



# **Overview of JNCC's scientific advice on possible offshore Marine Conservation Zones around England considered for consultation in 2018**

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## Version control

Build status:

Version	Date	Author	Reason/Comments
0.1	26/07/17	Hannah Carr	Initial draft of JNCC's Advice on Tranche Three MCZs Overview Report for publishing
0.2	08/08/17	Hannah Carr	Refining content
0.3	10/08/17	Hannah Carr	Clean version for review.
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0.6	03/01/18	Pete Chaniotis	Review of contents and structure prior to distribution to the JNCC MPA Sub Group.
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0.8	07/02/18	Hannah Carr	Clean version for review.
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# 1 Background

In July 2012, the Joint Nature Conservation Committee (JNCC) and Natural England submitted their advice on recommended Marine Conservation Zones (rMCZs) to Defra. These rMCZs had been identified by a wide range of stakeholders engaged via four Regional MCZ Projects. Stakeholders identified rMCZs using guidance drafted by JNCC and Natural England, whilst also considering socio-economic factors.

Defra designated the first tranche of MCZs in November 2013 after a comprehensive stakeholder-led process, scientific review and public consultation. There were 27 sites designated of which six lie in the offshore environment. A second tranche of 23 MCZs were designated in January 2016 following a similar consultation process; eight of which lie in the offshore environment. Further designated features were added to 10 existing MCZs, four located in offshore waters.

Defra are proposing to designate a third and final tranche of MCZs to complete the Secretary of State waters' contribution to the ecologically coherent network of MPAs in the North East Atlantic<sup>1</sup>. In summer 2016, JNCC undertook an analysis of the existing MPA network to identify what would be required in a Third Tranche of MCZs to effectively complete the network in Secretary of State waters. The analysis identified those remaining rMCZs considered necessary to fill gaps in the network. Defra requested JNCC and Natural England identify new site options to fill any remaining gaps.

Between 2016 and 2017, JNCC and Natural England provided advice on those remaining rMCZs from the Regional MCZ Projects, alongside new site options necessary to complete the network. Furthermore, Defra announced it may also consider MCZs proposed by third-parties for highly mobile species (marine mammals, birds and fish) in the final tranche of MCZ designations and so additional advice has been provided on those that were submitted for consideration by third-parties. In total, JNCC provided advice on 22 potential site options for Tranche Three. This included 13 offshore rMCZs; one possible MCZ proposed by Northern Irish Fishermen; advice on further features for possible designation in three existing offshore MCZs; four new site options; and one third party highly mobile species proposal (see Figure 1).

This overview report provides a brief summary of the approach taken for each element of the advice package and a high-level summary of the assessment results for each. The individual and specific advice reports for each element of the advice should be referred to, to obtain further information and particular sections are referred to in this overview report:

1. [JNCC's scientific advice on possible offshore Marine Conservation Zones considered for consultation in 2017, November 2016;](#)
2. [JNCC's scientific advice on possible offshore site options for consideration as Marine Conservation Zones to contribute to the MPA network on offshore new site options: Summary of results, February](#)

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<sup>1</sup> Defra Marine Conservation Zone update January 2016: Available at: <https://www.gov.uk/government/publications/marine-conservation-zones-january-2016-update>

[2017](#). Note: This document also contains JNCC and Natural England's advice; Overview of the contribution to the MPA network of inshore and offshore site options being considered as potential MCZs, February 2017 (see Annex 3);

3. [JNCC and Natural England's scientific advice on proposed MCZs for highly mobile species, February 2017](#) (published on the Natural England website).

## 2 Regional MCZ Project recommendations

### 2.1 Assessment approach

JNCC completed the rMCZ site assessments between January and August 2016 for the 13 possible Tranche Three offshore rMCZs (see Figure 1). During this time, further assessments of possible additional features for three designated MCZs were completed. A site assessment was also completed for the possible MCZ proposed by Northern Irish fishermen, which has been proposed as a socio-economic alternative to other sites for subtidal mud in the western Irish Sea.

Our assessments followed published peer-reviewed protocols and used the best-available evidence, which include new data and information collected since JNCC's previous advice<sup>2</sup> where it became available. No new biophysical data were available for some of the sites or for many of the associated features in other sites, and as such, JNCC's previous advice remains up-to-date for those sites or features. Even where new data had become available, any requirement to revise our advice depends upon its type and/or location, meaning that in some situations it was not necessary to revisit our previous advice. JNCC developed a decision-tree assessment process in the post-consultation advice of Tranche Two<sup>3</sup> to identify those features for which new or updated advice was required. This process has been implemented for our 2016 Tranche Three pre-consultation advice and further detail provided in advice report 1 (see [section 1](#)).

The advice was developed following the same technical protocols used for our previous advice on Tranches One<sup>4</sup> (2012/2013) and Two<sup>5</sup> (2014). These protocols are available on the JNCC website<sup>6</sup>. A further protocol on the whether the data available for a feature or site as a whole are sufficient to support designation<sup>7</sup> was developed for the Tranche Two advice in 2014 and JNCC and Natural England have drafted an addendum to this protocol for the Tranche Three advice to note that all decisions now relate to the aim of 'completing' the MPA network.

