. This is included as an additional box in the logic model. Without

this action the outcome and impact would not be realised.²⁴ This box includes various activities necessary for delivery but not of interest in the context of analysing the path to delivery of HLMOs.

Outcome: The outcomes of this Type of objectives are that negative impacts on the aims and objectives of the HLMOs have either been avoided, minimised or mitigated. This could mean that the marine environment has not deteriorated despite the creation of new marine activity in a port, or despite new aquaculture investments employing more people. The delivery of the HLMOs in the areas of economic, environmental and social is not compromised. Governance and science HLMOs will also benefit from these types of objectives because they require stakeholder engagement for all proposals and involve all those with an active interest.²⁵ With respect to the use of science, proposers are encouraged to use the Marine Information System in order to deliver their proposals.

Figure 4: Generic Logic model for objectives/policies in Type B



Amber circles: Logic Model-elements specific to an objective

Green circle: Elements of Logic Model common to all objective level Logic Models in this Type. But note the actors behind activities, and content of outputs etc. differ

Red circle and arrows: Elements of the Logic Model relevant to the MMO and the marine plans. Generic in description, but actual content differs.

²⁴ We have to bear in mind that the proposals under these Type B objectives are likely to be taken through a decision making process under a Type A objective fulfilling outcomes there, while avoiding negative impacts on others because they were subject to the process under a logic model of Type B.

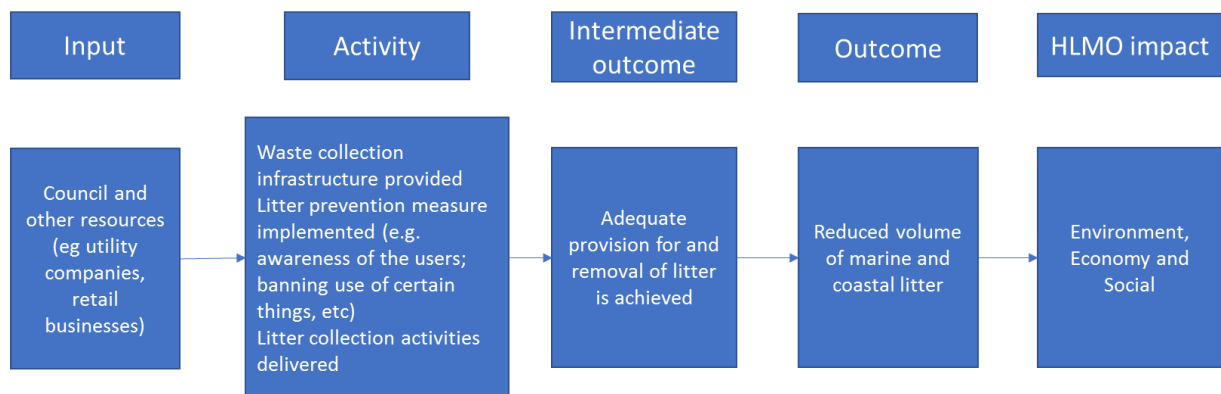
²⁵ "All those who have a stake in the marine environment have an input into associated decision-making.", Source: Defra (2009, p 7). Our seas: a shared resource, high level marine objectives. Available online at www.gov.uk/government/publications/our-seas-a-shared-resource-high-level-marine-objectives

5.3 Type C Objective/Policy Logic Model

Type C	Policy S-ML-1: requesting that Local Authorities have measures in place to reduce litter in coastal areas
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The main difference to the other policies is that S-ML-1 requires that Local Authorities have in place measures to deal with coastal litter. This is not dependent on proposal for activities. Unlike other policies it is an obligation on Local Authorities to address any shortfalls in waste management in their coastal areas, with regards litter (presumably marine litter). In addition Local Authorities may also require of other organisations, such as business, to manage the waste their activity creates. The activities will be those that Local Authorities should employ to clean up the litter or if possible who can be brought into this task. The logic model is depicted in Figure 5.

Figure 5: Logic model for S-ML-1



5.4 Type D Objective/Policy Logic Model

Type D	Policy S-MPA-3, re-drawing of MPAs where they deteriorate
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Simplified, this policy states that boundaries of Marine Protected Areas can be redrawn where site condition has deteriorated, or that features have moved due to Climate Change. It is therefore different to the other policies in its level of influence and impact. (See Figure 6).

Input 1

Advice is given that a MPA site condition is deteriorating; or features have shifted due to climate change.

Input 2

MMO and other organisations’ staff will engage in discussion on this and confirm or not the advice provided. The marine plan will be used as a tool to inform the decision makers by highlighting sources of evidence, other relevant policy areas etc.

Activities

Other stakeholders need to be informed and engaged. The marine plan will be a tool and source of information in this context.

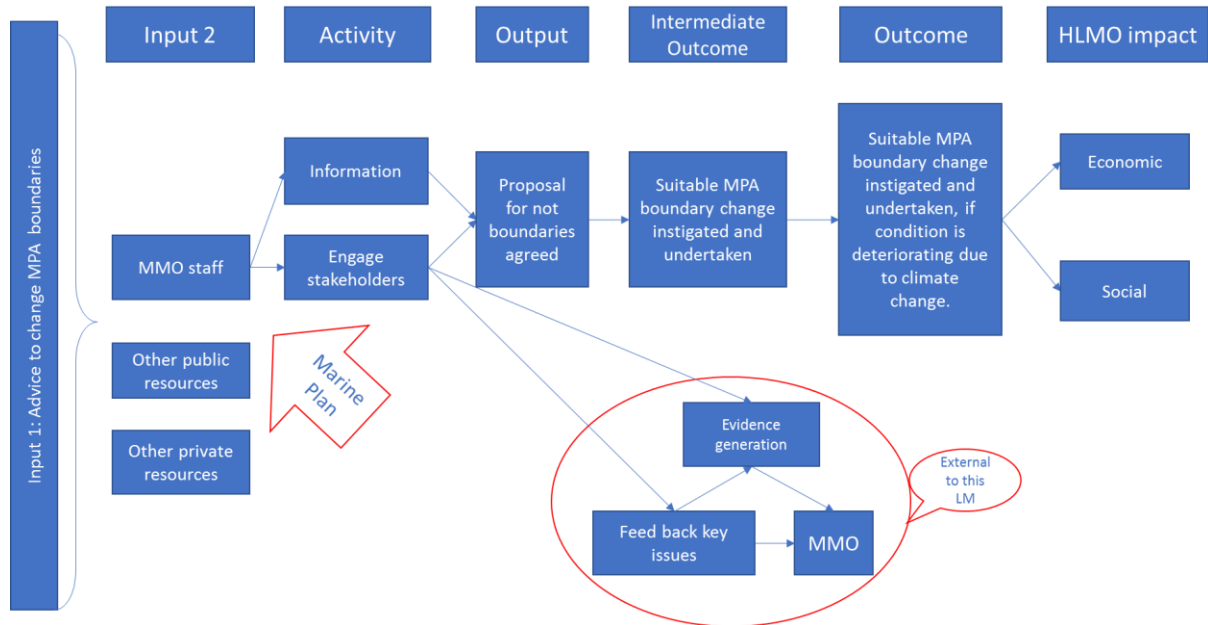
Output

The consultation will lead to an agreed new boundary for the MPA concerned.

Outcome

The boundary is redrawn. This leads to the realisation of the impact on the HLMOs.

Figure 6: Logic model for S-MPA-3



We have not provided a separate logic model for Type E as this is similar to Type D in terms of the logic model structure.

6 Review and Recommendations for Monitoring and Indicators

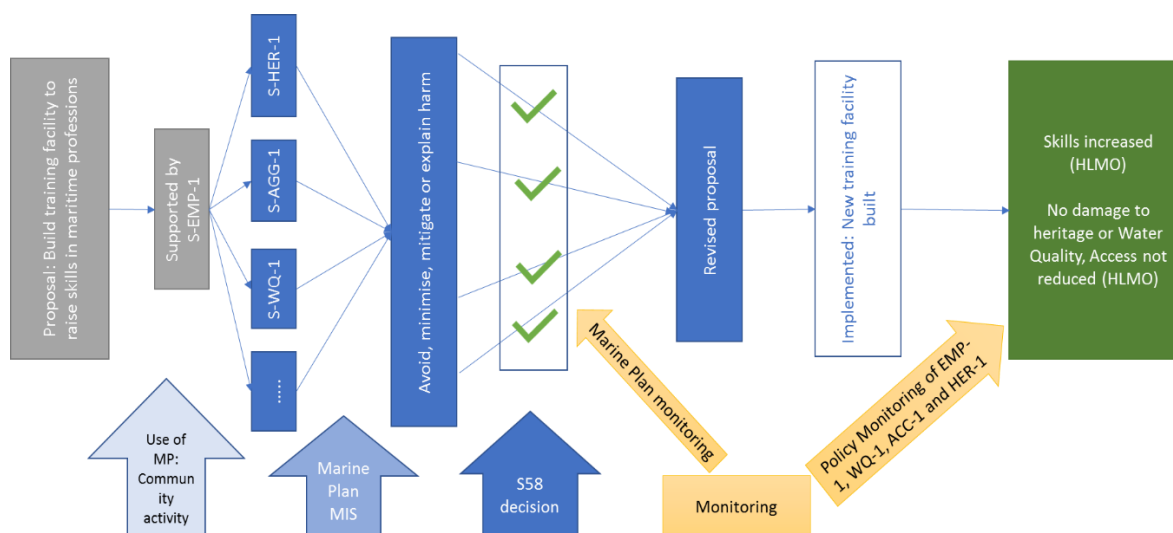
6.1 Summary

We recommend:

- To create and monitor one indicator for the quality of the decisions taken under S. 58. This will be based on information collected under each policy and built up into one simple and coherent indicator.
- To construct a smaller, more manageable number of indicators covering policies which affect a real life policy/topic area into one indicator, combining the relevant type A and type B policies.

