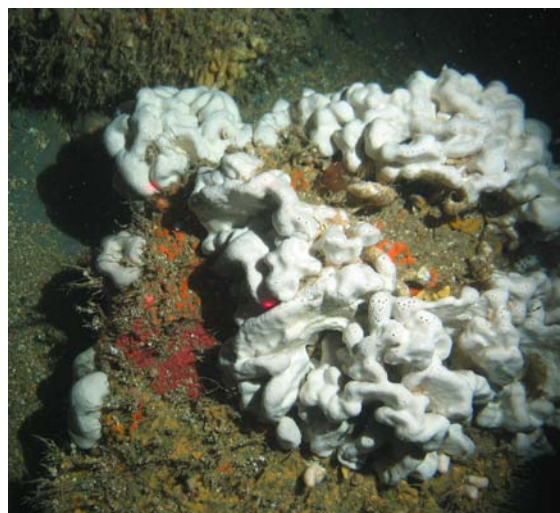




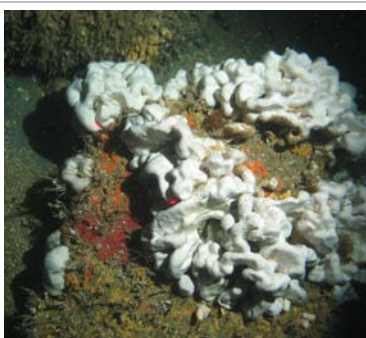


Report to the Secretary of State of the 2011 consultation on the selection of three UK offshore Special Areas of Conservation

8th May 2012 v1.0



Key to the images used on the front cover

	<p>Croker Carbonate Slabs</p> <p>Soft corals (<i>Alcyonium digitatum</i>) and dense <i>Tubularia indivisa</i> hydroids on a methane-derived authigenic carbonate structure in the Croker Carbonate Slabs site.</p> <p>© JNCC</p>
	<p>Pisces Reef Complex</p> <p>Annex I stony reef covered with a faunal turf of hydroids and cup sponges, recorded at Pisces Reef.</p> <p>© DTi 2004</p>
	<p>Wight-Barfleur Reef</p> <p>Boulders covered with many sponges and tube worms, observed on the Wight-Barfleur reef.</p> <p>© Crown Copyright</p>

Sign off procedure

Version	Issued to	Date submitted	Changes made	Approval by	Date approved
1.0	Secretary of State	08/05/12		Chair of JNCC	08/05/12
0.2	Review of draft by Defra, UK Marine Biodiversity Policy Steering Group & UK MPA Technical Group	30/01/12	Minor changes to improve clarity of responses	Joint Committee MPA Sub-Group / Chair of JNCC	21/02/12
0.1	JNCC Programme Leader + Internal Quality Check	23/01/12	Changes made to grammar and accuracy of content	JNCC Programme Leader	30/01/12

This report is produced by:

Joint Nature Conservation Committee
 Monkstone House
 City Road
 Peterborough
 PE1 1JY

Telephone: +44 (0)1733 762626

Email: offshoreconsult@jncc.gov.uk

Website: jncc.defra.gov.uk/marineprotectedareas

Table of Contents

1. Introduction and background	6
2. Purpose of the consultation and how it was carried out	7
2.1. The purpose of the consultation	7
2.2. How the formal consultation was carried out	7
2.3. Raising awareness of the consultation	8
3. Analysis of the responses.....	9
3.1. Independent review of evidence base	11
4. Summary of key messages and JNCC comments.....	13
4.1. Scientific case for designation of the three SACs	13
4.1.1 Croker Carbonate Slabs.....	13
4.1.2 Pisces Reef Complex.....	14
4.1.3 Wight-Barfleur Reef.....	16
4.1.4 Comments applicable to all three sites	16
4.1.5 Draft Conservation Objectives & Advice on Operations.....	17
5. Conclusions and final recommendation on site boundaries	18
Annex I: Consultation questions	19
Annex II: List of respondents	23
Annex III: Key messages on Impact Assessment	24
Croker Carbonate Slabs Impact Assessment.....	24
a) Fisheries specific comments	24
b) Other specific comments.....	24
Pisces Reef Complex Impact Assessment.....	24
a) Energy specific comments.....	24
b) Fisheries specific comments	25
c) Other specific comments.....	25
Wight-Barfleur Reef Impact Assessment.....	26
a) Energy specific comments.....	26

b) Fisheries specific comments	26
c) Other specific comments	27
Other comments applicable to all sites.....	27
a) General comments	27
Annex IV: Copy of the Evidence review of the three pSACs	29

1. Introduction and background

This document sets out the process undertaken by the Joint Nature Conservation Committee (JNCC) for the formal consultation on the three possible Special Areas of Conservation (SAC) - Croker Carbonate Slabs, Pisces Reef Complex and Wight-Barfleur Reef, outlines the responses received during the consultation, and summarises JNCC's recommendations following consideration of responses received.

The European 'Habitats Directive'¹ and 'Birds Directive'² together provide for the creation of a network of protected areas for important or threatened wildlife habitats across the European Union to be known collectively as 'Natura 2000'. This network consists of SACs for habitats and non-bird species, and Special Protection Areas (SPAs) for birds.

JNCC is responsible for recommending sites and conducting public consultation on SACs and SPAs for UK offshore waters (12-200 nautical miles and the UK Continental Shelf), and reporting to Defra (or Scottish Government for sites in Scottish offshore waters).

Croker Carbonate Slabs is situated in the mid-Irish Sea and has been recommended to Government as an SAC for its seabed habitat 'submarine structures made by leaking gases'. Pisces Reef Complex is situated in the western Irish Sea and has been recommended to Government as an SAC for its seabed habitat 'reefs'. Wight-Barfleur Reef is located in the English Channel and has also been recommended to Government as an SAC for its seabed habitat 'reefs'. Following approval by Government, the formal consultation for these three sites commenced on 6th July 2011 and closed on 29th September 2011.

A total of 15 responses to the consultation were received. The present report summarises the purpose of the consultation, how it was carried out, how the responses were analysed, what the nature of the responses was by sector and the key messages arising from it.

Following the consultation, JNCC has reviewed the scientific case for selection of each site and drawn up final site recommendations, taking into account representations made during the consultation. Final impact assessments have also been drafted to comply with Government guidance and are being submitted along with the final recommendation to Defra. JNCC has made minor amendments to the SAC Selection Assessment documents for Croker Carbonate Slabs and Pisces Reef Complex, and has updated the impact assessment for each site in the light of comments made. The features for which the sites have been identified (submarine structures made by leaking gases – Croker Carbonate Slabs, and reefs – Pisces Reef Complex and Wight-Barfleur Reef), have not changed. The site boundaries have not changed for Croker Carbonate Slabs and Wight-Barfleur Reef. However, following some responses received the boundaries around Pisces Reef Complex have been slightly amended.