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<sup>2</sup> JNCC's Tranche Two advice on offshore Marine Conservation Zones available at: <http://jncc.defra.gov.uk/page-6658>

<sup>3</sup> Scientific advice on offshore Marine Conservation Zones proposed for designation in 2015/16. Version 4.0, July 2015. Available at [http://jncc.defra.gov.uk/PDF/MCZT2PostConsultationAdvice\\_v4.pdf](http://jncc.defra.gov.uk/PDF/MCZT2PostConsultationAdvice_v4.pdf)

<sup>4</sup> JNCC's scientific advice on Tranche One MCZs. Available online at: <http://jncc.defra.gov.uk/page-6460>

<sup>5</sup> JNCC's scientific advice on Tranche Two MCZs. Available online at: <http://jncc.defra.gov.uk/page-6658>

<sup>6</sup> JNCC and Natural England's MCZ Advice Technical Protocols. Available online at: <http://jncc.defra.gov.uk/page-5999>

<sup>7</sup> MCZ Levels of Evidence - Advice on when data supports a feature/site for designation from a scientific, evidence-based perspective (available at: [http://jncc.defra.gov.uk/pdf/150130\\_MCZDataSufficiency\\_v5\\_0.pdf](http://jncc.defra.gov.uk/pdf/150130_MCZDataSufficiency_v5_0.pdf))

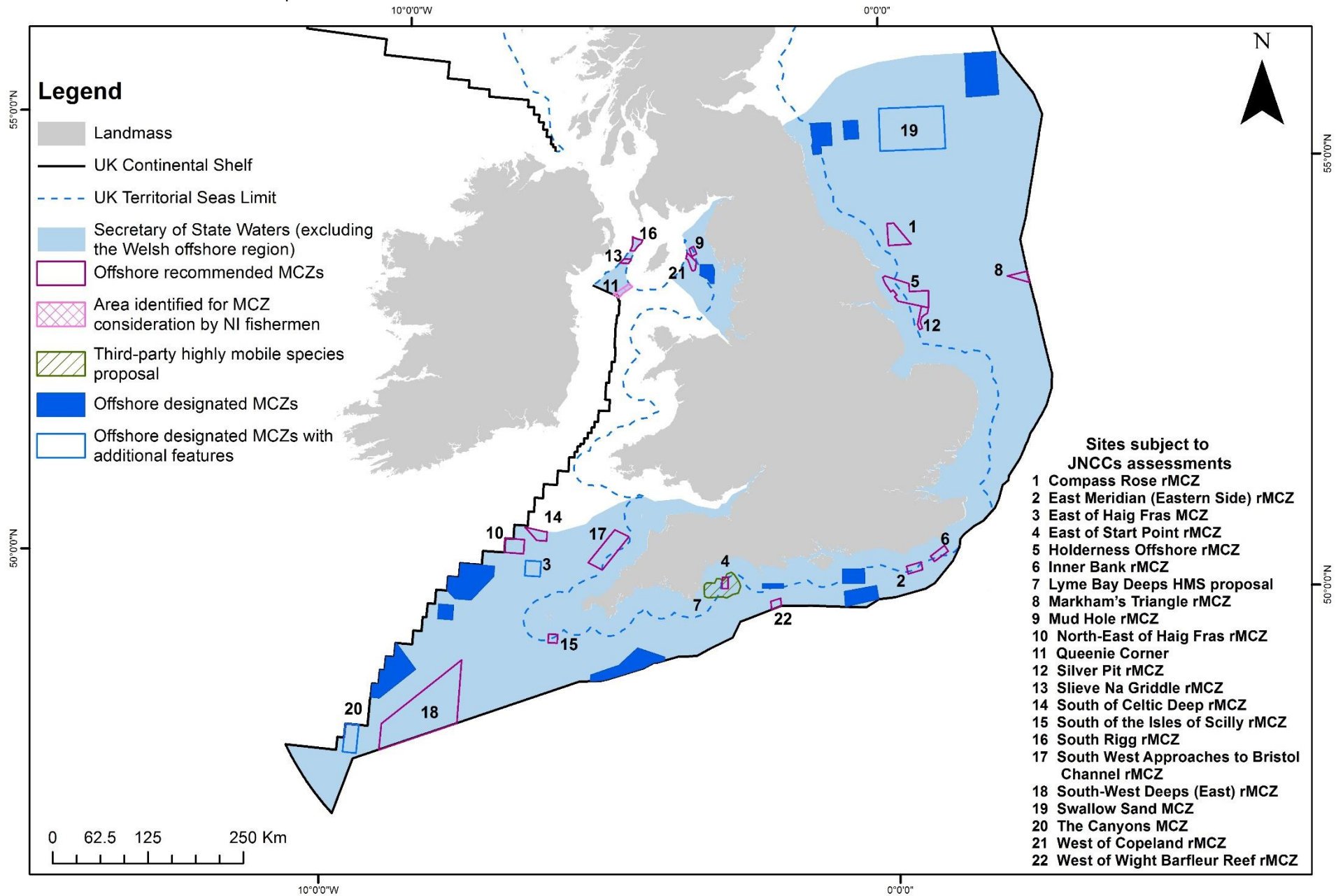
It should be noted that JNCC's 2016 advice covers all Ecological Network Guidance (ENG)<sup>8</sup> habitat features within offshore sites where new data indicates their presence, not just those features originally recommended by the Regional MCZ Projects; covers all species FOCI within offshore sites where data supports their presence; does not include an assessment of the sites against the ENG network guidelines; and does not make any further comment on the Regional Project's work.

Our full advice report describes the assessments of confidence in feature presence and feature extent; confidence in feature condition; feature vulnerability and feature risk and on whether data support the designation of a feature or site from scientific evidence based perspective (see [Section 3](#) of this report for a summary of assessment results).