Figure 7 demonstrates how the draft South Marine Plan logic and the objective/policy logic models for policy types A and B come together to deliver real outcomes and HLMOs. The figure uses an illustrative, simplified example: The building of a training site to enhance skills. A proposal which delivers additional skills will be supported according to policy S-EMP-1. While this is the case the building of the additional training facility has to ensure it has no negative impact on water quality for example through its waste water (policy S-WQ-1). At the same time it has to ensure it is not in an area where aggregates are sourced (S-AGG-1) or where heritage objects are protected (S-HER-1). Other policies might impact as well, such as the policy protecting seascape. However, the exact list of policies will depend on the nature of the proposal and the area.

Figure 7: Bringing policies together to achieve the HLMOs using the draft South Marine Plan



6.2 Review of monitoring approach

The review and recommendations for the logic models in Sections 3 to 5 have implications for the MMO's monitoring activity. They bring out the key elements for which information has to be collected to identify whether the draft South Marine Plan

objectives have been achieved or not and the real life outcomes are on track of being achieved.

6.2.1 Monitoring at the Marine Plan level

Box 11 Recommendation

Create a single indicator which measures whether decisions have taken all relevant policies into account.

Aggregate this across all policies to calculate a Marine Plan indicator. This will also create sufficiently large numbers of observations to identify changes over time.

All objective level logic models have the mutual immediate outcome of decisions being made according to S. 58 of the MCAA. This means that each decision should take every relevant policy into account – although it does not mean that every decision has to conform to every relevant policy. Where a policy is not adhered to the decision maker is required to provide a justification.

This is a key stage in the marine planning process. As an intermediate outcome, it is located between activities/inputs and outcomes/impact. While not immediately connected to the HLMOs it is sufficiently close to allow one to draw a conclusion with respect to the functioning of the draft South Marine Plan as such.

The advantage of using a single indicator for all objectives to identify the effectiveness of the draft South Marine Plan is its proportionality. Monitoring has to minimise the burden it imposes on staff and others involved.²⁶ Data can be collected from decision makers to allow proportionate monitoring.²⁷

6.2.2 Monitoring at the objective and policy level

The current monitoring approach seeks to establish an indicator for the outcomes of every policy and an indicator for every marine plan objective. Two key issues result: (i) proportionality, and (ii) consistency.

Proportionality: Given that the draft South Marine Plan includes 53 policies and 12 objectives, this creates a need for 65 indicators for the plan. There will be seven marine plans – if each plan is similar in structure and scope to the draft South Marine Plan, one can assume that the current approach will create a need for 390 indicators (i.e. 6 plans multiplied by 65 indicators). Although a significant proportion of indicators are likely to be common across all plan areas. This means the information will only need to be collected once for all 6 plans. In addition the current approach requires indicators on S. 58 decision making and other marine plan level indicators.

It is suggested that this level of indicator production will create a significant amount of data collection and processing work, and will require the maintenance of a significant body of indicators many of which are unlikely to be fully utilised in marine plan reviews and other similar reporting. Hence, it is concluded that the current approach is disproportionate and requires simplification.

²⁶ It is also important not to burden staff with a broad ranging request “for completeness” where there is not a clear match between the level of detail in the data being requested and the analyses actually planned. Indeed the researcher should be able to demonstrate how the data requested will enable the policy to be improved. (Magenta Book)

²⁷ This recommendation follows the Magenta Book, Chapter 5, page 71

Consistency: the immediate policy effect indicators are clearly very challenging to construct conceptually – and even more so in practice. This has resulted in a current set of proposed policy effect indicators that are incomplete (there are a number of gaps) and inconsistent (a mix of indicators, e.g. some of which are focussed on the location of a given activity, others focussed on real world changes e.g. sector performance, and others on whether a decision was made in line with S. 58). This is made more difficult because there is currently no measurable description of what success would look like.

Monitoring objective level and policy outcomes provides the most obvious point for simplification – addressing issues of proportionality, consistency and completeness.

Box 12 Recommendation

Use one indicator for each relevant policy area²⁸, rather than an indicator for every policy.

This recommendation draws on the fact that several policy areas are covered by more than one policy. In many cases, it is a combination of one or more type A and type B policies. It takes into consideration that successful proposals will be supported by a policy and will have been assessed for their impact on other policy topics. It is this combination that leads to the delivery of policy outcomes and ultimately to the HLMOs.

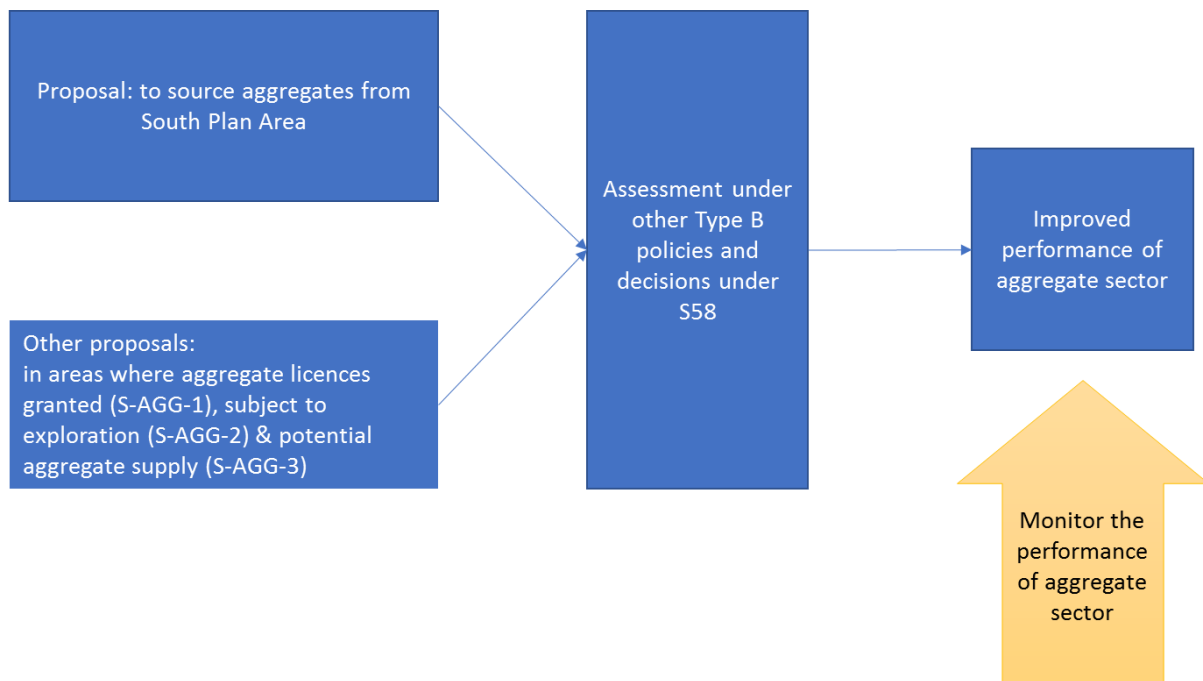
An example would be the performance of the aggregate sector in the draft South Marine Plan area:

- Policies S-AGG-1, 2, 3, and 4 seek the same outcome. In all cases it is the performance of the sector (e.g. in terms of turnover) that matters – the policies, by seeking to avoid/minimise/mitigate negative effects on the sector and support positive effects, are seeking to encourage improved performance of the sector.
- Currently AGG 1-3 are linked to a co-existence objective (i.e. new activity shouldn't inhibit aggregate activity) and AGG 4 to a diversification objective (i.e. new activity should utilise draft South Marine Plan marine aggregates). Clearly all policies are supporting the sector.
- In this example, the outcome indicator should be aggregate sector performance. This can be paired with the S. 58 indicator that decisions have been made in accordance with S. 58 for the four 'AGG' policies. Figure 8 illustrates this. This also demonstrates that the proposed indicators can be used at policy, objective and plan level.

It is recognised that this simplification brings with it reduced potential to attribute change to a marine plan policy/set of policies as some more immediate effect of a policy is no longer monitored.

²⁸ An example for a policy area is aquaculture. There is one policy supporting sustainable aquaculture – S-AQ-1. This policy also addresses other proposals which might harm aquaculture and requests that harm is minimised. There is another policy about infrastructure and aquaculture – S-AQ-2. In addition S-FISH-1 and -2 both also include a reference to sustainable aquaculture.

Figure 8: Achieving real world change outcomes for a sector: example of aggregates



This recommendation acknowledges the fact that the marine plan, HLMOs, objectives and policies are introduced to bring about real world changes. In some case this will require a careful definition of the indicator in sectoral, temporal and geographical terms. Other influences may also overlay the impact of the marine plan and the implemented policies. Examples range for severe weather events destroying access to the coastal areas, or overriding policy decisions at a national level (e.g. security of energy supply requiring a development such as a facility to import liquefied petroleum gas).