In addition to reviewing the consultation responses, an independent review of the evidence underpinning the scientific selection of the three sites was commissioned. The independent reviewers concluded that JNCC had collected data of sufficient quantity and quality to demonstrate that the sites contain a significant extent of Annex I habitats.

¹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

² Directive came into force in 1979, and is superseded by Directive 2009/147/EC of the European Parliament and the Council of 30 November 2009 on the conservation of wild birds

2. Purpose of the consultation and how it was carried out

2.1. The purpose of the consultation

The purpose of the consultation was to seek the view of all interested parties on:

- The scientific case for the designation of the Croker Carbonate Slabs pSAC, the Pisces Reef Complex pSAC and the Wight-Barfleur Reef pSAC;
- The assessment of the likely economic and social impact of the designation of each site.

It is important to note that the Habitats Directive does not permit socio-economic impacts to influence the choice of a site or its boundary. The UK, as a Member State, must identify the sites and boundaries based only on scientific evidence. Socio-economic information will be used to inform the development of advice on the management of activities for each site, to ensure the features for which the sites have been designated are conserved. Draft Conservation Objectives and Advice on Operations for each site were also made available to assist stakeholders in assessing the likely effects of the site designation on their activities. The Conservation Objectives for each site were not the subject of the consultation although any comments that were received will be considered and taken into account when JNCC develops its formal conservation advice.

2.2. How the formal consultation was carried out

The formal consultation ran for three months and followed the Government's code of practise on consultation³. At the start of the consultation, 642 letters were emailed or posted to stakeholders by JNCC. The documents being consulted on were available on JNCC's website and hard copies were available upon request.

The documents presented for consultation for each site were:

- a SAC Selection Assessment document;
- an Impact Assessment document;

In addition, a supplementary brief for Pisces Reef Complex which sought further information on four additional areas of potential reef was presented for consultation.

The following information was also made available on the JNCC website during the consultation:

- List of consultees;
- The letter sent to consultees;
- A document entitled "2011 Consultation on the selection of three UK offshore Special Areas of Conservation" which set out the purpose of the consultation, what was being consulted upon and how to respond;
- Draft Conservation Objectives and Advice on Operations for features on each site;
- A GIS shapefile of the each sites boundaries; and
- A document providing answers to some 'Frequently asked questions'.

Consultees were encouraged to respond via a standard template which was also posted on the website. However, responses were accepted in any format. The questions asked of consultees are set out in Annex I.

³ HM Government, 'Code of Practise on Consultation', July 2008 - <http://webarchive.nationalarchives.gov.uk/+/http://www.bis.gov.uk/files/file47158.pdf>

2.3. Raising awareness of the consultation

JNCC recommended Croker Carbonate Slabs, Pisces Reef Complex and Wight-Barfleur Reef to Defra as draft SACs in March 2011, and pending Government approval to start a formal consultation, JNCC conducted some informal dialogue meetings between March 2011 and September 2011. Meetings were also held with stakeholder groups concerned with the three sites during the consultation period (see list below). These meetings introduced the format and timing of the planned formal consultation, described the impact assessment, and provided an opportunity for early informal feedback on the three possible SACs.

JNCC sent out a press release, posted notices on the JNCC website and sent individual letters to stakeholders and stakeholder groups inviting them to participate in the consultation. During the consultation period all the major stakeholder groups were asked if they would like additional meetings with JNCC to update them on the consultation, and meetings were held with those who requested them.

Stakeholder meetings prior to consultation	Stakeholder meetings during consultation
Ministry of Defence	Department of Transport
UK Business Council for Sustainable Energy	Eneco / PMSS
UK Marine Biodiversity Policy Steering Group	National Federation of Fisheries Organisations
	North-West Waters Regional Advisory Council
	Pelagic Regional Advisory Council
	UK Marine Biodiversity Policy Steering Group
	World Wildlife Fund

3. Analysis of the responses

In total, 15 responses to the consultation were received from the following stakeholder sectors:

- commercial fishing (2 responses);
- conservation (2 responses);
- energy (3 responses);
- landowner (1 response);
- public sector (5 responses);
- research (1 response);
- trade association (1 response).

Each response was logged and an acknowledgement issued to the consultee.

The table below provides a summary of the responses received to each consultation question. The list of questions in full can be found in Annex I. Please note that 'Yes' indicates that a respondent either accepted the question or provided additional information.

	Yes	No	Not stated
Scientific			
1. Accept scientific basis			
Croker	4	1	10
Pisces	6	1	8
Wight-Barfleur	3	1	11
2. Provide additional scientific information			
Croker	0	2	13
Pisces	1	2	12
Wight-Barfleur	1	2	12
3. Provide additional information on the condition of the features of the site			
Croker	0	0	15
Pisces	0	1	14
Wight-Barfleur	0	0	15
4. Provide further comment on scientific selection			
Croker	3	1	11
Pisces	3	2	10
Wight-Barfleur	2	1	12
Economic and social impact of designation			
1. Provide additional information on assessing the value of goods and services for European habitats			
Croker	1	0	14
Pisces	1	0	14
Wight-Barfleur	1	0	14

<hr/>			
2. Provide additional activities that were not listed			
Croker	1	0	14
Pisces	2	0	13
Wight-Barfleur	3	0	12
<hr/>			
3. Provide information on what vessels would do in the event of a partial or full closure to certain types of fishing activity			
Croker	0	0	15
Pisces	1	0	14
Wight-Barfleur	2	0	13
<hr/>			
4. Provide additional information to improve the assessment of the costs of selecting the site			
Croker	2	0	13
Pisces	3	0	12
Wight-Barfleur	2	0	13
<hr/>			
5. Provide additional information to improve the assessment of the benefits of selecting the site			
Croker	0	0	15
Pisces	1	0	14
Wight-Barfleur	0	0	15
<hr/>			
6. Provide information on the importance of the features in supporting the wider ecosystem			
Croker	0	0	15
Pisces	1	0	14
Wight-Barfleur	0	0	15
<hr/>			
7. Provide information on how much time a business might take to familiarise themselves with the implications of SAC designation			
Croker	0	0	15
Pisces	1	0	14
Wight-Barfleur	1	0	14
<hr/>			
8. Provide information on significant unintended consequences that have not been identified			
Croker	0	0	15
Pisces	0	0	15
Wight-Barfleur	1	0	14
<hr/>			
9. Agree with the assessments of impacts on small businesses			
Croker	0	0	15
Pisces	1	0	14
Wight-Barfleur	1	0	14
<hr/>			

10. Provide comment on any other aspects of the impact assessment			
Croker	4	0	11
Pisces	4	0	11
Wight-Barfleur	7	0	8

27% of the stakeholders who responded accepted the scientific basis put forward for Croker Carbonate Slabs, 7% did not accept the scientific basis and 67% made no comment on the scientific basis for site selection⁴. For Pisces Reef Complex, 40% of the stakeholders that responded accepted the scientific basis put forward for the site, 7% did not accept the scientific basis and 53% made no comment on the scientific basis for site selection. For Wight-Barfleur Reef, 20% of the stakeholders that responded accepted the scientific basis put forward for the site, 7% did not accept the scientific basis and 73% made no comment on the scientific basis for site selection.