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<sup>8</sup> Natural England and JNCC 'MCZ Project Ecological Network Guidance' (2010). Available at: [http://jncc.defra.gov.uk/PDF/100705\\_ENG\\_v10.pdf](http://jncc.defra.gov.uk/PDF/100705_ENG_v10.pdf)

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**Figure 1: The offshore rMCZs and designated MCZs with additional features considered for designation within Tranche Three**

## 2.2 Results

JNCC assessed 95 features within the 17 offshore sites. We have High confidence in the **presence** of 54 features, Moderate confidence for 14 features, Low confidence for 19 features, no confidence for three features and five features have not been assessed due to limited/no data availability to support their presence within a site. We have High confidence in the **extent** of 34 features, Moderate confidence in 16 features, Low confidence in 37 features, No confidence for three features and five features have not been assessed. There are 32 instances where confidence in feature presence is higher than confidence in feature extent.

JNCC reviewed the proposed **General Management Approach** for all 95 features. We concluded that 75 features require a Recover objective, and another 10 features require a Maintain objective. The remaining 10 features were not assessed, because it was not possible to assess the GMA of all features due to either unknown site fidelity of a species to a site, or in the instance of Ross Worm (*Sabellaria spinulosa*) reefs, there was no evidence of the habitat occurring within the site only its component species (see Table 1).



**Table 1: Summary assessment results table: Regional MCZ Project recommended MCZs and New Site Options**

Site Name	Ecological Network Guidance (ENG) feature	Confidence in feature presence	Confidence in feature Extent /distribution <sup>9</sup>	Confidence in feature condition	General Management Approach advised	Outcome of data sufficiency and additional conservation / ecological considerations assessment
<b>Compass Rose rMCZ</b>	<b>Moderate energy circalittoral rock</b>	No confidence	No confidence	Not assessed	Not assessed	<b>No confidence</b>
	<b>Subtidal sand</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal coarse sediment</b>	High	Low	Low	Recover	<b>Feature should be further considered</b> – JNCC advises the feature is designated as part of a mosaic habitat with Subtidal mixed sediments
	<b>Subtidal mixed sediments</b>	Moderate	Low	Low	Recover	<b>Scientific evidence does not justify designation as this stage</b> – however JNCC notes that this feature is mapped as a mosaic feature with Subtidal coarse sediment and it would be difficult to manage Subtidal coarse sediment without the constituent other component of the mosaic habitat designated.
	<b>Subtidal coarse sediment/Subtidal mixed sediments habitat mosaic</b>	High	Moderate	Low	Recover	<b>Data support designation of feature.</b>
	<b>Ocean quahog (<i>Arctica islandica</i>)</b>	High	High	Low	Recover	<b>Data support designation of feature.</b>
<b>East Meridian (Eastern Side) rMCZ</b>	<b>Moderate energy circalittoral rock</b>	Low	Low	Low	Recover	<b>Conservation benefits support priority feature designation</b> - however, JNCC advise that Defra do not designate this feature as there are no ground-truth data to support the feature occurring in the site
	<b>Subtidal coarse sediment</b>	High	High	Low	Recover	<b>Data support designation of feature.</b>
	<b>Subtidal sand</b>	Moderate	Low	Low	Recover	<b>Conservation benefits support priority feature designation</b> - however, JNCC advise that Defra do not designate this feature in this site as there are very limited data to support the feature and survey work has not identified a mapped extent for the feature
	<b>Subtidal mixed sediments</b>	Low	Low	Low	Recover	<b>Conservation benefits support priority feature designation</b> - however, JNCC advise that Defra

<sup>9</sup> Distribution relates only to species FOCI whereas extent is applied to broad-scale habitats, geological/geomorphological features and habitat FOCI.

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						do not designate this feature in this site as there are very limited data to support the feature and survey work has not identified a mapped extent for the feature
	<b>Ross worm (<i>Sabellaria spinulosa</i>) reefs</b>	Not Assessed	Not Assessed	Not Assessed	Not Assessed	<b>Not Assessed</b>
	<b>Undulate ray (<i>Raja undulata</i>)</b>	Moderate	Moderate	Not Assessed	Not Assessed	Undulate ray ( <i>Raja undulata</i> ) are a highly mobile species and there is a lack of evidence to demonstrate any site within the offshore area is essential to the species life cycle or life history. Consequently, no further advice was provided for this feature.
	<b>English Channel outburst flood features (Quaternary fluvio-glacial erosion features)</b>	High	High	Not Assessed	Not Assessed	<b>Data support designation of feature.</b>
<b>East of Haig Fras MCZ</b> (additional features)	<b>High energy circalittoral rock</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
	<b>Sea-pen and burrowing megafauna communities</b>	High	Low	Low	Recover	<b>Conservation benefits support priority feature designation</b>
	<b>Fan mussel (<i>Atrina fragilis</i>)</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
<b>Holderness Offshore rMCZ</b>	<b>High energy circalittoral rock</b>	Low	Low	Low	Maintain	<b>Scientific evidence does not justify designation as this stage</b>
	<b>Moderate energy circalittoral rock</b>	Moderate	Low	Low	Recover	<b>Feature should be further considered – JNCC consider that there are sufficient data for the feature to be designated in the site, although it should be noted that the extent of the feature is unknown beyond ground-truthing data.</b>
	<b>Subtidal coarse sediment</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal sand</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mud</b>	Low	Low	Low	Recover	<b>Scientific evidence does not justify designation as this stage</b>
	<b>Subtidal mixed sediments</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
	<b>Horse mussels (<i>Modiolus modiolus</i>) beds</b>	Not Assessed	Not Assessed	Not Assessed	Not Assessed	<b>Not Assessed</b>