As a result, there is a trade-off between the proportionate use of public resources on monitoring and the detailed information providing identifiable attribution of cause and effect. It has to be borne in mind that even the most detailed data collection for indicators is unlikely to ever determine causation and attribution at full certainty. This means the trade-off is between two different levels of uncertainty and a proportionate use of resource.

6.2.3 Application within the current framework

Within the current monitoring approach – which is focussed on groups of policies delivering a marine plan objective – a large number of indicators are proposed for collection for each policy within an objective. The proposed framework still allows the use of the 12 objectives, however, the monitoring will focus on the use of the draft South Marine Plan as an enabler by monitoring the decisions made **and** the real world outcomes to which policies under a number of objectives contribute (for examples see Figure 8 for the aggregate sector and Figure 7 for the improvement of skills).

For example, the objective of diversification²⁹ – the objective contains policies on four sectors (renewable energy, aggregates, fishing, and tourism). The objective seeks the improved performance of the four sectors. Including the building of a supply chain for renewable energy, deepening of the aggregate and tourism industries and a diversification of sustainable fishing. This may be best monitored using a combination of sector performance indicators and a draft South Marine Plan maritime economy diversification indicator.

²⁹ To support diversification of activities which improve socio-economic conditions in coastal communities

7 Relevance to the East Marine Plan

This section provides observations on the East Marine Plan logic model, building on the review published in 2016³⁰, and concludes on the extent to which the recommendations of the draft South Marine Plan review will be transferable to the East Plan when the plan is reviewed in 2020.

7.1 Observations

7.1.1 Nested logic models

The proposal to have a “nest” of three levels of logic models – one logic model for Marine Planning, one logic model for a Marine Plan and logic models for types of policies/objectives - corresponds to the recommendation made in the Review of the East Marine Plan (2016), which proposed an overarching logic model for the plan as a whole. The second level of the nest, i.e. the logic model for a Marine Plan, is also suitable for the East Marine Plan.

The content of the Marine Plan level logic model would be expected to be consistent across the plan areas (assuming the MMO’s approach to delivering marine plans is consistent – or is working to be consistent). This consistency will support the adoption of common indicators across plan areas and hence allow larger sample sizes and hence more robust indicators to be generated.

The rest of this note focuses on the policy level logic models and their appropriateness for the East Marine Plan.

7.1.2 Policy logic model review criteria

Line of sight

The logic models in the East Marine Plan have a clear deficit in terms of line of sight, which was picked up in the previous East Marine Plan review. The introduction of activities by others, arising from a different context, i.e. of wanting to build a factory, start mining for aggregates etc. recognises the fact that these activities deliver the results, but misses the point that the inputs within the policy/objective level logic model as well as the outcomes are not the main source or outcome of these activities.

The review of the East Marine Plan referred to the difference that has to be made between the working of the plan itself and the activities of individual users. These user activities are the main activities in the logic models. In the review of the draft South Marine Plan logic models presented above, we have brought these perspectives together by adding a stage of proposal delivery between the intermediate outcome and outcome in the logic models of Type A and Type B. We have not included a more detailed reference to the activities we can expect as part of the proposal delivery, such as construction work etc. In doing so we recognise here that it is the implementation that leads to the delivery of the HLMOs, not the mere existence of the plan. This creates the line of sight between the Marine Plan and its policies with the change on the ground. In the East Marine Plan the attempt has been made to introduce this link

³⁰ MMO (2016) Review of the Marine Planning Monitoring and Evaluation Framework and Development of Baselines. A report produced for the Marine Management Organisation, pp86. MMO Project No: 1087. ISBN: 978-1-909452-89-3

by having activities described as “All sectors that...”. When considering the decision making and project planning which stands behind this Activity box these are activities within their own logic chain as part of the delivery of individual projects. They will have different inputs to the MMO and other activities which involve consultations and decision making. These are not included in the East Marine Plan logic models.

Relevance

Some of the policies are very high level (as was observed in the East Marine Plan review). This has an impact on measurability and attribution. The review of the East Marine Plan comments on this. The draft South Marine Plan has gone the other way, leaving out the actual project implementation which forms the core of delivering change. The recommendations in our review of the draft South Marine Plan introduce, a “systems element”, into the logic model by including implicitly another set of logic chains taken forward by those people who implement projects, i.e. the “proposal delivery” box, already mentioned above.

Consistency

The review of the draft South Marine Plan highlights the fact that each project proposal has to go through a number of policy logic chains to ensure harm is avoided and to find support within the S. 58 framework. The harm avoided can cover a variety of potential negative impacts on infrastructure, biodiversity etc. This is also the case for projects brought forward under the East Marine Plan.

Communicability

The logic models in the East Marine Plan do not have impact following outcomes; and the outcomes are not split up into intermediate outcomes and outcomes. In addition there is inconsistency across the logic models in how outcomes are framed. This reduces their usefulness as communication tools. We recommend the use of impacts and intermediate outcome to increase transparency. The increase in transparency would arise from a more precise description of the steps within the logic model that lead to outcomes.

Recommendations:

Most policies in the East Marine Plan are compatible with the main groups identified in the review of the draft South Marine Plan. This is perhaps not a surprise given that policy will want to increase some activities, but also wants to ensure that existing assets are not damaged. Annex 2 provides a rapid review of the East Marine Plan policies against the typology proposed earlier in this document. This leads to the structure of type A and B policies.

- We recommend to use a similar approach as proposed in the review of the draft South Marine Plan logic models and introduce a project delivery element which is closer to the outcomes from the Marine Plan perspective than activities.
- We recommend to harmonise the policies with the types described in the review of the draft South Marine Plan. Where the East Marine Plan and draft South Marine Plan policies are similar but expressed differently, as in the case of CC2 and S-CC-1, the MMO should decide which wording is more appropriate to achieve the policy objectives.

7.1.3 Policies in marine planning

The East Marine Plan includes some policies which are not directly reflected in the draft South Marine Plan. Some policies may only be relevant for the East Marine Plan area e.g. due to local geological conditions. However, even in these cases we recommend harmonising the drafting of the policy with the drafting of the draft South Marine Plan to avoid any misunderstandings by stakeholders. It might be more coherent and easier for users who operate across different marine planning areas if there is common drafting of policies across marine plans, and potentially a clear policy typology and list of policy goals specific to each plan area.

Review of Indicators and Development of Report Cards

8 Draft South Marine Plan indicator critique and development of report cards

Each of the proposed draft South Marine Plan monitoring indicators³¹ set out in MMO (2017)³² was reviewed by undertaking a critique of the MMO's existing indicator descriptions. The MMO's indicator descriptions include the following information: indicator description, rationale, data source, conceptual soundness, technical robustness and spatial scale.

On the basis of the MMO descriptions and ICF critique, report cards were then developed for each indicator. The critique found that the proposed indicators often comprised of multiple sub-indicators under a common indicator theme. As such each indicator report card includes a headline indicator title, but may present multiple specific indicators. In total 24 indicator report cards were prepared providing details on over 80 specific indicators.

The report cards set out the practical details for each indicator. This includes information on each indicator's current status and trends. It also includes technical details including a final indicator description, target and rationale, as well as the methodology for constructing the indicator and any key weaknesses or assumptions.

In some cases recommendations are provided at the end of the report card on further work that could be carried out to address weakness or further develop the indicator(s).

The indicator critique and report cards will be used by the MMO as templates to guide the further development of the indicators, and as a guide on which to establish the necessary data collection and analytical processes for each indicator. The critique and report cards are not included in this report.

³¹ Excluding those which are to be derived from primary survey work

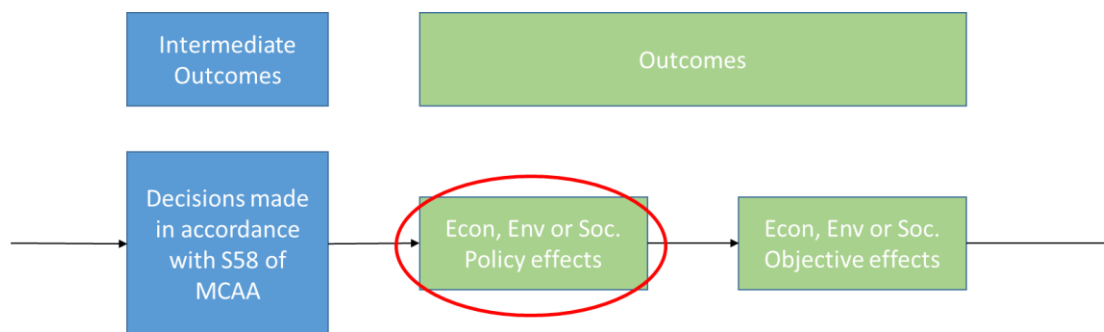
³² MMO (2017). Draft South Marine Plan Approach to Monitoring Annex of Indicators. June 2017

9 Consideration of policy-specific indicator gaps

This section sets out a high level review of the East Marine Plan and draft South Marine Plan policies for which the MMO has not yet identified any policy-specific indicators.