Any scientific reports and detailed comments on the SAC Selection Assessment document provided by stakeholders have been analysed and incorporated where appropriate. New data and detailed comments were also provided for the impact assessment and have been included where necessary. Revised versions of these documents have been produced. A few stakeholders also provided comments on the conservation objectives, which will be assessed before the conservation objectives are finalised. The comments highlighted are discussed in more detail below.

3.1. Independent review of evidence base

In July 2011 an independent review was undertaken of the evidence process for selecting English marine SACs. A key recommendation from this review was that “*Defra and Natural England should ensure that independent, expert review is built into processes which rely significantly on the gathering, synthesis and interpretation of evidence. Reviews should be transparent: the reviewers’ comments and Natural England’s response to them should be recorded and published*” (Bryce *et al.* 2011⁵). This recommendation was accepted for the process of evidence-gathering in support of the identification of SACs in English waters as part of the work required under the Habitats Directive.

Therefore the Bryce *et al.* (2011) review recommended the needed for the robustness of evidence and advice provided by JNCC to inform decisions regarding the identification of SACs offshore, in light of the requirements of the Habitats Directive. Consequently, alongside the consultation process on the three possible SACs covered by the present document, JNCC commissioned an independent review of evidence for the proposed sites.

The review was undertaken by Dr Matthew Frost (Marine Biological Association) and Dr Stephen Widdicombe (Plymouth Marine Laboratory), who sought to answer the following questions:

- Are the quality, quantity and analysis of biological and geomorphological data used to support each site recommendation scientifically robust?
- Does the interpretation of the resulting biological and geomorphological findings, and the resultant extent of Annex I features proposed to be included within the site boundaries, accord with the intent of the Habitats Directive?

⁴ Please note that percentages have been rounded up or down to a single figure and therefore, in this instance, do not equal 100%.

⁵ Dr Ian Graham-Bryce, ‘*Independent review of the evidence process for selecting marine special areas of conservation*’, July 2011 - <http://www.defra.gov.uk/publications/files/pb13598-graham-bryce-independent-review-marine-sacs-110713.pdf>

- Are the boundary judgements made by JNCC reasonable given the available evidence and the JNCC boundary guidance (2008)⁶;

The reviewers concluded that for all three sites, the JNCC had collected data of sufficient quantity and quality to demonstrate that each site contained a significant extent of Annex I habitat. The reviewers further concluded that JNCC had used the evidence appropriately in setting reasonable site boundaries for each site.

The complete final report of the independent review can be found at Annex IV to this report.

⁶ http://jncc.defra.gov.uk/pdf/SACHabBoundaryGuidance_2008Update.pdf

4. Summary of key messages and JNCC comments

4.1. Scientific case for designation of the three SACs

4.1.1 Croker Carbonate Slabs

a) Justification for submarine structure habitat

- Majority of respondents broadly accepted the scientific justification for recommending Croker Carbonate Slabs to protect the Annex I habitat 'submarine structures made by leaking gases'.
- A comment noted that the habitat is unique in terms of its size and presence and is of international importance.

JNCC response

JNCC has amended the Selection Assessment Document for Croker Carbonate Slabs to include a new reference which outlines the international importance of the site.

b) Habitats and species

- A comment noted that designating the site as excellent for representativity is excessive if the habitat is no longer active.

JNCC response

While JNCC recognises that the site is not presently active, the habitat represents an excellent example of Annex I habitat 'submarine structures made by leaking gases'. In this case, it is the presence of the features and how intact they are, not the level of activity of the processes that form them that is the essential criterion for governing whether the site qualifies as representative of this type of Annex I habitat. The site will be assessed periodically and if it is found the feature is degrading due to inactivity, then the site designation would be reviewed.

c) Selection criteria

- Questions raised whether the site was selected only because of the difficulty of finding alternative suitable sites.

JNCC response

The Offshore Marine Conservation Regulations 2007 require JNCC to identify the most suitable Annex I habitats in our offshore marine environment, and recommend them to Government as SACs. JNCC relies on the use of the best-available scientific evidence to complete this task. As outlined in the SAC Selection Assessment Document for Croker Carbonate Slabs, JNCC believes that this site is an excellent representative example of Annex I habitat 'submarine structures made by leaking gases'. JNCC recognises that there may be alternative locations that are also examples of Annex I habitat 'submarine structures made by leaking gases'. However, there is currently limited scientific evidence to identify such sites in comparison to the evidence available for Croker Carbonate Slabs.

d) Boundary delineation

- No comments were received that related to the proposed boundaries of the site.

4.1.2 Pisces Reef Complex

a) Justification for reef habitat

- The majority of respondents broadly accepted the scientific justification for recommending Pisces Reef Complex to protect the Annex I habitat 'reefs'.

b) Habitats and species

- No comments were received relating to the interest features of the site.

c) Selection criteria

- A comment noted that the selection of the site should have been done with a greater consideration of the Marine Conservation Zone (MCZ) process

JNCC response

JNCC recognises that a procedure which aligns the MCZ process and the Natura 2000 selection process would simplify site selection to a wide range of stakeholders that have an interest in both site identification processes. However, the legal instruments underpinning the site selection processes are different and therefore alignment between the two processes is not fully possible. However, JNCC recognised that close engagement with the relevant MCZ Project, the Irish Sea Conservation Zones (ISCZ) Project, was essential prior to recommendation of the Pisces Reef Complex as an SAC. The ISCZ Project was fully informed of JNCC's intention to recommend Pisces Reef Complex (along with Croker Carbonate Slabs which also lies within the ISCZ Project area) to Government prior to our formal advice. As such, the ISCZ Project considered the introduction of the site(s) and took account of the possible contribution the draft SACs could make to the network of Marine Protected Areas (MPAs) during its MCZ recommendation process.