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	<b>Ross worm (<i>Sabellaria spinulosa</i>) reefs</b>	Low	Low	Low	Recover	<b>Feature should be further considered –JNCC advise that this feature should not be designated as there are limited data to support its presence in the site</b>
	<b>Ocean quahog (<i>Arctica islandica</i>)</b>	Moderate	Low	Low	Recover	<b>Conservation benefits support priority feature designation</b>
	<b>North Sea Glacial Tunnel Valleys (Inner Silver Pitt)</b>	High	High	High	Maintain	<b>Data support designation of feature</b>
<b>Inner Bank rMCZ</b>	<b>Moderate energy infralittoral rock</b>	No confidence	No confidence	Not Assessed	Not Assessed	<b>Not confidence</b>
	<b>Moderate energy circalittoral rock</b>	Moderate	Low	Low	Recover	<b>Feature should be further considered – however JNCC advise that Defra do not designate this feature in this site as there are very limited data to support the feature and survey work has not identified a mapped extent for the feature</b>
	<b>Subtidal coarse sediment</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal sand</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mud</b>	Low	Low	Low	Recover	<b>Feature should be further considered - the feature is at high risk of damage and is not adequately protected in the region, so although only one ground-truthing point confirms its presence, JNCC would still advise that this feature is designated.</b>
	<b>Subtidal mixed sediments</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Native oyster beds</b>	Not Assessed	Not Assessed	Not Assessed	Not Assessed	<b>Not Assessed</b>
	<b>Native oyster (<i>Ostrea edulis</i>)</b>	Low	Low	Low	Recover	<b>Feature should be further considered –however JNCC advise that this feature should not be designated as only a single record is available to support the species occurring in the site, despite further survey work</b>
<b>Markham's Triangle rMCZ</b>	<b>Subtidal coarse sediment</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal sand</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mud</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mixed sediments</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
<b>Mud Hole rMCZ</b>	<b>Subtidal mud</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Sea-pen and burrowing megafauna communities</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
<b>North-East of Haig Fras rMCZ</b>	<b>Subtidal coarse sediment</b>	Moderate	Low	Low	Recover	<b>Data support designation of feature</b>

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	<b>Subtidal sand</b>	High	Low	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mud</b>	High	Low	Low	Recover	<b>Feature should be further considered</b> – JNCC advise that the feature should be designated as there is sufficient evidence that it occurs in the site and would ensure most features found in the site are designated
	<b>Subtidal mixed sediments</b>	Low	Low	Low	Recover	<b>Scientific evidence does not justify designation as this stage</b>
<b>Queenie Corner</b> (Alternative site proposed by Northern Irish fishermen)	<b>Subtidal sand</b>	Moderate	Low	Low	Recover	<b>Feature should be further considered</b> – however JNCC advise that Defra do not designate this feature in this site as there are very limited data to support the feature and much data to support alternative habitats in the modelled area of Subtidal sand. It is therefore likely that much of the site is actually Subtidal mud.
	<b>Subtidal mud</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Sea-pen and burrowing megafauna communities</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
<b>Silver Pit rMCZ</b>	<b>Moderate energy circalittoral rock</b>	Low	Low	Low	Recover	<b>Feature should be further considered</b> –JNCC advise that this feature should not be designated as there are no data to support its presence in the site
	<b>Subtidal coarse sediment</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal sand</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mud</b>	Moderate	Low	Low	Recover	<b>Feature should be further considered</b> –JNCC advise that this feature should not be designated as there are limited data to support its presence in the site
	<b>Subtidal mixed sediments</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Horse mussel (<i>Modiolus modiolus</i>) beds</b>	Not Assessed	Not Assessed	Not Assessed	Not Assessed	<b>Feature should be further considered</b> –JNCC advise that this feature should not be designated as there are limited data to support its presence in the site
	<b>Ross worm (<i>Sabellaria spinulosa</i>) reefs</b>	Moderate	Low	Low	Recover	<b>Feature should be further considered</b> –JNCC advise that this feature should be designated as there are sufficient data to indicate the feature occurs in the site and further data are still to be analysed which may increase the amount of habitat known to occur in Silver Pit rMCZ
	<b>Ocean quahog (<i>Arctica islandica</i>)</b>	Low	Low	Low	Recover	<b>Feature should be further considered</b> –JNCC advise that this feature should not be designated as there are limited data to support its presence in the site.