In this context, ‘policy-specific indicators’ refer to indicators which map onto the ‘policy effects’ component of the draft South Marine Plan logic model (as shown by the red circle in Figure 9). Such indicators seek to isolate effects that are directly and clearly linked to each plan policy. Examples of other policy-specific indicators are presented in Table 2 of MMO (2017)³³, which also gives a fuller description of the MMO’s proposed monitoring approach (for the South Marine Plan) and the complete logic model.

Figure 9: Extract from the draft South Marine Plan logic model, highlighting the immediate policy-specific effects component.



9.1 Policy-specific review

Each policy is reviewed in turn, presented first for the draft South Marine Plan and then the East Marine Plan. For each policy, the policy is stated followed by a summary of the policy-specific indicator requirements and suggestions of possible approaches for defining indicators.

The suggested approaches have not been fully investigated (e.g. to examine their appropriateness and feasibility) as part of this project. Rather they comprise ideas for policy-specific indicators which require further investigation and testing before their viability can be determined.

In some cases indicators already proposed in the draft South Marine Plan monitoring framework³⁴ are suggested; these are annotated with the indicator number used in that framework report. Where a new indicator (or possible indicator) is suggested this is annotated as ‘Indicator #n’.

³³ See: MMO (2017). Draft South Marine Plan Approach to Monitoring Annex of Indicators. June 2017

³⁴ *ibid*

Where no suitable policy-indicator is known, this is stated.

In all cases where it is feasible (i.e. most), Indicator #4 (which tracks the preceding component of the logic model – decisions made in accordance with S. 58 of the MCAA) should be analysed at the policy-specific level. However, Indicator #4 is only included as an indicator approach in the policy-specific review in cases where it fully satisfies the requirements of the desired policy-specific indicator.

In general it was found that policy-specific effects can be difficult to monitor because they cover:

- complex issues that require further unpacking to determine the indicator needs. In some such cases the underlying evidence and understanding may be lacking to adequately unpack the issues into meaningful components for which indicators could be specified
- a broad range of issues which cannot be adequately covered through a single or small number of indicators
- issues for which a desirable indicator can be identified but for which no data sources (or suitable proxy sources) are known to be available.

In the draft South Marine Plan most policies and their aims are clearly stated, which helps in the process of determining what indicators may be desirable. In the East Marine Plan the policies are, in some instances, more vague or broad, and lack a clear – or at least lack a targeted – description of what they are trying to achieve, which can make it harder to determine what indicators may be desirable.

9.2 Draft South Marine Plan policies review

Table 6: S-FISH-1 Review.

	Policy	Policy aim
<u>S-FISH-1</u>	Proposals that support the diversification of a sustainable fishing industry and or enhance fishing industry resilience to the effects of climate change should be supported.	Climate change can impact commercial fisheries by altering fish abundance, growth, distribution, or behaviour. S-FISH-1 supports long-term strategic proposals that enable the fishing industry to diversify or build in resilience to manage climate change risks and maximise opportunities for sustainable use of marine resources.
Indicator requirements	The policy indicator would need to be able to monitor changes in the climate-resilience of the fishing fleet. The concept is challenging to define. Sector climate risks are multifaceted, as are the possible adaptation responses (ranging from improved scientific information, education and training, changes in fisheries management, on-board vessels investments, port infrastructure investments, market access development) ³⁵ . There are no known indicators or suitable data sources.	
Indicator approaches	No policy-specific indicator is identified. Note: It may be feasible to track proposals linked to EMFF Article 48 Productive investments in aquaculture, which can include (amongst other things) ‘diversification of species and production’ projects (and hence partially covers the policy scope). However, (as for Indicator #11) because the EMFF will no longer be available to UK aquaculture businesses after EU Exit, the continuity of the dataset cannot be guaranteed and hence does not offer a robust indicator.	

³⁵ For further information see, for example, Garrett, A, Buckley, P, and Brown, S. (2015) Understanding and responding to climate change in the UK seafood industry: Climate change risk adaptation for wild capture seafood. A Seafish report to the UK Government under the Climate Change Adaptation Reporting Power.

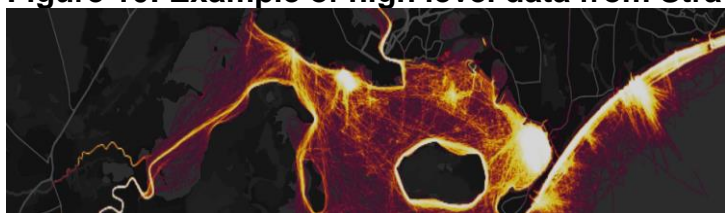
Table 7: S-EMP-2 Review.

	Policy	Policy aim
S-EMP-2	Proposals resulting in a net increase to marine related employment will be supported, particularly where they are in line with the skills available in and adjacent to the south marine plan areas.	The south marine plan areas have employment structures with significant variation within and between local authority areas. S-EMP-2 encourages public authorities to consider the employment benefits of a proposal and how the required skills equate to those of the plan area. It enables maximum sustainable activity, prosperity and opportunities for all, now and in the future.
Indicator requirements	The policy indicator would need to be able to monitor changes in the extent to which new economic activity in the South Plan area is providing a diversity of job types, appropriate for a broad range of the economically active workforce. Data on employment by occupation (from ONS Annual Population Survey), provides an area-wide picture of job types – this can be taken as a proxy for skills involved in any given job. However, there is a lack of data to construct an indicator that can specifically compare new marine job types (i.e. new marine employment by occupation) with the types of jobs that are suitable for given population (i.e. the skills, and suitable occupations, of the local population).	
Indicator approaches	No policy-specific indicator is identified.	

Table 8: S-FISH-3 Review.

	Policy	Policy aim
S-FISH-3	Proposals that enhance access to, or within sustainable fishing or aquaculture sites should be supported.	Through co-existence and co-location of facilities, S-FISH-3 enables support for sustainable fishing and aquaculture by supporting proposals that enhance access to sites.
Indicator requirements	The indicator would require data on the physical accessibility of fishing/aquaculture sites. There are no known data sets that measure accessibility or a similar proxy. As the policy aim is for development to enhance access, it is not sufficient to use assumptions on development footprints as a proxy for changes in access (which might more appropriately be the case if development were limiting access).	
Indicator approaches	No policy-specific indicator is identified.	

Table 9: S-ACC-1 and S-ACC-2 Review.

	Policy	Policy aim
S-ACC-1	Proposals, including in relation to tourism and recreation, should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts on public access.	Provision for marine access is essential to enabling the economic and social benefits that will come from the growth of tourism and recreation in the south marine plan areas. S-ACC-1 requires proposals to manage impacts on public access to the marine area and contributes to the health and wellbeing of communities.
S-ACC-2	Proposals demonstrating enhanced public access to and within the marine area will be supported.	S-ACC-2 ensures that support will be given to proposals which enhance public access to the marine area, such as physical, digital, and interpretative access and signage. Support will also be given to proposals which enhance access by removing unsuitable access arrangements enabling better access to the marine area.
Indicator requirements	In both cases indicators are required on public access to and within the marine area.	
Indicator approaches	<p>Indicator #n: number of access points and levels of use.</p> <p>Strava data³⁶ provides spatial information on marine access points and use levels (by Strava users – as an indicative sample of the population of all users). Processed data can be purchased from Strava on a commercial basis. On its own this may be sufficient as an access ‘objective’ level indicator. To create a policy-specific indicator, it would be necessary to measure changes resulting from new projects. It may be feasible to isolate access points relevant to new projects (those for which the policies are identified as relevant during the licencing process), in order to better fit the data to just the policy effects.</p> <p>Note: Figure 10 provides an illustration of the activity data available on Strava. It shows water-based activities, which the higher intensity areas indicating the key access points. More detailed view of the data is available on a commercial basis.</p> <p>Figure 10: Example of high level data from Strava (Poole Harbour).</p>  <p><i>Source: Strava Global Heatmap (activity: water)</i></p>	

³⁶ Strava (nd). The Global Heatmap. Available online at www.strava.com/heatmap#7.00/-120.90000/38.36000/hot/all

Table 10: S-CC-1 Review.

	Policy	Policy aim
S-CC-1	Proposals must consider their contribution to greenhouse gas emissions arising from unintended consequences on other activities. Where such consequences are likely to result in increased greenhouse gas emissions, proposals should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate unintended consequences on other activities.	S-CC-1 addresses the indirect greenhouse gas emissions of a proposal. Indirect emissions include those that have occurred specifically due to the impositions of a proposal on other activities.
Indicator requirements	<p>The indicator requires tracking of greenhouse gas emissions as a result of unintended consequences on other activities. This requirement is particularly difficult to breakdown into a relevant and deliverable indicator.</p> <p>Whilst the policy is not specific about the types of activities of relevance, for the purposes of establishing a focus for monitoring, some scope of potential activities effected needs to be set. It may be assumed that two key activities are shipping and commercial fishing. Both of these are at risk of displacement due to new marine projects (e.g. wind farms or MPAs) which may result in changes in operations that result in increased emissions. Further review may be appropriate to confirm changes in emissions from these two activities as an appropriate monitoring scope.</p> <p>The policy-specific indicator requires information on the change in emissions from these activities occurring specifically due to new marine projects. Again the scope of such projects needs to be set to support subsequent analysis. It is suggested that this may include new projects with meaningful spatial footprint which are identified during the licencing process as having the potential to displace commercial fishing activity or shipping e.g. an offshore wind farm.</p> <p>There are no known data sources which can directly provide information on changes in emissions. However it is feasible to undertake analysis using existing data sources (AIS and VMS) to make such estimates.</p>	
Indicator approaches	<p>Indicator #n (part a): Change in shipping emissions. For commercial vessels it should be possible to use before and after MMO processed AIS data to get a direct measure of increased steaming distances and number of vessels involved, from which an estimate of emissions can be calculated.</p> <p>Indicator #n (part b): Change in fishing emissions. A similar approach may be used for fishing vessels using VMS data. However it is not clear that changes in steaming distances could be estimated without further effort to understand where the displaced effort is moved to.</p>	

	<p>A number of studies³⁷ examining baseline emissions of shipping have used similar AIS-based approaches. There are no known 'off the shelf' data on emissions that can be used to allow a simple assessment to be undertaken, and further work would be required to create a simple methodology that would be amenable to regular application for the purposes of monitoring.</p>
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³⁷ E.g. Ricardo Energy & Environment (2017). A review of the NAEI shipping emissions methodology. Final Report. Report for the Department for Business, Energy & Industrial Strategy PO number 1109088.