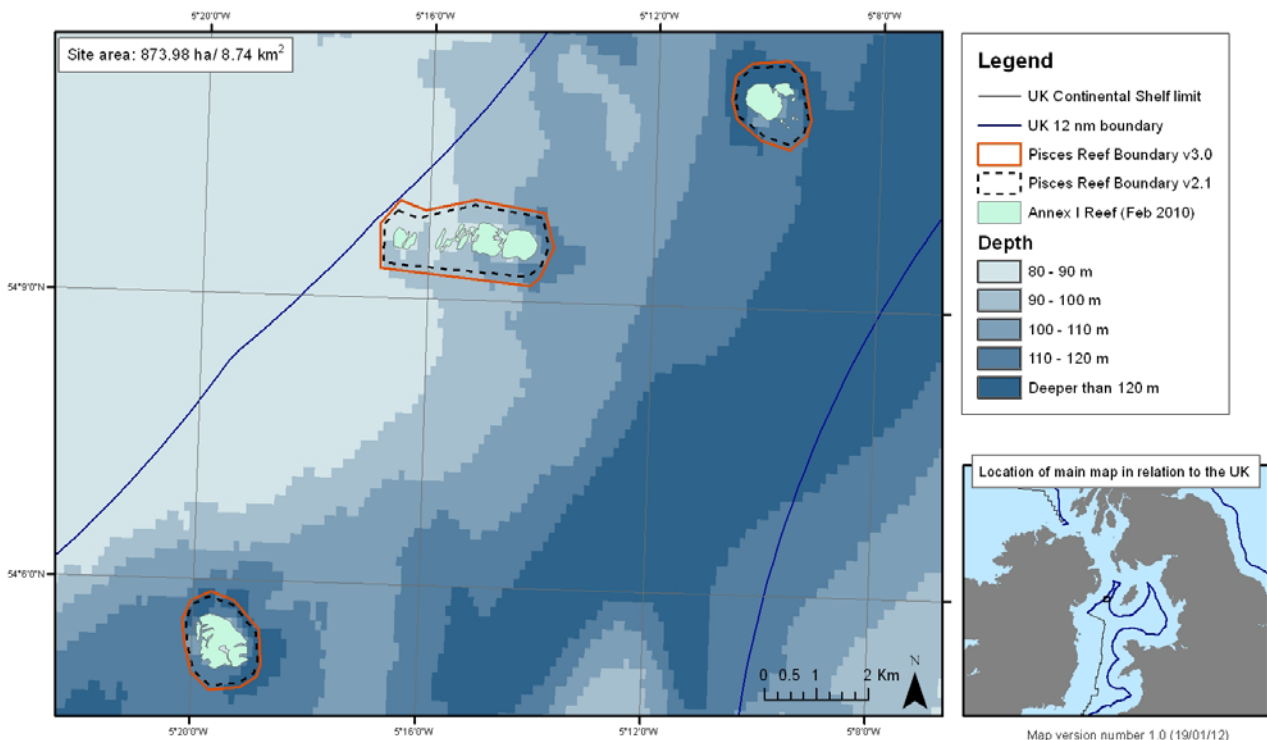
d) Boundary delineation

- Concern that the boundary had been drawn up using average water depth rather than maximum water depth.
- Part of the complex of peaks lies within Northern Irish territorial waters and it seems perverse to observe political boundaries rather than ecosystem features.

JNCC response

JNCC agreed with the response received which recommended that the Pisces Reef Complex boundaries be drawn up using maximum water depth rather than average water depth, as this would correctly calculate the margin to reduce the risk of impact from mobile fishing gear. The boundaries have been slightly amended from the original proposal and these changes have been reflected in both the Selection Assessment Document and revised Impact Assessment. Figure 4.1 below highlights the original Pisces Reef Complex pSAC boundary alongside the revised boundary.

Offshore Special Area of Conservation Site Map: Pisces Reef Complex



Site map projected in UTM (Zone 31N, WGS84 datum). Seabed habitat derived from BGS 1:250,000 seabed sediment maps © NERC and SeaZone bathymetry. Bathymetry © British Crown and SeaZone Solutions Limited. All rights reserved. Products Licence No. PGA042006.003. This product has been derived in part from material obtained from the UK Hydrographic Office with the permission of the Controller of Her Majesty's Stationery Office and UK Hydrographic Office (www.ukho.gov.uk). NOT TO BE USED FOR NAVIGATION. The exact limits of the UK Continental Shelf are set out in orders made under section 1(7) of the Continental Shelf Act 1964 (© Crown Copyright). Map copyright JNCC 2012.

Figure 4.1: Original Pisces Reef Complex pSAC boundary (v2.1) and the revised Pisces Reef Complex pSAC boundary (v3.0)

In addition to changing the site boundary for Pisces Reef Complex pSAC, JNCC are recommending a change to the 2008 Boundary Guidelines in order to maintain consistency during identification of site buffer areas around features within sites.

The extent of the reef habitat has been determined using a range of data described within the accompanying Selection Assessment Document. Following the consultation, JNCC examined additional data provided by the Agri-Food Biosciences Institute (AFBI) of Northern Ireland. These data covered three of the four outcrops of potential Annex I reef as indicated by the British Geological Survey (BGS) hard substrate data layer⁷, as well as one data point overlapping with the areas of potential Annex I reef identified within Northern Irish territorial waters. These data did not demonstrate the presence of Annex I reef in any of the adjacent potential areas.

There is currently no additional evidence beyond the BGS hard substrate layer to suggest that the areas identified as potential Annex I reef are present. In this region many of the areas identified as rock on the BGS hard substrate layer are actually rock strata near the surface, with a veneer of mud of varying thickness preventing typical rocky communities establishing on the hard substrata. Any such areas of potential Annex I reef indicated by the BGS layer without additional evidence that the rock is exposed and supports typical rocky communities have not been included within the site boundary.

⁷ British Geological Survey, 'MB103 Final Report: Developing the necessary data layers for Marine Conservation Zone selection – Distribution of rock/hard substrate on the UK Continental Shelf', May 2010 - http://randd.defra.gov.uk/Document.aspx?Document=MB0103_9616_FRP.pdf

The identification and selection of SACs within Northern Irish territorial waters is determined by the Northern Ireland Environment Agency. If an opportunity arises to gather additional data on these areas, JNCC will work with relevant Northern Irish bodies to further investigate the areas identified as potential reef in Northern Irish waters.

4.1.3 Wight-Barfleur Reef

a) Justification for reef habitat

- The majority of respondents broadly accepted the scientific justification for recommending Wight-Barfleur Reef to protect the Annex I habitat “reefs”.

b) Habitats and species

- A comment noted that additional marine mammal data are being collected as part of the Environmental Impact Assessment work for the proposed Navitus Bay Wind Park project.

JNCC response

JNCC notes that further marine mammal data within close proximity of the possible SAC at Wight-Barfleur Reef are being collected and that these data are being made available to the Joint Cetacean Database. JNCC will continue to monitor the results of Eneco’s marine mammal data collection campaign, together with all other sources of evidence for marine mammal distribution to examine whether the area might have a presence of a species which could be clearly identified as an area considered as being essential to the life and reproduction of the species. If at some point these new data do demonstrate that the site is appropriate for the conservation of any Annex II species, JNCC will advise the Government on an appropriate course of action.

c) Selection criteria

- No comments were received which related to the selection criteria of the site.

d) Boundary delineation

- No comments were received which related to the boundaries of the site.