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	<b>North Sea Glacial Tunnel Valleys (Inner Silver Pit)</b>	High	High	High	Maintain	<b>Data support designation of feature</b>
<b>Slieve Na Griddle rMCZ</b>	<b>Low energy circalittoral rock</b>	Not Assessed	Not Assessed	Not Assessed	Not Assessed	<b>Not Assessed</b>
	<b>Subtidal mud</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Sea-pen and burrowing megafauna communities</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
<b>South of Celtic Deep rMCZ</b>	<b>Moderate energy circalittoral rock</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal coarse sediment</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal sand</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mud</b>	Moderate	Low	Low	Recover	<b>Scientific evidence does not justify designation as this stage</b>
	<b>Subtidal mixed sediments</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Ocean quahog (<i>Arctica islandica</i>)</b>	Low	Low	Low	Recover	<b>Feature should be further considered –JNCC advise that this feature should not be designated as there are limited data to support its presence in the site</b>
<b>South of the Isles of Scilly rMCZ</b>	<b>Moderate energy circalittoral rock</b>	Low	Low	Low	Recover	<b>Feature should be further considered –JNCC advise that this feature should not be designated as there are limited data to support its presence in the site</b>
	<b>Subtidal coarse sediment</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal sand</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mixed sediments</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal coarse sediment/Subtidal mixed sediments habitat mosaic</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Ocean quahog (<i>Arctica islandica</i>)</b>	Low	Low	Low	Recover	<b>Feature should be further considered –JNCC advise that this feature should not be designated as there are limited data to support its presence in the site</b>
	<b>Fan mussel (<i>Atrina fragilis</i>)</b>	Moderate	Low	Low	Recover	<b>Data support designation of feature</b>
<b>South Rigg rMCZ</b>	<b>High energy circalittoral rock</b>	Low	Low	Low	Maintain	<b>Feature should be further considered – JNCC advise that this feature should not be designated as there are limited data to support its presence in the site</b>

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	<b>Moderate energy circalittoral rock</b>	Moderate	Moderate	Low	Maintain	<b>Data support designation of feature</b>
	<b>Low energy circalittoral rock</b>	No Confidence	No Confidence	Not Assessed	Not Assessed	<b>Data support designation of feature</b>
	<b>Subtidal coarse sediment</b>	High	Moderate	Low	Maintain	<b>Data support designation of feature</b>
	<b>Subtidal sand</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mud</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mixed sediments</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
	<b>Sea-pen and burrowing megafauna communities</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Ocean quahog (<i>Arctica islandica</i>)</b>	Low	Low	Low	Recover	<b>Feature should be further considered –JNCC advise that this feature should not be designated as there are limited data to support its presence in the site</b>
<b>South-West Deeps (East) rMCZ</b>	<b>Subtidal coarse sediment</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal sand</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mixed sediments</b>	Low	Low	Low	Recover	<b>Scientific evidence does not justify designation as this stage</b>
	<b>Deep-sea bed</b>	High	High	Low	Recover	<b>Data support designation of feature</b>
	<b>Celtic Sea Relict Sandbanks</b>	High	High	Low	Maintain	<b>Data support designation of feature</b>
	<b>Ocean quahog (<i>Arctica islandica</i>)</b>	Low	Low	Low	Maintain	<b>Feature should be further considered –JNCC advise that this feature should not be designated as there are limited data to support its presence in the site</b>
	<b>Fan mussel (<i>Atrina fragilis</i>)</b>	Low	Low	Low	Recover	<b>Feature should be further considered –JNCC advise that this feature should not be designated as there are limited data to support its presence in the site</b>
	<b>Native oyster (<i>Ostrea edulis</i>)</b>	Low	Low	Low	Maintain	<b>Feature should be further considered –JNCC advise that this feature should not be designated as there are limited data to support its presence in the site</b>
<b>Swallow Sand MCZ (additional features)</b>	<b>Subtidal mud</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
	<b>Subtidal mixed sediments</b>	High	Low	Low	Recover	<b>Scientific evidence does not justify designation as this stage</b>
	<b>Ocean quahog (<i>Arctica islandica</i>)</b>	High	High	Low	Recover	<b>Data support designation of feature</b>

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	<b>Sea-pen and burrowing megafauna communities</b>	High	Moderate	Low	Recover	<b>Data support designation of feature</b>
<b>The Canyons MCZ</b> (additional features)	<b>Coral Gardens</b>	Moderate	Low	Low	Recover	<b>Conservation benefits support priority feature designation</b>
	<b>Sea-pen and burrowing megafauna communities</b>	High	Low	Low	Maintain	<b>Conservation benefits support priority feature designation</b>

### 3 New site options

#### 3.1 Assessment approach

In summer 2016, JNCC completed an analysis of Defra’s progress towards achieving an ecologically coherent MPA network in Secretary of State waters<sup>10</sup>. Defra indicated the MPA network should achieve the targets advised by JNCC and Natural England in the ENG. The analysis revealed a shortfall in the protection of several features in four out of five Charting Progress (CP2) regions that overlap with Secretary of State waters; where the analysis concluded a habitat or species is not considered to be adequately protected within the existing MPA network in the region. Some features were still considered as a shortfall after considering the potential contribution from remaining rMCZs; these shortfalls are summarised in Table 2<sup>11</sup>.

**Table 21. The remaining gaps for Broad-scale habitats, Habitat Features of Conservation Importance (FOCI) and Species FOCI in the MPA network, after considering the potential contribution from remaining recommended MCZs from the Regional MCZ Projects.**

CP2 Region	Remaining shortfalls in the MPA network		
	Broad-scale habitats	Habitats FOCI	Species FOCI
Southern North Sea		Sheltered muddy gravels	Native oyster ( <i>Ostrea edulis</i> )
Eastern Channel	Subtidal coarse sediment Subtidal sand Subtidal mud Subtidal mixed sediments	Maerl beds	
Western Channel & Celtic Sea	Subtidal coarse sediment Deep-sea bed		Native oyster ( <i>Ostrea edulis</i> )
Irish Sea	Subtidal coarse sediment		