Table 11: S-CC-2 Review.

	Policy	Policy aim
S-CC-2	Proposals should demonstrate for the lifetime of the proposal that: 1) they are resilient to the effects of climate change 2) they will not have a significant adverse impact upon climate change adaptation measures elsewhere. In respect of 2) proposals should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate the significant adverse impacts upon these climate change adaptation measures.	S-CC-2 ensures that proposals should not compromise existing adaptation measures, which will enable improvement of the resilience of coastal communities to coastal erosion and flood risk. S-CC-2 enables enhanced resilience of developments, activities and ecosystems within the south marine plan areas to the effects of climate change.
Indicator requirements	The indicator requires tracking of climate-related performance metrics of new developments over time. It is not known whether such information is routinely collected or available. If it is not then it may be appropriate to utilise the 'planned' (or forecast) performance metrics, which may be available as part of proposal assessments required to demonstrate due consideration of policy S-CC-2.	
Indicator approaches	No policy-specific indicator is identified.	

Table 12: S-CC-3 Review.

	Policy	Policy aim
S-CC-3	Proposals in and adjacent to the south marine plan areas that are likely to have a significant adverse impact on coastal change should not be supported.	Large areas of the south marine plan coastline are subject to or vulnerable to change. S-CC-3 ensures proposals do not exacerbate coastal change, enabling communities to be more resilient and able to adapt better to coastal erosion and flood risk where identified.
Indicator requirements	The indicator requires information on the extent to which proposals are occurring which are exacerbating coastal change. There is no known data sources that allow the impact of specific developments on coastal change processes to be tracked.	
Indicator approaches	No policy-specific indicator is identified.	

Table 13: S-MPA-3 Review.

	Policy	Policy aim
S-MPA-3	Where statutory advice states that a marine protected area site condition is deteriorating, or that features are moving or changing due to climate change, a suitable boundary change will be supported to ensure continued protection of the site and coherence of the overall network.	Within the south marine plan areas, marine protected areas are generally small in size so are more susceptible to climate change. S-MPA-3 ensures flexibility by supporting boundary changes to improve resilience of the marine protected area network. S-MPA-3 enables adaptive management to help mitigate the loss of features within sites, and promote adaptation to climate change.
Indicator requirements	The indicator would require data on MPA boundary changes that occur as a result of the effects of climate change. There is no known dataset that records such changes – however if such changes occur they are likely to be well publicised (e.g. by Defra, Natural England or the JNCC).	
Indicator approaches	A periodic request (e.g. at the point of three year review) could be made to relevant agencies (e.g. JNCC, Natural England) to ask whether any MPA boundary changes have occurred over the period as a result of changes that are thought to have been climate induced; or whether needed changes have not been achieved. The feasibility of this would require further exploration with the relevant agencies.	

Table 14: S-NIS-1 Review.

	Policy	Policy aim
S-NIS-1	Proposals must put in place appropriate measures to avoid or minimise significant adverse impacts on the marine area that would arise through the introduction and transport of non-indigenous species, particularly when: 1) moving equipment, boats or livestock (for example fish and shellfish) from one water body to another 2) introducing structures suitable for settlement of non-indigenous species, or the spread of invasive non-indigenous species known to exist in the area.	As the south marine plan areas are so close to the continent and have one of the busiest shipping channels in the world, there is a high risk of introducing or spreading invasive non-native species. S-NIS-1 aims to avoid or minimise damage to the marine area from the introduction or transport of invasive non-native species, focusing on two pathways of particular relevance for the south marine plan areas. This will enable support for viable populations of flora and fauna.
Indicator requirements	The indicator would require data on occurrence of invasive non-indigenous species introductions by pathway. There is no known data source that records such changes.	
Indicator approaches	The Environment Agency (and potentially other relevant agencies) typically undertake some level of formal reporting when a new invasive species outbreak occurs. This may include some consideration of the likely pathway in cases where it can be feasibly determined. Periodic requests could be made to the relevant agencies for such information. This may only amount to qualitative information rather than a comprehensive quantitative indicator. The feasibility of this would require further exploration with the relevant agencies.	

Table 15: S-ML-1 Review.

	Policy	Policy aim
S-ML-1	Public authorities should ensure adequate provision for and removal of beach and marine litter on amenity beaches.	Litter at sea often originates on land. Increase in development, recreation and tourism in the south marine plan areas may result in increased litter, and an adverse impact on the environment on which these activities rely. Addressing marine litter along the coastline is important for tackling this problem. S-ML-1 aims to reduce litter at amenity beaches in the south inshore marine plan area.
Indicator requirements	The indicator would require data on the extent of beach/marine litter removal facilities/services (it does not appear to target preventative collection measures). There is no known dataset focussing on facilities/services ³⁸ . (Most current effort is put to developing better monitoring programmes on the prevalence of litter in the environment – e.g. via MSFD monitoring ³⁹ – however this does not provide policy-specific data).	
Indicator approaches	Indicator 28.n – Proportion of subnational plans that cite the South Marine Plan. A specific indicator under indicator #28 focussed on local authority policies with regards marine/beach litter could be developed drawing on the detailed policy-specific information that (may) be collected in the MMO’s ‘New Plan Recorder’ spreadsheet. However, this would only track policy intent rather than delivery. Future monitoring and evaluation which may take place with regards England Litter Strategy (Defra, 2017. Litter Strategy for England), may provide additional opportunities to identify indicators.	

³⁸ A further complication to indicators on litter collection infrastructure may occur due to the purposeful avoidance of providing such infrastructure in some (typically more rural) locations, with policy instead focussed on encouraging beach users to take litter home with them.

³⁹ E.g. the Marine Conservation Society were commissioned by Defra to provide data for the MSFD indicator and have been doing beach litter surveys for 20 years

Table 16: S-ML-2 Review.

	Policy	Policy aim
S-ML-2	The introduction of litter as a result of proposals should be avoided or minimised where practicable and activities that help reduce marine litter will be supported.	The natural landscapes, wildlife and recreational opportunities on offer in the south marine plan areas attract visitors to the area. More visitors and increases in coastal development are likely to increase litter. S-ML-2 ensures proposals avoid or minimise introducing litter to the marine area, and encourages voluntary action to protect the marine environment and the services it provides for people.
Indicator requirements	The indicator would require data on the extent of marine litter resulting from new developments/activities as well as activities that are being undertaken to reduce existing marine litter. There is no known dataset focussing on either. (Most current effort is put to developing better monitoring programmes on the prevalence of litter in the environment – e.g. via MSFD monitoring – however this does not provide policy-specific data).	
Indicator approaches	No policy-specific indicator identified. Future monitoring and evaluation which may take place with regards England Litter Strategy (Defra, 2017. Litter Strategy for England), may provide additional opportunities to identify indicators.	

Table 17: S-UWN-2 Review.

	Policy	Policy aim
S-UWN-2	Proposals that generate impulsive sound and/or ambient noise must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts on highly mobile species, d) if it is not possible to mitigate significant adverse impacts, proposals must state the case for proceeding.	Underwater noise levels have increased with marine space use. Noise can impact on highly mobile species, including causing chronic stress and death at higher intensities. S-UWN-2 supports management of underwater noise requiring proposals to take appropriate noise reduction actions. S-UWN-2 enables clear and proportionate regulation to ensure marine activity respects environmental limits and protects biodiversity.
Indicator requirements	The indicator would require data on the extent to which underwater noise generation is being adequately managed. This can be conceived in a number of different ways: Generation of underwater noise against environmental limits; Per unit noise generation of activities.	
Indicator approaches	Further investigation into options for analysis of JNCC’s Marine Noise Register (http://www.mnr.jncc.gov.uk/) and environmental limits. Further investigation into the feasibility of normalised analysis of Marine Noise Register entries to see if per ‘unit’ noise emissions are reducing over time. (Noting limitations that not all relevant projects are required to submit data to the Marine Noise Register).	

Table 18: S-BIO-2 Review.

	Policy	Policy aim
S-BIO-2	Proposals that incorporate features that enhance or facilitate natural habitat and species adaptation, migration and connectivity will be supported.	S-BIO-2 supports proposals that incorporate features that enhance or facilitate natural habitat and species adaptation, migration and connectivity, enabling the environment to respond to climate change and development. This may include novel designs, and collaboration between developers and public authorities.
Indicator requirements	The indicator would require data on enhancement 'features'. No known data source. The environmental outcomes are diverse and not amenable to single indicator monitoring.	
Indicator approaches	No policy-specific indicator is identified.	

