

Annex B. Process for identifying pilot Highly Protected Marine Areas

1. Defra have identified candidate HPMA's using ecological, social and economic criteria, to select sites that provide strong biodiversity benefits while seeking to minimise impacts to sea users.
2. JNCC and Natural England, along with Cefas, developed [ecological criteria](#) to start identifying potential HPMA locations, and [invited stakeholders to submit proposals](#) for pilot HPMA's that met these criteria. The ecological criteria are based on the principles outlined in the Benyon Review. Defra developed the social and economic criteria, also based on principles published in the Benyon review¹. Figure 1 below provides an overview of the process.
3. To ensure that pilot HPMA's can deliver protection and full recovery, locations with existing and/or consented physical structures and activities that would not be allowed in an HPMA (i.e. they are extractive, depositional or destructive) were not considered for designation (Table 1). In some cases, we also excluded areas of the sea with proposed locations for some structures or licensable activities, because activities that are likely to begin in the future would not be allowed in HPMA's. JNCC and NE added evidence-based buffers to the excluded areas. The buffers have different sizes according to the excluded structure or activity to ensure that incompatible activities do not impact the recovery of nearby pilot HPMA's.
4. After considering third-party proposals, alongside areas they themselves had identified, Natural England and JNCC developed an initial list of 30 potential areas which they submitted to Defra. This advice can be found [here](#).

¹ **Principle 1: Impact on social and economic activities.** Pilot HPMA's will impact different sea users in different ways and to varying degrees. Impacts may be positive or negative. This principle assesses the use and activities occurring in a proposed location and the potential social and economic impact of a pilot HPMA on activities and sea users. We applied activity data to help in shortlisting sites and will apply more detailed modelling and local knowledge collected through the consultation.

Principle 2: Public and stakeholder acceptability. Protected sites are more likely to be successful where there is a high level of social acceptance and local buy-in. This principle assesses the level of support or opposition from local communities as well as from regional and national stakeholders. It also considers the potential impact of a pilot HPMA on relationships and conflict between sea users. This has been partially applied prior to the consultation, however significant local knowledge is needed through the consultation.

Principle 3: Effective governance and management. Effective governance and management are essential to the success of pilot HPMA's. This principle considers management and resource requirements for the proposed location, and the potential impacts for the wider area. This includes assessing capacity for monitoring, enforcement and ecological surveys as well as potential risks to the success of the pilot HPMA from nearby activity. This has been partially identified prior to consultation but we will gather local knowledge and further information during the consultation period.

Social and economic criteria for shortlisting

5. Defra, using data from Cefas, MMO, IFCAs, JNCC and Natural England then applied social and economic criteria to narrow down the list of areas (Table 2).
6. This next stage of the shortlisting process identified what activities were currently taking place in the potential areas (Principle 1 from the Benyon Review to the sites: Impact on Social and Economic activities). The activity analysis focused on those which would be most impacted by the designation of a HPMA:
 - Commercial wild capture fishing
 - Recreational and charter fishing
 - Anchoring (except in emergencies) including by commercial and recreational activity
7. Defra, using data supplied by the MMO and analysis by Cefas, assessed commercial wild capture fishing activity using metrics for UK commercial fishing vessels which indicated the number of vessels, total revenue, share of revenue from fishing in the candidate pilot HPMA, and the effort within the site (i.e., the level of gear usage invested in a site). All data was split by size of vessel. The approach used for non-UK fishing vessels differed slightly due to lack of data and quality issues. Non-UK activity was assessed using data from the vessel monitoring system and therefore only identified data for vessels over 12m on hotspots, number of vessels and level of activity.
8. As part of this process we identified smaller site boundaries for an HPMA within several of the 30 areas in order to reduce the social and economic impact but still meet ecological criteria.
9. Due to a lack of data on recreational and charter fishing activity in the UK, an assessment was carried out using the model output for the potential for angling activity in English waters from a project that modelled [marine recreation potential in England](#). The presence or absence of anchoring activity was assessed based on data of licensed anchoring locations and cross-checked using satellite imagery to identify unlicensed anchoring activity.
10. Our assessment of the extent of existing activity has been supported by analysis undertaken by Defra, MMO, Cefas, AIFCA and Natural England.
11. Analysis is on-going to understand the displacement impacts of HPMA sites and also the impacts on recreational fishing in greater detail. We have outlined in the Impact Assessment topics where further information from stakeholders would help us to understand and fully apply the social and economic principles to the candidate HPMA sites.

12. We have used site specific advice from our arm's length bodies, including on the principles of acceptability and governance and management to inform the candidate HPMA selection process.