Consequently, Defra asked JNCC and Natural England to identify sufficient potential site options to complete the network, including any new areas needed beyond those rMCZs. JNCC and Natural England developed an approach for identifying new site options<sup>12</sup> which is summarised in Figure 2. JNCC and Natural England developed new offshore and inshore options respectively and it was agreed that potential Areas of Search (AoS) would be identified in the offshore region for the following features in specific biogeographic regions to address the remaining shortfalls in the MPA network:

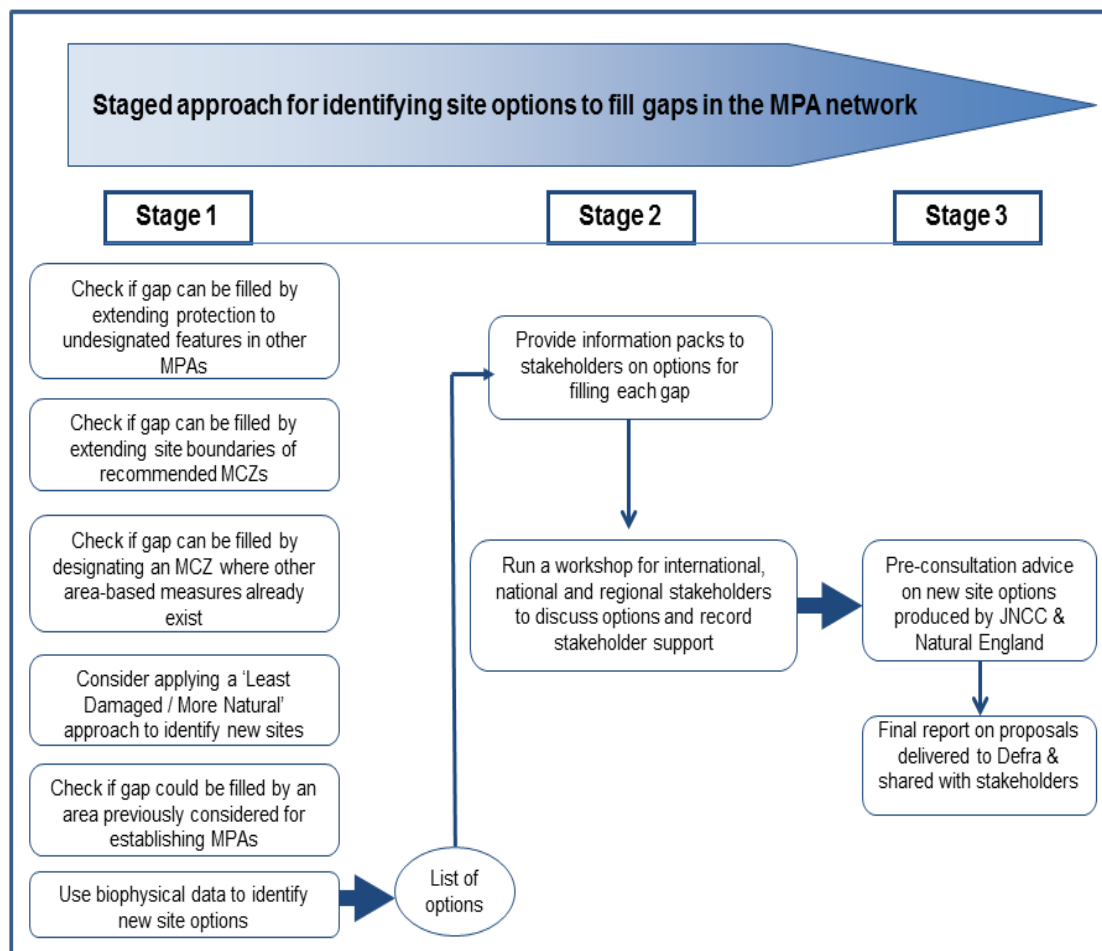
- Subtidal coarse sediment in the Western Channel and Celtic Sea region;
- Subtidal sand and Subtidal mixed sediments in the Eastern Channel region; and,
- Subtidal coarse sediment in the Irish Sea region.

<sup>10</sup> Add details and link

<sup>11</sup> No feature shortfalls were identified within the Northern North Sea region and therefore no New Site options have been proposed for this region.

<sup>12</sup> 'Identifying potential site options to help complete the Marine Protected Area network in the waters around England', JNCC and Natural England 2016. Available at: <http://jncc.defra.gov.uk/page-7119>





**Figure 2: A stepwise approach for identifying New Site Options for possible designation as MCZs to address shortfalls in the existing MPA network.**

Once initial AoS were identified these were discussed with stakeholders at a stakeholder workshop in early November 2016. Following on from this workshop a stepwise approach was adopted for considering the contribution an MCZ option within these areas could potentially make to the network. This process used a decision tree to aid decision making about which AoS to progress. This process is not documented in this present overview report but is in detail in the accompanying full advice report including detail on stakeholder engagement (see advice report 2 listed in [Section 1](#) above).

This process resulted in the following four offshore new site options (see Figure 1):

- East of Start Point – for Subtidal sand in the Eastern Channel region;
- West of Copeland – for Subtidal coarse sediment in the Irish Sea region.;
- South West Approaches to Bristol Channel – for Subtidal coarse sediment in Western Channel and Celtic Sea region; and,
- West of Wight Barfleurl – for Subtidal mixed sediments in the Eastern Channel region.

In total, JNCC and Natural England have proposed 13 new site options for possible inclusion in the third Tranche of MCZs. The remaining nine sites lie in inshore waters (within 12 nautical miles), and are the responsibility of Natural England. More detail on the contribution of these sites and other site options being

advised on to the MPA network in SoS waters can be found in the supplementary advice document (see advice report 3 in [Section 1](#)).