Table 19: S-DD-2 Review.

	Policy	Policy aim
S-DD-2	Proposals must identify, where possible, alternative opportunities to minimise the use of dredged waste disposal sites by pursuing re-use opportunities through matching of spoil to suitable sites.	Re-use or recycling of dredge material supports the growth of industry and increases available space within development areas in the south marine plan areas. It can also reduce the pressure on existing marine habitats with some materials being able to support beneficial re-use and ecosystem services. S-DD-2 enables the re-use or recycling of dredge material reducing the need to dispose of excavated material at marine disposal sites.
Indicator requirements	The indicator would require data on the volume of dredged material that is reused / recycled. No known data sources. Disposal licence applications are required to consider alternative uses. These could be reviewed to identify incidences where alternative uses are foreseen.	
Indicator approaches	Indicator #n – alternative use proposal (from licence applications)	

9.3 East Marine Plan policies review

Table 20: EC3 Review.

EC3	Proposals that will help the East marine plan areas to contribute to offshore wind energy generation should be supported.
Indicator requirements	The policy is supportive of any type of development that supports growth in the sector – be it energy generation projects, facilitating services (e.g. port infrastructure) or other (e.g. skills and training projects). The indicator therefore requires data on the expansion of offshore wind energy support businesses (of all forms). There is no known dataset that can isolate just this activity.
Indicator approaches	No policy-specific indicator is identified.

Table 21: OG2 Review.

OG2	Proposals for new oil and gas activity should be supported over proposals for other development.
Indicator requirements	The policy is not solely focussed on O&G development, rather on where O&G proposals are taken forward instead of some other development. The indicator requires information about the licencing (or planning) decision rather than the proposal itself i.e. has an O&G licence been provided despite (or declined because) of other development proposals.
Indicator approaches	Indicator #n(i) – the number of O&G licence proposals declined because they conflict with an alternative development option. Indicator #n(ii) – the number of non-O&G licence proposals declined because they conflict with O&G development proposals These two indicators may be sourced from MMO records of why licences are declined (if sufficient detail is recorded). Indicator #8 – if potential O&G development areas overlap with those of other industries then a periodic analysis could be conducted to determine whether O&G development has been given primacy (although this cannot account for the underlying market demand to deliver O&G projects in these areas in the first place)

Table 22: WIND1 Review.

WIND1	Developments requiring authorisation, that are in or could affect sites held under a lease or an agreement for lease that has been granted by The Crown Estate for development of an Offshore Wind Farm, should not be authorised unless: a) they can clearly demonstrate that they will not compromise the construction, operation, maintenance, or decommissioning of the Offshore Wind Farm b) the lease/agreement for lease has been surrendered back to The Crown Estate and not been re-tendered c) the lease/agreement for lease has been terminated by the Secretary of State d) in other exceptional circumstances.
Indicator requirements	The indicator requires information on proposed developments in/near Offshore Wind Farm sites. As the policy is focussed on achieving zero impact on offshore wind (except in exceptional circumstances) it is likely to be sufficient to monitor the licencing decision rather than the extent of impact being created (or avoided).
Indicator approaches	Indicator #4 – number of proposals complying with the policy

Table 23: WIND2 Review.

WIND2	Proposals for Offshore Wind Farms inside Round 3 zones, including relevant supporting projects and infrastructure, should be supported
Indicator requirements	The policy is supporting all types of activity that support Round 3 wind farm development. As such the indicator requires information on the extent of all activity geared towards Round 3 as well as the ultimate extent of wind capacity delivery in Round 3. The construct of the policy provides limited opportunity for a meaningful policy-specific indicator.
Indicator approaches	No meaningful policy-specific indicator is identified. But given the construct of the policy, it could be adequately monitored with the use of a policy specific indicator. As such the indicators would refer to the components of the logic model before and after the policy effect component. The indicators would be: <ul style="list-style-type: none"> • Indicator #4 – number of proposals complying with the policy • Indicator #n – Round 3 wind development delivered (GW installed) (no central source currently known, but can be drawn together from varied source e.g. the Global Offshore Wind Farms Database⁴⁰, developer websites and the Crown Estate⁴¹)

⁴⁰ www.4coffshore.com/windfarms/windfarms.aspx?windfarmId=UK36

⁴¹ Direct engagement or via reports and offshore wind map available at www.thecrownestate.co.uk/en-gb/what-we-do/on-the-seabed/energy/

Table 24: TIDE1 Review.

TIDE1	In defined areas of identified tidal stream resource (see figure 16), proposals should demonstrate, in order of preference: a) that they will not compromise potential future development of a tidal stream project b) how, if there are any adverse impacts on potential tidal stream deployment, they will minimise them c) how, if the adverse impacts cannot be minimised, they will be mitigated d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts.
Indicator requirements	The indicator requires information on proposed developments in/near tidal stream resource. As the policy is focussed on achieving zero impact on offshore wind (except in exceptional circumstances) it may be sufficient to monitor the licencing decision rather than the extent of impact being created (or avoided).
Indicator approaches	Indicator #8 – developments occurring in tidal stream resource areas

Table 25: CCS1 Review.

CCS1	Within defined areas of potential carbon dioxide storage, (mapped in figure 17) proposals should demonstrate in order of preference: a) that they will not prevent carbon dioxide storage b) how, if there are adverse impacts on carbon dioxide storage, they will minimise them c) how, if the adverse impacts cannot be minimised, they will be mitigated d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts.
Indicator requirements	The indicator requires information on the extent to which developments are or are not hindering CCS development. Specific information needs are therefore on (i) development occurring within CCS areas, and (ii) contextual information on those developments to determine the extent to which they may hinder CCS development.
Indicator approaches	Indicator #8 – developments occurring in potential CCS areas

Table 26: CCS2 Review.

CCS2	Carbon Capture and Storage proposals should demonstrate that consideration has been given to the re-use of existing oil and gas infrastructure rather than the installation of new infrastructure (either in depleted fields or in active fields via enhanced hydrocarbon recovery).
Indicator requirements	The indicator requires information on the extent to which CCS developments are re-using existing O&G infrastructure. No known data source.
Indicator approaches	Given the limited level of CCS development, bespoke data collection could be undertaken with CCS project companies (or extracted from project design documents, if available) to collect information on the extent of oil and gas infrastructure re-use.

Table 27: CAB1 Review.

CAB1	Preference should be given to proposals for cable installation where the method of installation is burial. Where burial is not achievable, decisions should take account of protection measures for the cable that may be proposed by the applicant.
Indicator requirements	The policy is seeking primarily to reduce or limit subsea cable damage, with a preference for doing this via cable burial. Hence the indicator requires information on the extent of cable damage occurring and the extent of cable burial (compared to other protection measures) being used (e.g. km of cable using different protection measures). No comprehensive data source is known.
Indicator approaches	No policy-specific indicator is identified

Table 28: AQ1 Review.

AQ1	Within sustainable aquaculture development sites (identified through research), proposals should demonstrate in order of preference: a) that they will avoid adverse impacts on future aquaculture development by altering the sea bed or water column in ways which would cause adverse impacts to aquaculture productivity or potential b) how, if there are adverse impacts on aquaculture development, they can be minimised c) how, if the adverse impacts cannot be minimised they will be mitigated d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts.
Indicator requirements	The indicator(s) require information on the extent to which proposals that potentially inhibit future aquaculture development are being avoided or harm minimised. Specific information needs are therefore on (i) development occurring within sustainable aquaculture development sites, and (ii) contextual information on those developments to determine the extent to which they may hinder aquaculture development.
Indicator approaches	Indicator #8 – number of developments occurring within sustainable aquaculture development sites

Table 29: TR2 Review.

<p>TR2</p>	<p>Proposals that require static objects in the East marine plan areas, should demonstrate, in order of preference:</p> <ul style="list-style-type: none"> a) that they will not adversely impact on recreational boating routes b) how, if there are adverse impacts on recreational boating routes, they will minimise them c) how, if the adverse impacts cannot be minimised, they will be mitigated d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts.
<p>Indicator requirements</p>	<p>The indicator(s) requires information on the extent to which recreational boating routes are being adversely affected by static objects (e.g. infrastructure) – affecting accessibility or safety of navigation for recreational boats within recreational boating areas.</p> <p>Specific information needs are therefore on (i) static objectives deployment / infrastructure development overlapping recreational boating routes, and (ii) contextual information on those objectives/developments to determine the extent to which they may hinder use (e.g. access, navigational safety) of those routes).</p>
<p>Indicator approaches</p>	<p>Indicator #8 – static objects/infrastructure development occurring within recreational boating areas</p> <p>Indicator #n – periodic survey response from RYA (or similar) on major new impacts on access/safety in recreational boating areas due to static objects/infrastructure⁴²</p>

⁴² A periodic survey could (i) ask an open question on whether there have been any major impacts on sailing route access due to developments, or (ii) provide information (e.g. a map) on the location of new infrastructure (and other relevant access restrictions) with the question on impact framed against this information. Information on impact significance could combined closed Likert questions with open response options for further details. The survey questions could be delivered via a bespoke questionnaire targeting key stakeholder representatives or the wider stakeholder community; or included as part of a more general survey. The former will like require more resources whilst the latter will like be more restrictive in what can be asked and what information can be provided.

