



Marine
Management
Organisation

Decision document:

South Dorset Marine Conservation Zone

April 2022



...ambitious for our seas and coasts

Contents

Executive summary	3
1. Introduction	3
2. South Dorset Marine Conservation Zone	3
3. Assessment of the effects of fishing in South Dorset MCZ	4
4. Call for evidence.....	6
5. Formal consultation	7
6. Decision and next steps	8
Annex 1: MMO responses to site specific consultation responses received through call for evidence – South Dorset MCZ.....	11
1. Site specific consultation responses	11
2. General call for evidence responses	16
Annex 2: MMO responses to site specific consultation responses received through formal consultation – South Dorset MCZ.....	20
1. Site specific consultation responses	20
2. General formal consultation responses.....	23
References.....	26

Executive summary

MMO has a duty under the Marine and Coastal Access Act 2009 to exercise relevant functions in a way which best furthers the conservation objectives for marine conservation zones (MCZs). This includes using the MMO's byelaw making powers to ensure that fishing does not hinder the conservation objectives of an MCZ.

MMO ran a call for evidence and formal consultation to seek views on a draft marine protected area (MPA) fisheries assessment and proposed management measures for South Dorset MCZ.

MMO received a number of responses to both public consultations and have considered and reviewed all submissions and updated assessments and associated documents accordingly.

This decision document details MMO's response to key themes raised by stakeholders through both public consultations.

MMO has considered the best available evidence, including that submitted through stakeholder consultations, to inform its decision on the management required for South Dorset MCZ. MMO has concluded that in order to comply with its duties outlined above we will make, and seek confirmation from the Secretary of State of, 'The South Dorset Marine Conservation Zone (Specified Area) Bottom Towed Fishing Gear Byelaw 2022' to prohibit bottom towed fishing gears from the site.

1. Introduction

Between 1 February and 28 March 2021, MMO ran a formal consultation to seek views on the draft assessments of the impacts of fishing activities in four marine protected areas (MPAs).

The four MPAs which are being assessed for the impact of fishing are:

- The Canyons Marine Conservation Zone (MCZ);
- Dogger Bank Special Area of Conservation (SAC);
- Inner Dowsing, Race Bank, North Ridge SAC;
- South Dorset MCZ.

Further details on the formal consultation are provided [here](#).

This document presents the conclusions from the call for evidence held between 28 October and 15 December 2020 and formal consultation held between 1 February and 28 March 2021, and the decision for the next steps for South Dorset MCZ.

2. South Dorset Marine Conservation Zone

South Dorset MCZ was formally designated on 12 December 2013¹. Moderate energy circalittoral rock was added as a protected feature on 29 January 2016². High

¹ Ministerial order 2013 No. 20. Available online at: www.legislation.gov.uk/ukmo/2013/20/pdfs/ukmo_20130020_en.pdf

² Ministerial order 2016 No. 29. Available online at: www.legislation.gov.uk/ukmo/2016/29/pdfs/ukmo_20160029_en.pdf

energy circalittoral rock was added as a protected feature on 31 May 2019³. The site has four designated features:

- Subtidal coarse sediment
- Subtidal chalk
- Moderate energy circalittoral rock
- High energy circalittoral rock

The conservation objectives set for the features of South Dorset MCZ are set out in the site's designation order as:

The habitats, so far as:

- *already in favourable condition, remain in such condition; and*
- *not already in favourable condition, be brought into such condition, and remain in such condition.*

Natural England and the Joint Nature Conservation Committee (JNCC) have stated that the general management approach for subtidal coarse sediment is to 'maintain in favourable condition' whilst the approach for the other site features is to 'recover to favourable condition'⁴.