These new site options underwent the assessment process in line with JNCC's previous MCZ Advice (see advice report 2 listed in Section 1 for more detail). JNCC completed site assessments for the offshore new site options between December 2016 and January 2017. This included assessments of confidence in feature presence and feature extent; confidence in feature condition; feature vulnerability and feature risk; and, the data to support the designation of a feature or site from scientific evidence-based perspective (see [Section 3](#) for a summary of assessment results).

JNCC's 2016 advice on the possible offshore Site Options has been developed following the same Technical Protocols used for our previous advice on Tranches One<sup>6</sup> (2012/2013); Two<sup>7</sup> (2014) and the advice on possible rMCZs for consideration in Tranche Three. These Protocols are available on the JNCC website<sup>8</sup>.

### 3.2 Results

JNCC assessed 11 features within the four offshore new site options. This included the feature for which the site was identified to fill a shortfall in the MPA network plus any additional features that are located within the delineated boundary. We have High confidence in the presence of 7 features, Moderate confidence for 1 feature, and Low confidence for 3 features. We have High confidence in extent of 3 features, Moderate confidence in 5 features, and Low confidence in 3 features. There are 4 instances where confidence in feature presence is higher than confidence in feature extent. JNCC reviewed the proposed General Management Approach for all features and concluded that all 10 out of the 11 features require a Recover objective (see Table 3).

**Table 3: Summary assessment results table: Regional MCZ Project recommended MCZs and New Site Options**

Site Name	Ecological Network Guidance (ENG) feature	Confidence in feature presence	Confidence in feature Extent /distribution <sup>13</sup>	Confidence in feature condition	General Management Approach advised	Outcome of data sufficiency and additional conservation / ecological considerations assessment
East of Start Point New Site Option	Subtidal sand	High	High	Low	Recover	Data support designation of feature
South West Approaches to Bristol Channel	Moderate energy circalittoral rock	Low	Low	Low	Recover	Conservation benefits support priority feature designation but JNCC advised it is not progressed
	Subtidal coarse sediment	High	Moderate	Low	Recover	Data support designation of feature
	Subtidal sand	Moderate	Moderate	Low	Recover	Data support designation of feature
West of Copeland	Subtidal coarse sediment	High	Moderate	Low	Recover	Data support designation of feature

<sup>13</sup> Distribution relates only to species FOCI whereas extent is applied to broad-scale habitats, geological/geomorphological features and habitat FOCI.

New Site Option	Subtidal sand	High	Moderate	Low	Recover	Data support designation of feature
	Subtidal mud	Low	Low	Low	Recover	Conservation benefits support priority feature designation but JNCC advised it is not progressed
	Subtidal mixed sediments	High	High	Low	Recover	Data support designation of feature
West of Wight Barfleur Reef New Site Option	Subtidal coarse sediment	High	High	Low	Recover	Data support designation of feature
	Subtidal mixed sediments	High	Moderate	Low	Recover	Data support designation of feature

## 4 Third-party highly mobile species proposals

### 4.1 Assessment approach

In 2016, third-parties were asked by Defra to propose highly mobile species for protection within MCZs where there is clear evidence that their conservation will benefit from site-based protection measures. MCZs designated to conserve highly mobile species must clearly be able to contribute to the long-term viability of protected populations and, where necessary, help recover those populations. As such, to support third-parties in preparing submissions for highly mobile species MCZs, JNCC and Natural England jointly produced guidance setting out the principles that third-parties should follow in preparing their submissions<sup>14</sup>. These principles draw on the MCZ network principles set out in the ENG<sup>9</sup>, as well as experience in selecting Special Protection Areas and Special Areas of Conservation for highly mobile species under the EC Wild Birds and EC Habitats Directives respectively.

Four principles were identified as being important for the identification of MCZs for highly mobile species. Further detail provided in advice report 4 (see [Section 1](#)):

- **Ecological significance** – is the area considered to be of critical importance to the life history of the highly mobile species, e.g. for feeding or breeding behaviours?
- **Persistence** – supporting data should demonstrate long-term persistence (allowing for natural seasonal and inter-annual variation) of highly mobile species at a greater than average density by comparison to the wider sea area.
- **Site size and delineation** – MCZs should be large enough to maintain the supporting functions that a highly mobile species requires in a given location. This includes any supporting habitats, oceanographic processes, geological/geomorphological features or species important to the conservation of a given highly mobile species in the same locality are also considered in the

<sup>14</sup> JNCC and Natural England 2016. Identifying possible Marine Conservation Zones for highly mobile species: Principles for third-party proposals. Available at: [http://jncc.defra.gov.uk/pdf/20160525\\_AnnexA\\_Selection\\_criteria\\_proposed\\_by\\_JNCC\\_and\\_Natural\\_England\\_v4.0.pdf](http://jncc.defra.gov.uk/pdf/20160525_AnnexA_Selection_criteria_proposed_by_JNCC_and_Natural_England_v4.0.pdf)

context of MCZ size and extent.

- **Appropriateness of management** - The particular value of site-based protection measures to the conservation of the species must be clear in an MCZ proposal to conserve a highly mobile species. For example, the proposal should demonstrate how a site-based measure compares to wider (possibly already existing) measures. Site-based measures may be particularly useful where localised threats are present that are not adequately considered by wider existing measures.