Annex 1 Draft South Marine Plan policy types

Policy		Policy type
<u>S-CO-1</u>	Proposals will minimise their use of space and consider opportunities for co-existence with other activities.	B
<u>S-DEF-1</u>	Proposals in or affecting Ministry of Defence Areas should only be authorised with agreement from the Ministry of Defence.	B
<u>S-OG-1</u>	Proposals in areas where a licence for oil and gas has been granted or formally applied for should not be authorised unless it is demonstrated that the other development or activity is compatible with the oil and gas activity.	B
<u>S-TIDE-1</u>	Proposals in areas under seabed agreement for tidal energy generation (see figure 5 in the technical annex) should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	B
<u>S-PS-1</u>	Proposals that may have a significant adverse impact upon current activity and future opportunity for expansion of port and harbour activities should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts, d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	B
<u>S-AGG-1</u>	Proposals in areas where a licence for extraction of aggregates has been granted or formally applied for should not be authorised, unless it is demonstrated that the other development or activity is compatible with aggregate extraction.	B
<u>S-AGG-2</u>	Proposals within an area subject to an Exploration and Option Agreement with The Crown Estate should not be supported unless it is demonstrated that the other development or activity is compatible with aggregate extraction.	B
<u>S-AGG-3</u>	Proposals in areas where high potential aggregate resource occurs should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts on aggregate extraction, d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	B
<u>S-DD-1</u>	Proposals within or adjacent to licenced dredging and disposal areas should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts on licenced dredging and disposal areas, d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	B
<u>S-AQ-1</u>	Proposals for sustainable aquaculture in identified areas of potential sustainable aquaculture production will be supported.	A and B

Policy	Policy type
Proposals in existing or within potential sustainable aquaculture production areas must demonstrate consideration of and compatibility with sustainable aquaculture production. Where compatibility is not possible, proposals must demonstrate that they will, in order of preference: a) avoid, b) minimise c) mitigate significant adverse impacts on sustainable aquaculture, d) if it is not possible to mitigate significant adverse impacts, proposals should state the case for proceeding.	
<u>S-INF-1</u>	A
<u>S-PS-2</u>	B
<u>S-PS-3</u>	B
<u>S-CAB-1</u>	A and B
<u>S-CAB-2</u>	B
<u>S-AQ-2</u>	A
<u>S-REN-1</u>	A
<u>S-AGG-4</u>	A
<u>S-FISH-1</u>	A

Policy	Policy type
<u>S-TR-1</u>	Proposals supporting, promoting or facilitating tourism and recreation activities, particularly where this creates additional utilisation of related facilities beyond typical usage patterns, should be supported.
<u>S-EMP-1</u>	Proposals that develop skills related to marine activities, particularly in line with local skills strategies, will be supported.
<u>S-EMP-2</u>	Proposals resulting in a net increase to marine related employment will be supported, particularly where they are in line with the skills available in and adjacent to the south marine plan areas.
<u>S-SOC-1</u>	Proposals that enhance or promote social benefits will be supported. Proposals must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts which result in the displacement of other existing or authorised (but yet to be implemented) activities that generate social benefits.
<u>S-TR-2</u>	Proposals that enhance or promote tourism and recreation activities will be supported. Proposals for development must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts on tourism and recreation activities.
<u>S-FISH-2</u>	Proposals that may have significant adverse impacts on access to, or within, sustainable fishing or aquaculture sites must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts, d) if it is not possible to mitigate the significant adverse impacts, proposals should state the case for proceeding.
<u>S-FISH-3</u>	Proposals that enhance access to, or within sustainable fishing or aquaculture sites should be supported.
<u>S-ACC-1</u>	Proposals, including in relation to tourism and recreation, should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts on public access
<u>S-ACC-2</u>	Proposals demonstrating enhanced public access to and within the marine area will be supported.
<u>S-CC-1</u>	Proposals must consider their contribution to greenhouse gas emissions arising from unintended consequences on other activities. Where such consequences are likely to result in increased greenhouse gas emissions, proposals should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate unintended consequences on other activities.
<u>S-CC-2</u>	Proposals should demonstrate for the lifetime of the proposal that: 1) they are resilient to the effects of climate change 2) they will not have a significant adverse impact upon climate change adaptation measures elsewhere. In respect of 2) proposals should demonstrate that they will,

Policy	Policy type
<u>S-CC-3</u>	B
<u>S-CC-4</u>	B
<u>S-HER-1</u>	B
<u>S-SCP-1</u>	B
<u>S-MPA-1</u>	A and B
<u>S-MPA-2</u>	A and B
<u>S-MPA-3</u>	D

Policy	Policy type
<p><u>S-MPA-4</u> Until the ecological coherence of the marine protected area network is confirmed⁴³, proposals should demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate adverse impacts on features⁴⁴ that may be required to complete the network, d) if it is not possible to mitigate adverse impacts, proposals should state the case for proceeding.</p>	B
<p><u>S-NIS-1</u> Proposals must put in place appropriate measures to avoid or minimise significant adverse impacts on the marine area that would arise through the introduction and transport of non-indigenous species, particularly when: 1) moving equipment, boats or livestock (for example fish and shellfish) from one water body to another 2) introducing structures suitable for settlement of non-indigenous species, or the spread of invasive non-indigenous species known to exist in the area.</p>	B
<p><u>S-ML-1</u> Public authorities should ensure adequate provision for and removal of beach and marine litter on amenity beaches.</p>	C
<p><u>S-ML-2</u> The introduction of litter as a result of proposals should be avoided or minimised where practicable and activities that help reduce marine litter will be supported.</p>	B
<p><u>S-UWN-1</u> Proposals generating impulsive sound, must contribute data to the UK Marine Noise Registry as per any currently agreed requirements. Public authorities must take account of any currently agreed targets under the UK Marine Strategy part one descriptor 11.</p>	E
<p><u>S-UWN-2</u> Proposals that generate impulsive sound and/or ambient noise must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts on highly mobile species, d) if it is not possible to mitigate significant adverse impacts, proposals must state the case for proceeding.</p>	B
<p><u>S-WQ-1</u> Proposals that may have significant adverse impacts upon water environment, including upon habitats and species that can be of benefit to water quality must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant adverse impacts</p>	B
<p><u>S-WQ-2</u> Activities that can deliver an improvement to water environment, or enhance habitats and species which can be of benefit to water quality should be supported.</p>	A
<p><u>S-BIO-1</u> Proposals that may have significant adverse impacts on natural habitat and species adaptation, migration and connectivity must demonstrate that they will, in order of preference: a) avoid, b) minimise c) mitigate significant adverse impacts.</p>	B

⁴³ By government

⁴⁴ The potential features to consider for S-MPA-4 are restricted to Features of Conservation Importance (FOCI) identified by JNCC, annex I habitats identified by the Habitats Directive, and the S41 list identified in the Natural Environment and Rural Communities Act.

Policy	Policy type	
<u>S-BIO-2</u>	Proposals that incorporate features that enhance or facilitate natural habitat and species adaptation, migration and connectivity will be supported.	A
<u>S-BIO-3</u>	Proposals that enhance coastal habitats where important in their own right and/or for ecosystem functioning and provision of goods and services will be supported. Proposals must take account of the space required for coastal habitats where important in their own right and/or for ecosystem functioning and provision of goods and services and demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate for net loss of coastal habitat.	A and B
<u>S-BIO-4</u>	Proposals that enhance the distribution and net extent of priority habitats should be supported. Proposals must demonstrate that they will avoid reducing the distribution and net extent of priority habitats.	A and B
<u>S-DIST-1</u>	Proposals, including in relation to tourism and recreational activities, within and adjacent to the south marine plan areas must demonstrate that they will, in order of preference: a) avoid, b) minimise, c) mitigate significant cumulative adverse physical disturbance or displacement impacts on highly mobile species.	B
<u>S-FISH-4</u>	Proposals that enhance essential fish habitat, including spawning, nursery and feeding grounds, and migratory routes should be supported. Proposals must demonstrate that they will, in order of preference: a) avoid, b) minimise c) mitigate significant adverse impact on essential fish habitat, including, spawning, nursery, feeding grounds and migration routes.	A and B
<u>S-FISH-4-HER</u>	Proposals will consider herring spawning mitigation in the area highlighted on figure 26 (in the technical annex) during the period 01 November to the last day of February annually.	B
<u>S-DD-2</u>	Proposals must identify, where possible, alternative opportunities to minimise the use of dredged waste disposal sites by pursuing re-use opportunities through matching of spoil to suitable sites.	B

Annex 2 Rapid review of East Marine Plan policies

Policy	E-Policy-Text	Policy Type (matched as closely as possible - not all drafting differences are included)
GOV2	Opportunities for co-existence should be maximised wherever possible.	This could be seen as an objective for the Marine Plan as a whole.
DEF1	Proposals in or affecting Ministry of Defence Danger and Exercise Areas should not be authorised without agreement from the Ministry of Defence.	Type B
OG1	Proposals within areas with existing oil and gas production should not be authorised except where compatibility with oil and gas production and infrastructure can be satisfactorily demonstrated.	Type B (extreme) – S-OG-1 also includes licensed areas where no production happening yet.
EC1	Proposals that provide economic productivity benefits which are additional to Gross Value Added currently generated by existing activities should be supported.	Type A
EC2	Proposals that provide additional employment benefits should be supported, particularly where these benefits have the potential to meet employment needs in localities close to the marine plan areas.	Type A (with particular focus)
EC3	Proposals that will help the East marine plan areas to contribute to offshore wind energy generation should be supported.	Type A
SOC1	Proposals that provide health and social well-being benefits including through maintaining, or enhancing, access to the coast and marine area should be supported.	Type A