Applying the principles for selecting pilot HPMA's after consultation

13. Our analysis after the consultation will further apply Principle 1 to understand impacts to commercial wild capture fishing including displacement impacts and those on cost, landed catch and effort and impacts on recreational fishing and anchoring (Table 2).
14. In line with Principle 2 and Principle 3, Defra will identify acceptability of candidate HPMA sites by all groups impacted by a candidate HPMA (Table 2). Finally, analysis will identify perceptions of adaptation and mitigation strategies for both commercial wild capture fishing, recreational fishing and anchoring.
15. Analysis will use data collected during the consultation period from site-specific and wider UK population qualitative and quantitative information. The consultation will also engage key regional and national stakeholders in person to determine levels of acceptability for each site. The consultation document will present detailed questions designed to provide a detailed assessment of impact, acceptability and management options.
16. Defra will use this analysis to help decide which pilot HPMA's to designate.

Figure 1. Overview of process to shortlist candidate HPMAs

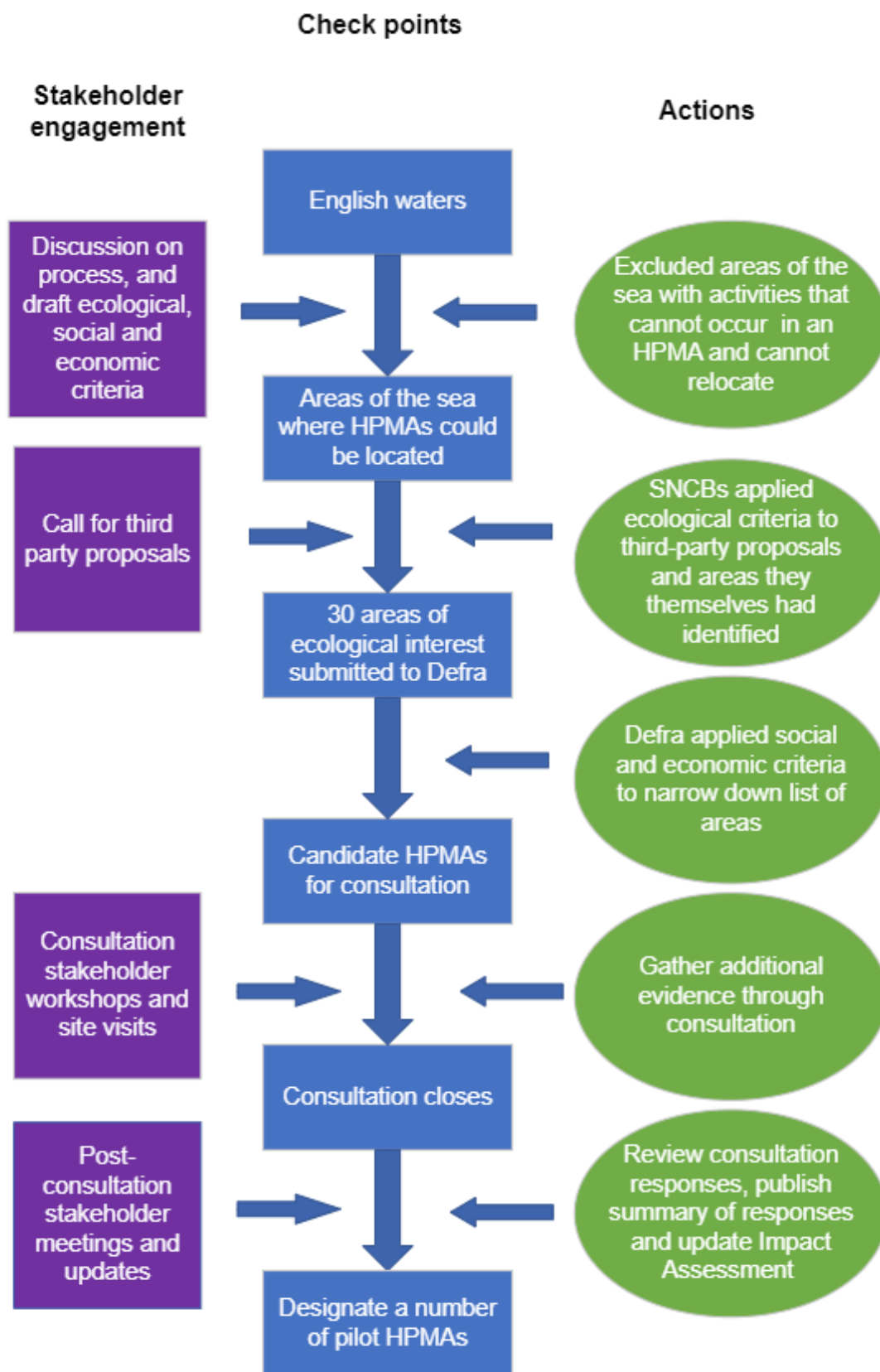


Table 1. Specific areas of the sea excluded from pilot HPMA identification process