4.1.4 Comments applicable to all three sites

- A concern noted was raised that the designation of these sites would impact operations required for safe navigation of our seas.

JNCC response

JNCC recognises the importance of safe navigation of seas and understands the responsibilities of organisations in fulfilling their duties with respect to navigation. The selection of sites precludes the consideration of socio-economic impacts and is based purely on the scientific evidence available and whether the site meets the required selection criteria contained within Annex III of the Habitats Directive. There is the possibility that the designation of the sites will impact operations required for safe navigation of our seas. However under the duties placed through Section 25 of the Offshore Marine Conservation Regulations 2007 (as amended), it is up to the relevant competent authority to determine whether any of its plans or projects will have a likely significant effect on the features for which the site is designated.

JNCC is of the opinion that activities involving the placement of navigational equipment or other associated small-scale infrastructure are unlikely to significantly affect the conservation status of a designated site, although this is very much dependent on a case-by-case basis and before a consideration of possible in-combination effects with other activities have been examined.

4.1.5 Draft Conservation Objectives & Advice on Operations

Some specific comments on the draft Conservation Objectives and Advice on Operations documents were received. None of these comments were of a nature that would influence the scientific case for the recommendation of the three sites to Government. However the comments did raise issues that will be addressed when the documents are updated ahead of JNCC issuing its formal Conservation Advice following submission of the three SACs to the European Commission.

5. Conclusions and final recommendation on site boundaries

The overall site recommendations for all three sites remain unchanged following the consultation. However the site boundaries for Pisces Reef Complex have been slightly adjusted following comments received about the way the boundaries were calculated.

New sources of survey data have been incorporated into the SAC Selection Assessment document for Pisces Reef Complex but this has not resulted in any addition to the areas identified as containing reef habitat requiring protection. The SAC Selection Assessment documents for each site have been amended in light of comments made in consultation responses. The Impact Assessment documents have been updated to include new fisheries data and to address comments made during the consultation.

JNCC confirms its advice to Government that Croker Carbonate Slabs, Pisces Reef Complex and Wight-Barfleur should be recommended to the European Commission as candidate SACs as part of the UK's contribution to the Natura 2000 network.

Annex I: Consultation questions

The scientific justification for the sites and their boundaries

SAC1) Do you support the scientific basis for the sites being put forward in this round of consultation?	
SAC1.1) Croker Carbonate Slabs	Yes/No
SAC1.2) Pisces Reef Complex	Yes/No
SAC1.3) Wight-Barfleur Reef	Yes/No

SAC2) Please indicate if you have any scientific information, not already referenced in the SAC Selection Assessment document for each site (or in the Pisces Reef Complex supplementary brief), to support your response to SAC1.	
SAC2.1) Croker Carbonate Slabs	
SAC2.2) Pisces Reef Complex	
SAC2.3) Wight-Barfleur Reef	

SAC3) Do you have any information additional to that included in the SAC Selection Assessment documents about the condition of Annex I habitats within each site boundary that you would like to share with JNCC?	
SAC3.1) Croker Carbonate Slabs	
SAC3.2) Pisces Reef Complex	
SAC3.3) Wight-Barfleur Reef	

SAC4) Do you have any further comments on the scientific selection of each site as a SAC?	
SAC4.1) Croker Carbonate Slabs	

SAC4.2) Pisces Reef Complex	
SAC4.3) Wight-Barfleur Reef	

Socio-economic Impact Assessment

IA1) Do you have any further information on assessing the value of goods and services for European habitats for each Impact Assessment for Option 1: Designate the site?	
IA1.1) Croker Carbonate Slabs	
IA1.2) Pisces Reef Complex	
IA1.3) Wight-Barfleur Reef	

IA2) Are there any other significant activities at each site that the IA has not identified?	
IA2.1) Croker Carbonate Slabs	
IA2.2) Pisces Reef Complex	
IA2.3) Wight-Barfleur Reef	

IA3) Can you provide any information to inform estimates of what vessels would do in response to closing each site or part of it to certain types of fishing methods?	
IA3.1) Croker Carbonate Slabs	
IA3.2) Pisces Reef Complex	
IA3.3) Wight-Barfleur Reef	

IA4) Can you provide any information to improve the assessment of the costs (and wider impacts) of selecting each site?	
-------------------------------------------------------------------------------------------------------------------------	--

IA4.1) Croker Carbonate Slabs	
IA4.2) Pisces Reef Complex	
IA4.3) Wight-Barfleur Reef	

IA5) Can you provide any information to improve the assessment of benefits of selecting each site?	
IA5.1) Croker Carbonate Slabs	
IA5.2) Pisces Reef Complex	
IA5.3) Wight-Barfleur Reef	

IA6) In assessing the benefits, we do not take account of the role of the feature (i.e. habitat type) in supporting the wider ecosystem. Can you provide information on the importance of any of the features in supporting the wider ecosystem?	
IA6.1) Croker Carbonate Slabs	
IA6.2) Pisces Reef Complex	
IA6.3) Wight-Barfleur Reef	

IA7) How much time do you think a business might typically take to familiarise themselves with the implications of offshore SAC designation if implemented? (If you represent a particular sector, please make your answer specific to that sector)	
IA7.1) Croker Carbonate Slabs	
IA7.2) Pisces Reef Complex	
IA7.3) Wight-Barfleur Reef	

IA8) Are there significant unintended consequences associated with the Options (Baseline: do nothing or Option 1: designate the site) that have not been identified in the IAs?	
IA8.1) Croker Carbonate Slabs	
IA8.2) Pisces Reef Complex	
IA8.3) Wight-Barfleur Reef	

IA9) Do you agree with the assessments of impacts on small businesses and can you provide any further information?	
IA9.1) Croker Carbonate Slabs	
IA9.2) Pisces Reef Complex	
IA9.3) Wight-Barfleur Reef	

IA10) Are there any other aspects of the IAs on which you would like to comment or where you are able to provide further information?	
IA10.1) Croker Carbonate Slabs	
IA10.2) Pisces Reef Complex	
IA10.3) Wight-Barfleur Reef	

Annex II: List of respondents

Agri-Food Biosciences Institute (Northern Ireland)

Alan Judd Partnership

Chamber of Shipping

Comité National des Pêches Maritimes et des Elevages Marins

Commissioners of Irish Lights

Eneco / PMSS

English Heritage

Marine Biological Association

Marine Management Organisation

National Federation of Fisheries Organisations

National Grid

Renewable Energy Systems Ltd

The Crown Estate

Trinity House

World Wildlife Fund

Annex III: Key messages on Impact Assessment

The Impact Assessments (IA) for each of the three sites have been updated following the consultation, and will be provided to Defra separately to this report. The following comments were received on the IAs during the consultation and have been assimilated into revised versions.