Policy	E-Policy-Text	Policy Type (matched as closely as possible - not all drafting differences are included)
SOC1	Proposals that provide health and social well-being benefits including through maintaining, or enhancing, access to the coast and marine area should be supported.	Type A
SOC2	Proposals that may affect heritage assets should demonstrate, in order of preference: a) that they will not compromise or harm elements which contribute to the significance of the heritage asset b) how, if there is compromise or harm to a heritage asset, this will be minimised c) how, where compromise or harm to a heritage asset cannot be minimised it will be mitigated against or d) the public benefits for proceeding with the proposal if it is not possible to minimise or mitigate compromise or harm to the heritage asset	Type B (different drafting)
SOC3	Proposals that may affect the terrestrial and marine character of an area should demonstrate, in order of preference: a) that they will not adversely impact the terrestrial and marine character of an area b) how, if there are adverse impacts on the terrestrial and marine character of an area, they will minimise them c) how, where these adverse impacts on the terrestrial and marine character of an area cannot be minimised they will be mitigated against d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts	Type B (different drafting)
ECO1	Cumulative impacts affecting the ecosystem of the East marine plans and adjacent areas (marine, terrestrial) should be addressed in decision-making and plan implementation.	Different – however, is making the point of the overall marine planning process
ECO2	The risk of release of hazardous substances as a secondary effect due to any increased collision risk should be taken account of in proposals that require an authorisation.	Cross cutting, should be the case for all proposals. There is no South Marine Plan equivalent unless this is understood as a particular harm to the

Policy	E-Policy-Text	Policy Type (matched as closely as possible - not all drafting differences are included)
		environment which should be avoided
BIO1	Appropriate weight should be attached to biodiversity, reflecting the need to protect biodiversity as a whole, taking account of the best available evidence including on habitats and species that are protected or of conservation concern in the East marine plans and adjacent areas (marine, terrestrial).	Different, but achieves the same objective as S-BIO 1 - 4
BIO2	Where appropriate, proposals for development should incorporate features that enhance biodiversity and geological interests.	Partly covered by S-BIO-1 - 4
MPA1	Any impacts on the overall Marine Protected Area network must be taken account of in strategic level measures and assessments, with due regard given to any current agreed advice on an ecologically coherent network.	Weaker than the South MPA policy
CC1	Proposals should take account of: • how they may be impacted upon by, and respond to, climate change over their lifetime and • how they may impact upon any climate change adaptation measures elsewhere during their lifetime Where detrimental impacts on climate change adaptation measures are identified, evidence should be provided as to how the proposal will reduce such impacts	Variation of type B
CC2	Proposals for development should minimise emissions of greenhouse gases as far as is appropriate. Mitigation measures will also be encouraged where emissions remain following minimising steps. Consideration should also be given to emissions from other activities or users affected by the proposal	Variation of type B
GOV1	Appropriate provision should be made for infrastructure on land which supports activities in the marine area and vice versa.	Type A (South Marine Plan includes a number of policies on infrastructure in Objective 2)

Policy	E-Policy-Text	Policy Type (matched as closely as possible - not all drafting differences are included)
GOV3	Proposals should demonstrate in order of preference: a) that they will avoid displacement of other existing or authorised (but yet to be implemented) activities b) how, if there are adverse impacts resulting in displacement by the proposal, they will minimise them c) how, if the adverse impacts resulting in displacement by the proposal, cannot be minimised, they will be mitigated against or d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts of displacement	Type B
OG2	Proposals for new oil and gas activity should be supported over proposals for other development.	Type A
WIND1	Developments requiring authorisation, that are in or could affect sites held under a lease or an agreement for lease that has been granted by The Crown Estate for development of an Offshore Wind Farm, should not be authorised unless a) they can clearly demonstrate that they will not compromise the construction, operation, maintenance, or decommissioning of the Offshore Wind Farm b) the lease/agreement for lease has been surrendered back to The Crown Estate and not been re-tendered c) the lease/agreement for lease has been terminated by the Secretary of State d) in other exceptional circumstances	Type B
WIND2	Proposals for Offshore Wind Farms inside Round 3 zones, including relevant supporting projects and infrastructure, should be supported.	Type A
TIDE1	In defined areas of identified tidal stream resource (see figure 16), proposals should demonstrate, in order of preference: a) that they will not compromise potential future development of a tidal stream project b) how, if there are any adverse impacts on potential tidal stream deployment, they will minimise them c) how, if the adverse impacts cannot be minimised, they will be mitigated d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts	Type B

Policy	E-Policy-Text	Policy Type (matched as closely as possible - not all drafting differences are included)
CCS1	Within defined areas of potential carbon dioxide storage, (mapped in figure 17) proposals should demonstrate in order of preference: a) that they will not prevent carbon dioxide storage b) how, if there are adverse impacts on carbon dioxide storage, they will minimise them c) how, if the adverse impacts cannot be minimised, they will be mitigated d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts	Type B
CCS2	Carbon Capture and Storage proposals should demonstrate that consideration has been given to the re-use of existing oil and gas infrastructure rather than the installation of new infrastructure (either in depleted fields or in active fields via enhanced hydrocarbon recovery).	Type B, but different. Makes a proposal on how to minimise use of space by reusing existing infrastructure.
PS1	Proposals that require static sea surface infrastructure or that significantly reduce under-keel clearance should not be authorised in International Maritime Organization designated routes.	Type B
PS2	Proposals that require static sea surface infrastructure that encroaches upon important navigation routes (see figure 18) should not be authorised unless there are exceptional circumstances. Proposals should: a) be compatible with the need to maintain space for safe navigation, avoiding adverse economic impact ²⁰¹ b) anticipate and provide for future safe navigational requirements where evidence and/or stakeholder input allows and c) account for impacts upon navigation in-combination with other existing and proposed activities ²	Type B (slightly different)
DD1	Proposals within or adjacent to licensed dredging and disposal areas should demonstrate, in order of preference a) that they will not adversely impact dredging and disposal activities b) how, if there are adverse impacts on dredging and disposal, they will minimise these c) how, if the adverse impacts cannot be minimised they will be mitigated d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts	Type B (slightly different)
AGG1	Proposals in areas where a licence for extraction of aggregates has been granted or formally applied for should not be authorised unless there are exceptional circumstances.	Type B

Policy	E-Policy-Text	Policy Type (matched as closely as possible - not all drafting differences are included)
AGG2	Proposals within an area subject to an Exploration and Option Agreement with The Crown Estate should not be supported unless it is demonstrated that the other development or activity is compatible with aggregate extraction or there are exceptional circumstances.	Type B
CAB1	Preference should be given to proposals for cable installation where the method of installation is burial. Where burial is not achievable, decisions should take account of protection measures for the cable that may be proposed by the applicant.	Type A
FISH1	Within areas of fishing activity, proposals should demonstrate in order of preference: a) that they will not prevent fishing activities on, or access to, fishing grounds b) how, if there are adverse impacts on the ability to undertake fishing activities or access to fishing grounds, they will minimise them c) how, if the adverse impacts cannot be minimised, they will be mitigated d) the case for proceeding with their proposal if it is not possible to minimise or mitigate the adverse impacts	Type B
FISH2	Proposals should demonstrate, in order of preference: a) that they will not have an adverse impact upon spawning and nursery areas and any associated habitat b) how, if there are adverse impacts upon the spawning and nursery areas and any associated habitat, they will minimise them c) how, if the adverse impacts cannot be minimised they will be mitigated d) the case for proceeding with their proposals if it is not possible to minimise or mitigate the adverse impacts	Type B
AQ1	Within sustainable aquaculture development sites (identified through research), proposals should demonstrate in order of preference: a) that they will avoid adverse impacts on future aquaculture development by altering the sea bed or water column in ways which would cause adverse impacts to aquaculture productivity or potential b) how, if there are adverse impacts on aquaculture development, they can be minimised c) how, if the adverse impacts cannot be minimised they will be mitigated d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts	Type B

Policy	E-Policy-Text	Policy Type (matched as closely as possible - not all drafting differences are included)
TR1	Proposals for development should demonstrate that during construction and operation, in order of preference: a) they will not adversely impact tourism and recreation activities b) how, if there are adverse impacts on tourism and recreation activities, they will minimise them c) how, if the adverse impacts cannot be minimised, they will be mitigated d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts	Type B
TR2	Proposals that require static objects in the East marine plan areas, should demonstrate, in order of preference: a) that they will not adversely impact on recreational boating routes b) how, if there are adverse impacts on recreational boating routes, they will minimise them c) how, if the adverse impacts cannot be minimised, they will be mitigated d) the case for proceeding with the proposal if it is not possible to minimise or mitigate the adverse impacts	Type B
TR3	Proposals that deliver tourism and/or recreation related benefits in communities adjacent to the East marine plan areas should be supported.	Type A