Ports and harbours	Ports and harbours have permanent infrastructure that requires maintenance and relocation is not possible. We have excluded areas with ports and harbours.
Existing licensed aggregate extraction	We have excluded locations where there are active licensed aggregate extraction operations, aggregates site agreements and licensed exploration areas, because these activities operate with location specific licences.
Existing licensed dredging and dredging disposal	We have excluded locations where licensed dredging and disposal takes place, because these activities operate with location specific licences.
Existing licensed oil and gas	We have excluded locations where oil and gas well heads exist and where there are licensed oil and gas blocks, for which licence holders have exclusivity and may begin activities at any time.
Active and proposed pipelines	We have excluded active pipelines, which have permanent infrastructure that may require maintenance. Proposed pipelines have also been excluded due to the impact installation would have on a site. Decommissioned pipelines may be compatible with the aims of HPMA's, pending further work to understand the structures and activities involved at a site specific level. We have not excluded these areas as potential HPMA locations.
Carbon capture and storage (CCS)	We have excluded locations where there are site agreements for carbon capture and storage due to the impact this activity would have on a site.
Existing offshore wind farms, Leasing Round 4 sites and pre-commercial floating offshore wind sites	We have excluded all operational windfarms because the infrastructure is permanent and can require maintenance. We have also excluded all sites with lease agreements, as well as Offshore Wind Leasing Round 4 sites, and the pre-commercial floating offshore wind sites as specific areas have been identified and installation would impact a site. Areas for future offshore wind leasing rounds have not been excluded.
Active and proposed cables	We have excluded active cables, which have permanent infrastructure that may require maintenance. Proposed cables have also been excluded from potential pilot HPMA's due to the impact installation would have on a site. Decommissioned cables may be compatible with the aims of HPMA's, pending further work to understand the structures and activities involved at a site specific level. We have not excluded these areas as potential HPMA locations.

Existing licensed aquaculture	This activity cannot be moved because there are location specific licences or authorisations associated with aquaculture farms. We have excluding locations with aquaculture farms.
Existing licensed anchorages, moorings and berths	These activities cannot be moved because they operate with location specific licences. We have excluded locations with licensed anchorages, moorings and berths.

Table 2. Social and economic criteria and indicators for pilot HPMA identification

Criteria	Indicators for site selection	Indicators for post consultation analysis
<i>Principle 1: Impact on social and economic activities</i>		
1.1 Commercial wild capture fishing	a) Extent of existing activity: <ul style="list-style-type: none"> • number of vessels • fishing effort 	a) Extent of existing activity: <ul style="list-style-type: none"> • value of catch • number of vessels • fishing effort
	b) Impact of designation on activity and sea users including: <ul style="list-style-type: none"> • economic impacts including displacement, dependency on particular areas and ability to adapt 	b) Impact of designation on activity and sea users including: <ul style="list-style-type: none"> • economic impacts including displacement, dependency on particular areas and ability to adapt • social and cultural impacts including conflict, vulnerability of livelihoods and fishing community, loss of rare, unique or culturally important fishing grounds • health, safety and wellbeing
1.2 Recreational and charter fishing	a) Extent of existing activity <ul style="list-style-type: none"> • Potential for angling • proximity to major angling ports Cefas angling survey	a) Extent of existing activity <ul style="list-style-type: none"> • number of users/popularity of area • fishing effort • proximity to major angling ports • presence of key recreational/charter fishing species
		b) Impact of designation on activity and sea users <ul style="list-style-type: none"> • economic impacts including dependency on particular areas, angling tourism and recreation employment and income impacts and ability to adapt • social and cultural impacts including conflict, vulnerability of livelihoods and fishing community, loss of rare, unique or culturally important fishing grounds • health, safety and wellbeing
1.3 Anchoring (commercial and recreational activity)	a) Extent of existing activity <ul style="list-style-type: none"> • number of anchoring vessels (e.g. sailing boats & powered leisure craft) 	a) Extent of existing activity <ul style="list-style-type: none"> • number of anchoring vessels (e.g. sailing boats & powered leisure craft)

		b) Impact of designation on activity and sea users <ul style="list-style-type: none"> • health, safety and wellbeing • social and cultural impacts including loss of access to recreational sites/benefits Identification of alternative anchorages
1.4 Public stakeholders		a) Tourism and recreation b) Health and Wellbeing c) Cultural, heritage and existence value
<i>Principle 2: Public and stakeholder acceptability</i>		
2.1 Commercial wild capture fishing		Acceptability for site and sea users
2.2 Recreational and charter fishing		Acceptability for site and sea users
2.3 Anchoring (commercial and recreational activity)		Acceptability for site and sea users
2.4 Public stakeholders		Acceptability for local, regional, and national UK public stakeholders
<i>Principle 3: Effective governance and management</i>		
3.1 Monitoring		Capacity for monitoring
3.2 Enforcement		Capacity for local enforcement
3.3 Management		a) Current or future designations or management measures b) Degree of local understanding of rules / regulations c) Participation in management
3.4 Compliance		a) Degree of compliance b) Degree of community support
3.5 Adaptation	Ability of local communities, marine users and management to adapt	