In August 2016, JNCC and Natural England received 21 highly mobile species MCZ submissions from Defra that were prepared by third-parties. Defra requested that JNCC and Natural England undertake a review of the degree to which the principles summarised above are considered to be met. The four proposals not assessed were for smelt (*Osmerus eperlanus*) in the Alde Ore, Medway, Thames and Wyre Lune estuaries because these areas were already under consideration for smelt as part of the main Tranche 3 MCZ work programme by Natural England.

Of the 17 proposals JNCC and Natural England assessed, Defra requested further formal pre-consultation advice on 10 (and agreed that the Dorset composite proposals should thereon be considered as 3 separate proposals called Poole Rocks, Southbourne Rough and Purbeck). This covered all those proposals (including their specific features) that sufficiently met the four principles *i.e.* scored moderate or high (or had the potential to score moderate or high with modest additional analysis of readily available evidence). Due to the splitting of the Dorset composite proposal into 3 separate proposals, there were then 12 proposals to provide further formal pre-consultation advice on. Only one of these 12 proposals (Lyme Bay Deeps) extended into the offshore and so JNCC's scientific advice was provided exclusively on this proposal.

## 4.2 Results

JNCC and Natural England assessed the only third party highly mobile species proposal that extends into the offshore. Lyme Bay Deeps draft MCZ is proposed to conserve the most southerly known group of white-beaked dolphin which are regularly observed in UK waters. The draft MCZ scored moderately against ecological significance of the area for white-beaked dolphin due to empirical evidence being limited (based on a single study) and that benefits would unlikely be at the population or sub-population level. It scored highly for presence and persistence due to a scientifically robust evidence base supporting the conclusion that a group of white-beaked dolphin persists in this area of the English Channel and demonstrating the groups fidelity to the area proposed as the Lyme Bay Deeps draft MCZ. It is important however to note that white-beaked dolphins were not observed in the Lyme Bay region on a regular basis until the mid 2000s and there is a risk that this small isolated group at the edge of its range (normally found in more northerly and cooler waters) may not persist in the region in the long-term due to climate change or other increasing pressures. The management intention for the draft MCZ would be to safeguard this group of white-beaked dolphin against potentially damaging human activities that may take place in the future and to ensure that any potential impacts from such activities are adequately considered. JNCC and Natural England consider

that there is sufficient evidence to support a moderate score for the appropriateness of management. Most activities that could give rise to pressures to which this group of white-beaked dolphin may be considered to be sensitive, are largely already adequately managed through existing mechanisms. However, there is the added value in designating an MCZ for this particular group of white-beaked dolphin as it would enable greater consideration being given to impacts from more localised activities taking place within the area – most notably powerboating and wildlife tourism (see Table 4).

**Table 4: Summary assessment results table: Offshore third party highly mobile species proposal**

	<b>Feature</b>	<b>Principle 1: Ecological Significance</b>	<b>Principle 2: Persistence</b>	<b>Principle 3: Site size and delineation</b>	<b>Principle 4: Appropriateness of Management</b>	<b>General Management Approach</b>
<b>Lyme Bay Deeps</b>	White-beaked dolphin	Moderate	High	High	Moderate	Maintain in favourable condition

## 5 Quality Assurance Process

When compiling our advice, JNCC has endeavoured to comply with the Government Chief Scientific Adviser’s guidelines for preparing scientific advice<sup>15</sup>, and the recommendations of the Graham-Bryce report<sup>16</sup> that reviewed the evidence process for selecting marine Special Areas of Conservation (SACs). JNCC has also applied its own internal Evidence Quality Assurance (EQA) Policy<sup>17</sup> to ensure our advice is scientifically robust.

The JNCC MCZ EQA Group reviewed the assessment process, and applied judgement where required to ensure that assessments in our degree of confidence in the presence and extent of features were consistent and appropriate, using a clearly described rationale. The EQA group signed off the assessments once it was satisfied that all technical protocols had been followed.

Our advice has been quality assured through our internal systems, and reviewed and signed-off by our independent non-executive MPA Sub-Group. Detailed information on the QA procedures followed during this advice package can be found in the individual advice reports available alongside this brief overview report (see [Section 1](#)).

## 6 Conclusions

JNCC concluded there is sufficient evidence to designate the majority of features identified in the 13 offshore rMCZs, the three designated offshore MCZs and the site proposed by Northern Irish fishermen in

<sup>15</sup> Guidelines for preparing scientific advice. Available at: <http://www.bis.gov.uk/go-science/science-in-government/strategy-and-guidance>

<sup>16</sup> Graham-Bryce Report. Available at: <https://www.gov.uk/government/publications/independent-review-of-the-evidence-process-for-selecting-marine-special-areas-of-conservation>

<sup>17</sup> JNCC Evidence Quality Policy. Available at: <http://jncc.defra.gov.uk/page-6675>

the Western Irish Sea. Additionally, it was concluded that there is sufficient evidence to designate the feature for which each New Site Option was specifically identified to address a shortfall in the MPA network. There is also sufficient evidence to designate a further 4 features present within these sites. The supporting evidence for the remaining two features was insufficient at this time to support their presence within the New Site Options and so it was advised that these are not considered further for designation. JNCC and Natural England did not advise on the suitability of third party proposals for designation *per se* but provided advice based on the outcomes of the assessment against the four principles and concluded that the evidence underpinning the proposal were deemed sufficient for this site to progress, noting that the population is at the edge of its range and may not persist in this location and that all activities that could potential impact the dolphins are already being managed through other mechanisms.