



1. Requirement overview:

Requirements	Developing an improved approach to the consideration of the impacts of co-location/displacement
Requirement detail	<p>Marine plans form a plan-led system for marine activities. Marine plans will ensure that different and competing activities are managed in such a way that they contribute to the achievement of sustainable development. A key issue in all marine plan areas is the optimisation of space through promoting compatibility and encouraging co-existence between different activities. As such co-existence or displacement of activities should be considered within marine licensing.</p> <p>An evaluation approach providing integrated consideration of the environmental, social and economic impacts of co-location/displacement has been proposed in research project MMO 1049 but further research and development is required to put this approach into working practice.</p> <p>Plan level evaluation of the impacts and risks for multiple use areas is required to inform plan development. Using an improved approach when identifying the issues stemming from co-location and displacement of activities at a plan area scale would allow better consideration of such issues at the project level through marine licensing.</p> <p>A process has been scoped out but would need further development and incorporation into licensing processes to enable balanced consideration of co-location/displacement impacts. This project should build on the outputs of MMO 1049, which outlines a proposed framework of comparing co-existence versus no-coexistence and makes recommendations for next steps in terms of this piece of work.</p>
MMO use	<p>Marine Planning:</p> <ul style="list-style-type: none"> • develop marine plan policies where appropriate that address and manage activities in a way that minimises displacement whilst ensuring sustainability <p>Marine Licensing:</p> <ul style="list-style-type: none"> • assess licence applications against how a development may create environmental, social or economic impacts through co-location or displacement of other activities.

External interest	Natural England, Environment Agency, Centre for Environment, Fisheries and Aquaculture Science, Joint Nature Conservation Committee,
Delivery target	Q2, 2018

2. Aims and objectives

Aim:

To develop an improved approach to the consideration of the impacts of co-location/displacement

Objectives:

The Objectives to deliver this requirement include to

- build on existing work to develop a process for the consideration of the environmental, social and economic impacts of displacement into the marine plan policies
- incorporate the developed process into the marine licensing application methodology

3. Existing evidence

MMO	MMO 1049 outlines a proposed framework of comparing co-existence versus no-coexistence and makes recommendations for next steps for the MMO.
Academic	<p>Christie et al 2014 investigated how windfarms could be co-located with other marine activity successfully and found that successful co-location will depend on adaptive management.</p> <p>Yates et al 2015 assessed multiple industries and biodiversity conservation trade-offs in ocean zoning.</p> <p>Kyriazi et al 2016 looked at the co-existence of marine renewable energy projects and marine protected areas and the interactions between the two.</p> <p>Vaughn 2017 proposed a framework for describing the displacement of fishing effort due to implementing marine protected areas. Environmental implications resulting from fishing effort displacement are set out. Fishing effort displacement mitigation options are detailed.</p>
Other	A marine research project (2016) for the Crown Estate and National Federation of Fishermen looked into changes to fishing practices in the Irish Sea as a result of the development of offshore windfarms, it was found that fishing activity remained fairly steady before and after offshore windfarm construction.

4. Current activity

The MMO is not currently actively undertaking any activity in this area.

5. Associated evidence requirements

Ref	Title
R012	Displacement in the marine area; the likelihood and impact of displacement of marine activities
R013	The impacts of multiple Marine Protected Area closures on fisheries and recreation

More information on these evidence requirements is available [here](#)

6. Potential delivery route

The MMO will look to partner with organisations of relevance to widen the potential impact of any work undertaken in this area. Similarly, where appropriate, the MMO will explore opportunities to influence the research of others to gather evidence that can be applied within a marine management context. As work progresses it is implicit that **knowledge exchange** is required throughout the duration of this requirement and not limited to when delivery is complete.

Commissioning

Delivery window: Q2, 2018

This approach has been taken for the previous project and has delivered work that has been useful for the teams it was aimed at. Direct commissioning will ensure the work can be delivered in line with the MMO's immediate needs.

See table 1 for timescales.

7. Contact

For more information or to add further research to the existing evidence list please email evidence@marinemanagement.org.uk

Table 1: Delivery timescales 2017 to 2020

Delivery Route	2017				2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Partnering																
Commissioning																
Influencing the research of others																
Knowledge exchange																

Key

	No activity
	Actively undertaking
	Outside of delivery target