Croker Carbonate Slabs Impact Assessment

a) Fisheries specific comments

- The economic impact of the potential closure of the site is too narrow.

JNCC response

JNCC recognises the socio-economic importance of the Nephrops fishery in the Irish Sea, however, only an extremely small proportion of the fishing ground overlaps with the site. From the information provided in Annex I to the Croker Carbonate Slabs IA, no fishing with Nephrops trawls occurs within the site and only very low levels of beam trawling and otter trawling (bottom) around the fringes of the site. It is assumed that fishers will be able to adapt to any possible management measures given the size of the fishing ground and the extremely small, infrequently fished proportion that overlaps with the site.

b) Other specific comments

- The proposed designation is shown to overlay directly with an inactive telecommunications cable.
- There may be increased navigation in the area should the proposed new nuclear power station at Wylfa A on the Isle of Anglesey gain consent.

JNCC response

JNCC has amended the IA to take into account of the inactive telecommunications cable which crosses the possible SAC.

JNCC recognises that the proposed nuclear power station at Wylfa A may lead to an increase in shipping activity in the immediate vicinity of the Croker Carbonate Slabs area. However this has not been included within the revised IA because the site is proposed for its 'submarine structures made by leaking gases' which are unlikely to be affected by shipping passing above it regardless of the intensity of activity. Therefore under the designate option, no change to current practises are likely to be required to fulfil the conservation objectives for submarine structures made by leaking gases at Croker Carbonate Slabs. Finally, the IA only considers current or future planned activity that overlaps with the site. Activities yet to be granted consent are not included within the scope of the IA.

Pisces Reef Complex Impact Assessment

a) Energy specific comments

- The IA does not record the potential negative economic consequences or the potential for limitation on the ability to mitigate greenhouse gas emissions if management measures impact the ability to develop renewable energy projects in the Irish Sea.

JNCC response

JNCC recognises that there is potential for the designation of a European Marine Site to affect future developments that might have an impact on the features of the site. This is outlined within the management scenarios included within the IA. However following guidance for previous pSACs from DECC, Defra and representatives of the renewable energy industry, it was felt that the IA should not include the risk of meeting renewable energy targets or a similar risk of being infringed through the Habitats Directive.

b) Fisheries specific comments

- Comment that there is considerable Nephrops fishing activity in the immediate vicinity of the reef that could be impacted by the designation.
- The fishing cost estimates in the IA are flawed in that the data has been derived from broad-scale information.

JNCC response

JNCC notes that Nephrops fishing activity takes place in close proximity to the areas identified as being a part of Pisces Reef Complex pSAC. However it is felt that given the reef features comprise of 30m high protruding rock, that Nephrops fishers are highly likely to avoid the area so as to prevent damage to their fishing equipment. Therefore as vessels are likely to avoid these areas of reef, there will likely be no impact on activity as a result of the site designation.

JNCC acknowledges that the cost estimates for fishing are derived from aggregated CEFAS information and ICES statistical sub-rectangle levels and as such there are limitations in the cost estimates that are discussed in the IA because of the scale that is provided to us. One issue is that Vessel Monitoring System data are provided in an aggregated, anonymised format in order to protect the identity of the fishers.

The data used are the best available to JNCC for use in these calculations and, if more detailed information were available, there is the potential for it to be provided during consultation in order to improve and revise fishing cost estimates. No new data were provided for fishing effort in the vicinity of the Pisces Reef Complex and therefore JNCC is unable to revise the fishing cost estimates.

c) Other specific comments

- There is a possible future impact with the northern section of the pSAC from a proposed Carbon Capture and Storage pipeline.
- There is an inactive cable just under 2000m from the middle section of the pSAC.
- The socio-economic assessment needs to be in line with that being produced by the MCZ Project.

JNCC response

JNCC has contacted the developers of the proposed Carbon Capture and Storage pipeline and they are currently considering a route for the pipeline which is 13km east of the Pisces Reef Complex. Therefore this has not been included within the revised IA.

JNCC has been unable to find a reference to the inactive cable mentioned in the response to consultation.

The MCZ Project is currently in the process of producing an IA to accompany the recommended MCZs. As the identification and designation process for Natura 2000 sites started prior to the MCZ Project, IA's for European Marine Sites have been developed over a number of years and pre-date the Impact Assessment currently being produced for the MCZ Project. However that said, all attempts are made to align the two processes wherever possible noting that the rationale for justification and importance of socio-economic considerations differs between the two processes thus requiring differences in the approach to assessing impact.

Wight-Barfleur Reef Impact Assessment

a) Energy specific comments

- Comment that the site overlays with Round 3 Zone 7 offshore wind area and that an exclusivity agreement has been signed with the developer, Eneco, who plan to develop the Navitus Bay Wind Park 2km north of the possible SAC.

JNCC response

JNCC has revised the IA to include the correct distances between the possible SAC and the proposed wind park.

b) Fisheries specific comments

- Comment that French fishing activity in the proximity of the site has not been included within the IA.
- Concern that the IA does not consider the cumulative impacts of the designation of both MCZs and N2K sites in the South region.
- In and around the area there are regular occurrences of potting for shellfish and trawling activity.
- There is likely to be considerable opposition from the industry to this possible SAC and associated management measures, particularly from Isle of Wight fishermen.
- High-cost scenario includes the closure of the site to pelagic fisheries when there are no active pelagic fisheries in the area, thus meaning it would be a redundant regulation.

JNCC response

JNCC note that IAs are a UK Policy requirement and assess costs to UK businesses only. In the interests of providing all the information, JNCC have added additional information on French fishing activity around Wight-Barfleur Reef as an Annex to the revised IA, but the figures cannot contribute to headline costs in the IA summary.

JNCC recognise that the IA does not consider the cumulative impacts of designation of both Natura 2000 sites and MCZs in the region. This is because a policy decision has been made that IAs for offshore SACs are done for the individual site only. However, in the IA for the MCZ network, the costs of the entire suite of protected areas are considered.

JNCC is aware of fishing activity generally taking place within the wider region which encompasses Wight-Barfleur Reef and this is outlined within the IA. The selection of sites under the Habitats Directive precludes the consideration of socio-economic factors. Wight-Barfleur Reef has been selected as a possible SAC as it is the best example of a reef habitat within this regional sea. More information on this is contained within the SAC Selection Assessment Document.

Suggested possible management measures have been proposed by JNCC in order to assess the range of costs that could be associated with SAC designation. It is anticipated that fisheries data will be examined in closer detail with the fishing industry during discussions about site management.

The upper management scenario considers the maximum possible impact to the fishing industry which would be closing the site to all forms of fishing. This does not represent the most likely or best estimate option, but rather the most extreme possible outcome of site designation. Additionally, regardless of whether a type of fishing currently occurs at the site, it may be necessary to put measures in place to prevent future damage. Post site-designation discussions with the fishing industry will be required in order to arrive at the best management solution.

c) Other specific comments

- No specific attention had been directed at 'cultural and social' (protection of iconic sites and archaeological features) factors as relevant to this IA.
- One active and seven inactive telecommunications cables cross the possible SAC.
- There were a number of comments about impacts of designation on nationally and internationally significant projects.

JNCC response

JNCC recognises the importance of recognising cultural and social services within the Impact Assessment for every possible SAC identified. In the case of Wight-Barfleur Reef, it was considered that the site had no known archaeological or heritage benefits as has been the case for other pSACs.

JNCC has amended the impact assessment to take into account of the telecommunications cables which cross the possible SAC.

Wight-Barfleur Reef has been selected for scientific reasons as outlined within the SAC Selection Assessment Document and as supported by the independent evidence review. When designating a site, no assumption is made about whether development is precluded, and all projects are considered on a case by case basis. Where it can be shown that the development will not have a significant on the features of the site, it will be permitted.

Other comments applicable to all sites

a) General comments

- Much of the fisheries data used in the IAs should be treated with caution as they are not comprehensive.
- Erroneous to think that there would be no displacement of fishing activity since the vessels cannot afford not to fish their quota.

JNCC response

JNCC are aware of the limitations associated with the fishing data used and these are set out explicitly within the IA. Information on landings is only available at the level of ICES statistical rectangle and JNCC have endeavoured to make this more accurate by proportioning the landings based on effort by gear type. If more detailed landings data were available, we would welcome its inclusion within the IA, but none have been provided through the consultation process.

Assumptions concerning displacement are unavoidable as the exact response of a fisher to a potential management regime is unknown. However, JNCC only assume that displacement could occur without loss of income when the suggested area of management is very small compared to the wider fishing grounds in the region for the same target species. JNCC agrees that insofar it is generally unlikely that there will be no displacement of activity.

Annex IV: Copy of the Evidence review of the three pSACs

Review of the evidence underpinning the scientific selection of marine Possible Special Areas of Conservation (pSACs).

Part I: JNCC Offshore sites; Wight-Barfleur Reef; Pisces Reef Complex; and Croker Carbonate Slabs.

Authors:

Dr Matthew Frost¹ & Dr Stephen Widdicombe²

¹*Deputy Director, Policy and Knowledge Exchange, Marine Biological Association of the UK, Citadel Hill, Plymouth, PL1 2PB*

²*Head of Science "Marine Life Support Systems" Plymouth Marine Laboratory, Prospect Place, Plymouth, Devon PL1 3DH*

These authors conducted this review independently from their organisations and as such their views stated in this review are those of the authors and not of either the Plymouth Marine Laboratory or the Marine Biological Association of the UK.

Introduction

Background

In July 2011 an independent review was undertaken of the evidence process for selecting four English marine Special Areas of Conservation (SACs). A key recommendation from this review was that *"Defra and Natural England should ensure that independent, expert review is built into processes which rely significantly on the gathering, synthesis and interpretation of evidence. Reviews should be transparent: the reviewers' comments and Natural England's response to them should be recorded and published"* (Bryce *et al.* 2011). This recommendation was accepted for the process of evidence gathering in support of the identification of SACs in English waters as part of the work required under the Habitats Directive.

Therefore, alongside the consultation on three possible SACs proposed by JNCC in the offshore area and one possible SAC proposed by Natural England in English inshore waters in 2011, the reviewers were asked to provide an independent assessment of evidence, specifically to:

"Explore the robustness of evidence and advice provided by Natural England and JNCC to inform decisions regarding the identification of four possible SACs in English waters, in light of the requirements of the Habitats Directive"

Terms of Reference

This report comprises the review of evidence for the three possible offshore SACs put forward by JNCC, namely Wight-Barfleur Reef, Pisces Reef Complex and Croker Carbonate Slabs. A separate report deals with the possible SAC proposed by Natural England, (Studland to Portland). As a comprehensive review of the processes used for the gathering of evidence in support of site designation in a wider context has already been undertaken by Bryce *et al.* (2011), the current review focused on consideration of the quantity and quality of the evidence gathered to support designation of each of the possible sites at a site level specifically. In doing so the review considered the following questions:

- Is the **quality, quantity and analysis** of biological and geomorphological data used to support each site recommendation scientifically robust?
- Does the **interpretation** of the resulting biological and geomorphological findings, and the resultant extent of Annex I features proposed to be included within the site boundaries, accord with the intent of the Habitats Directive?
- Are the **boundary judgements** made by JNCC reasonable given the available evidence and the JNCC boundary guidance (2008)?

An assessment is provided on the above questions for each site. As this is a site-specific assessment, issues relating to the selection of sites to contribute towards the Natura network, as outlined in Annex III of Article 4 of the Habitats Directive (Natural Range; Sufficiency; Proportionality) are not assessed here.

Review methodology

The assessment was undertaken in 3 steps:

- reviewing the Selection Assessment Documents (SADs) and other supporting documentation provided by JNCC
- face to face interviews with JNCC staff as part of a site visit so as to clarify issues and uncertainties that had arisen from the initial review of the SADs, in particular questions relating to the provided material and the analytical process (a list of staff interviewed in the face to face meeting can be found in Annex 1)
- as part of the site visit there was a systematic examination of underpinning data including GIS layers, species lists and images from both still and video camera surveys.

Assessment

Wight-Barfleur Reef pSAC (offshore) (Annex I reef)

- Quality, quantity and analysis of biological and geomorphological data:

The Wight-Barfleur Reef proposal was supported by a wide range of evidence including bathymetric data, multi-beam and side-scan data, video tows, grab samples and beam trawls. Much of the data came from a report (Coggan *et al.* 2009) of a major survey undertaken by Cefas to Map Annex I Reefs in the central English Channel in order to provide evidence to support the selection of SACs.

All the evidence and the Cefas report were provided to the reviewers in advance of the face to face meeting at JNCC in Peterborough.

The reviewers were shown the stills and video clips which were of exceptional quality for identifying habitats and the associated biota. The difficulty of identification of species from stills and video was raised by the reviewers and in response JNCC staff said a technique had been developed that had then been applied to the evidence on the Croker carbonate slabs.

The reviewers were shown all the evidence and were impressed by the quality and quantity. There are some extra data available from a survey of the English Channel undertaken in 2003 which repeats the Norman Holmes survey and this will be provided to JNCC. The amount of data relevant to the area is, however, very small so not expected to alter any of the conclusions.

- Interpretation of biological and geomorphological findings:

There was a question from reviewers on the non-significant presence of species. It was reported that Harbour Porpoise were rare in the area with sightings uncommon but the Charting Progress 2 State of Seas Assessment reported that Harbour Porpoise were previously present in higher abundances but had probably suffered due to the impact of fisheries by-catch. JNCC replied that the data on Harbour Porpoise did not indicate a significant presence of the species within the site, and therefore harbour porpoise are not identified as a qualifying feature for the site (which is selected for its Annex I reef). Historical data were not available at the resolution necessary to determine whether they had been a previous significant presence in this area.

- Boundary judgements

There was a question on the distribution of ground-truthing as it was noted that certain sections of reef (with specific sub-habitat definitions) had been identified on the basis of acoustic survey confirmed by numerous video tows whilst the large areas in the north and southwest of the site had also been identified using acoustic surveys but had only been confirmed by a single video tow in each area. On this basis the large area of reef to the North was included but a significant area to the southwest excluded. The reviewers feel that this is a correct decision based on the interpretation of the acoustic data (i.e. the balance of probability is that the correct boundary decisions have been undertaken) but suggest that further ground-truthing of acoustic surveys could be undertaken, especially in the Northern part of this site.

Pisces Reef Complex pSAC (offshore) (Annex I reef)

- Quality, quantity and analysis of biological and geomorphological data:

Once again the reviewers felt a large amount of good quality data underpinned the proposal for this site. Most of the evidence such as stills and video tows was of high quality. However, additional information supplied after the SAC Selection Assessment document had been prepared, in the form of a recent video tow supplied by AFBI was of very poor quality and deemed unsuitable for inclusion. This did not affect the fact that the currently available data was deemed sufficient as underpinning the proposal for this site selection.

- Interpretation of biological and geomorphological findings:

The reviewers agree that the evidence available has been interpreted correctly and that the site represents an area that can reasonably be described as an Annex 1 reef habitat.

- Boundary judgements

Overall, the reviewers felt that the boundaries were underpinned by good evidence and that JNCC had been very cautious in ensuring that Annex 1 habitat was being protected without including additional areas in between the reefs where *Nephrops* fisheries exist.

There was concern from the reviewers that there was some evidence of potential reef in Northern Irish waters adjacent to the proposed Pisces site boundary. Site selection should consider the inclusion of all areas of reef within a site on a scientific basis, rather than in relation to jurisdictional boundaries such as those between UK administrations.

Croker Carbonate Slabs pSAC (offshore) (Annex I Submarine structures made by leaking gases)

- Quality, quantity and analysis of biological and geomorphological data:

The Croker Carbonate Slabs proposal was supported by evidence including seismic surveys (measuring acoustic turbidity) and multi-beam echo-sounder, side-scan sonar, sub-bottom profiling, video tows, stills and grab samples. A more extensive survey had been commissioned by JNCC in 2008 to take more multi-beam, side-scan and stills along with Hamon Grab samples for ground-truthing.

The reviewers were shown all the evidence and were impressed by the quality and quantity.

- Interpretation of biological and geomorphological findings:

The reviewers asked about the Quality Assurance procedures for information derived from videos and stills and were told a pilot study had been successfully trialled by the NMBAQC. The reviewers suggest that statements as to quality assurance of data be more upfront. The SAD maybe not be the place to go into detail on quality assurance but a statement that all evidence (including stills and video) is subject to QA procedures would be appropriate for the document.

- Boundary judgements

A question was asked on the gaps in map coverage (page 6 - SAC site selection document) which stated that methane-derived authigenic carbonate (MDAC) was *expected to occur* in the gaps between the mapped corridors. JNCC felt that the current amount of MDAC was therefore an underestimate. JNCC had also excluded smaller areas of MDAC in the northerly and southerly ends so as not to incorporate large areas of non annex 1 habitat within the site boundary. It was noted by JNCC that there is no guidance as to a suitable ratio of annex 1 feature to site area. Overall the reviewers were satisfied that the boundaries were appropriately placed in order to encompass the vast majority of the qualifying habitat. The reviewers noted that the habitat itself only constituted approximately 8% of the entire site area but considered that due to the spatial complexity and fragmentation of the habitat it would not be possible to draw the boundaries so as to increase this percentage without compromising the integrity of the site as a whole.

Other

The reviewers were pleased that all the biological data collected by the grab samples had been provided to a data archive centre (DASSH) and made available through Marine Recorder. This provided full transparency as anyone who wishes to see this data can do so.

SAC Site Selection Document

P6 (Summary section) "... where extensive areas of the Annex I feature "submarine structures made by leaking gases" have been identified." Reword to just say "...where an approximate total area of over 800 ha of the Annex I feature "submarine structures made by leaking gases" has been identified."

P7: "The known occurrence of the Annex I habitat 'submarine structures made by leaking gases' is limited within UK waters". Reword to make clear whether it is the Annex 1 Habitat 'submarine structures' that is limited or the knowledge of its distribution (as implied on in section 9.1b).

P8: "It is anticipated that trawlers would avoid fishing on the feature". This statement was used to inform the exposure level but was not backed up by any evidence. The reviewers have asked JNCC to provide additional evidence to support this statement.

Conclusion

- For all three sites, the reviewers felt that JNCC had collected data of sufficient quantity and quality to demonstrate that the site contained a significant extent of Annex 1 habitat.
- The reviewers concluded that JNCC had used the evidence appropriately in setting reasonable site boundaries in each of the sites examined
- The reviewers were also impressed by the systematic way in which the large amount and variety of data had been achieved within the GIS system. All data requested by the reviewers were readily available and clearly presented. These systems should form the basis for the continued data storage, interpretation and visualisation in support of the long-term monitoring of these sites should they become designated as SACs.
- The approach to gathering, storing and interpreting evidence was highly transparent with biological data stored in data archive centres and freely available through Marine Recorder

Recommendations

The reviewers would like to offer a few recommendations which they feel would increase the clarity and usefulness of the Site Assessment Documents:

- All statements concerning evidence need to be backed up. It is not sufficient to simply state that “evidence suggests” without explaining what that evidence is and where it was obtained.
- There needs to be a clearer and more explicit explanation of the Quality Assurance procedures used, especially for video and stills where the QA procedure developed through the NMBAQC is relatively new. The detail does not need to be in the SAD but a strong statement concerning QA along with a link to the detail in backing documents should be made.
- The SAD authors need to check the site surface areas reported in the site selection documents as at times it was unclear whether the figures presented referred to the site area or the area of feature within the site. There appeared to be some inconsistency in the way this was represented. It was also not explicitly stated as to whether this area included the “buffer zone” to account for the warp of fishing gear.

References

Bryce *et al.* (2011) Independent review of the evidence process for selecting marine special areas of Conservation. July 2011. Report to Defra.

Coggan, R, Diesing, M and Vanstaen K. (2009). Mapping Annex I Reefs in the central English Channel: evidence to support the selection of candidate SACs. Scientific Series Technical Report, Cefas, Lowestoft, 145: 116pp.

Annex

JNCC Staff interviewed as part of review:

Charlotte Johnston, Daniel Bayley, Neil Golding, Therese Cope.