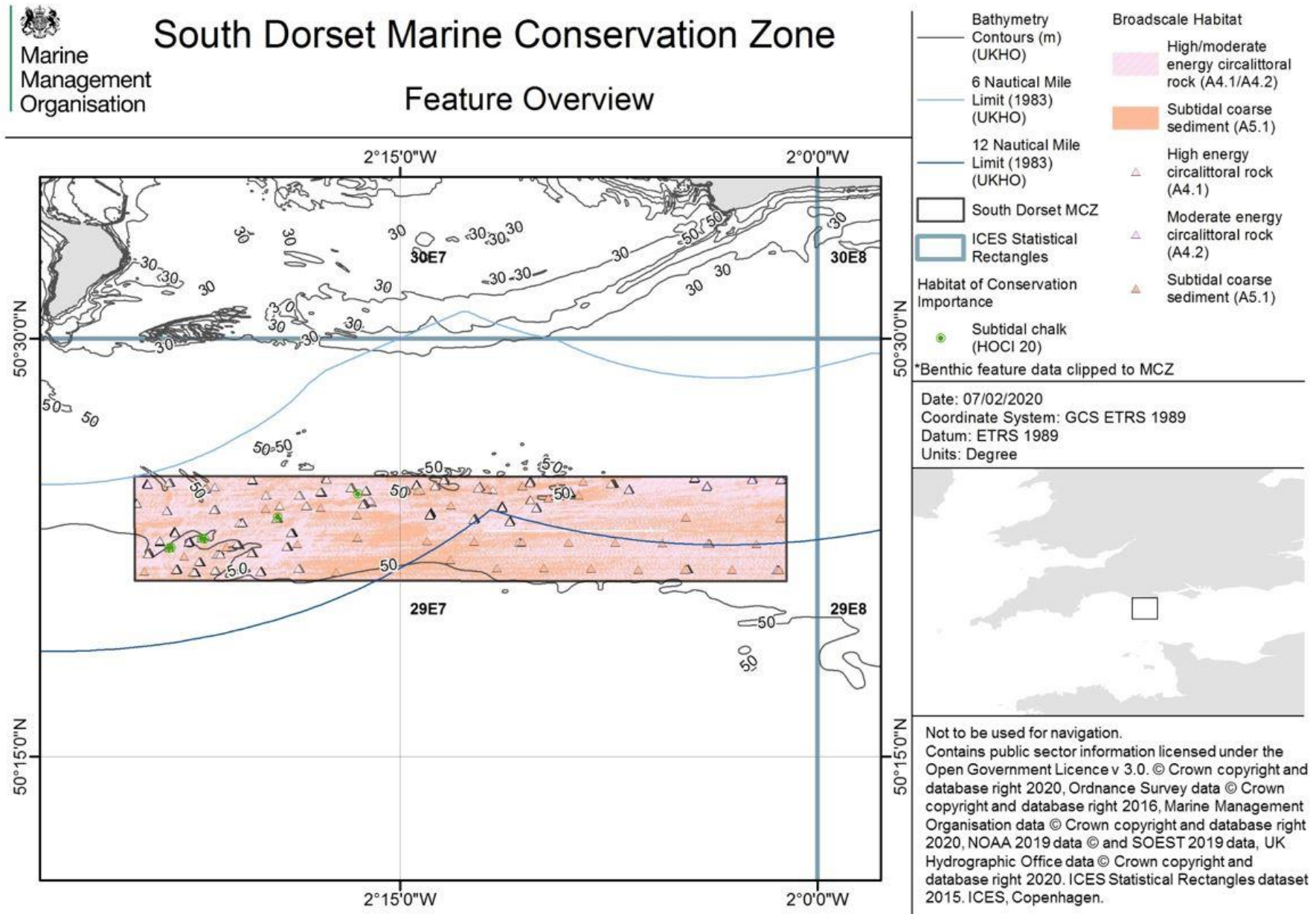
3. Assessment of the effects of fishing in South Dorset MCZ

The MMO assessment of fishing impacts at this site, taking into account advice from Natural England and JNCC, concluded that subtidal chalk, moderate energy circalittoral rock and high energy circalittoral rock are sensitive to the impacts of bottom towed fishing. For these features, we cannot rule out a significant risk that bottom towed fishing activities are hindering the site's conservation objectives. Therefore, the conservation objectives are unlikely to be achieved without management of bottom towed fishing. Coarse sediment is also sensitive to the impacts of bottom towed fishing but to a lesser degree. Figure 1 shows the designated features of South Dorset MCZ.

³ Ministerial order 2019 No. 37. Available online at: www.legislation.gov.uk/ukmo/2019/37/pdfs/ukmo_20190037_en.pdf

⁴ The South Dorset MCZ: factsheet. Available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/805629/mcz-south-dorset-2019.pdf

Figure 1 - Designated features of South Dorset MCZ



4. Call for evidence

4.1. Methodology for collecting responses

The call for evidence for South Dorset MCZ included an online survey which presented multiple management options for fishing activities.

Questions sought evidence and views from stakeholders on management options for each activity and asked for information about the location, condition and sensitivity of designated features, as well as the level or nature of fishing within the site.

Three management options were presented:

Option 1: No fisheries restrictions. Introduce a monitoring and control plan within the site.

Option 2: Reduce/limit pressures. Due to the potential impacts of bottom towed gear on the features of the site, management would be introduced to reduce the risk of the conservation objectives not being achieved. This may be through a zoned management approach and/or limiting the activity/intensity of these activity types.

Option 3: Remove/avoid pressures (whole site prohibition). The use of bottom towed fishing gears (including demersal and semi-pelagic trawls, demersal seines and dredges) will be prohibited in all areas of the site.

Stakeholders also had the option to answer the questions under consideration in the call for evidence letter via email. Several responses were received in this way and these have been summarised here alongside the online survey responses.

4.2. MMO conclusion following call for evidence

During call for evidence 25 responses were received related to South Dorset MCZ. These included responses from individuals, fishers, non-governmental organisations, industry groups and other government departments.

The subjects raised during the call for evidence fall within the following overarching categories:

- sensitivity of designated features;
- fishing activities;
- option analysis;
- archaeological impacts;
- referencing;
- potting impacts;
- novel monitoring, inshore fish communities;

- in-combination assessment;
- displacement of fishing activity;
- process timeliness and ambition;
- glossary of terms;
- statutory nature conservation body (SNCB) advice, management objectives; and
- Pr-values.

MMO would like to thank everyone who responded to the call for evidence. We have reviewed all responses and have used these responses to update our assessment. Please see Annex 1 for detailed MMO responses to site specific consultation responses received through the call for evidence.

Based on the updated assessment, MMO has concluded that option 3 (prohibition of bottom towed gear; demersal and semi-pelagic trawls, demersal seines and dredges, across the whole site) is the preferred option. MMO has developed a byelaw to prohibit bottom towed gear across the whole site.

5. Formal consultation

5.1 Methodology for collecting responses

The formal consultation consisted of a survey presenting the preferred management option rather than multiple options. The preferred management option, option 3, was to remove or avoid pressures through a whole site prohibition of bottom towed gears. Demersal and semi-pelagic trawls, demersal seines and dredges will be prohibited in all areas of the site. A depth-based buffer has been applied around the edge of the site in order to account for fishing gear warp length (i.e. the length of the lines, rope or wires that connect the gear on the seabed to the towing vessel) and to ensure that fishing activities taking place adjacent to the marine habitats do not negatively impact them.

Questions sought evidence and views from stakeholders on the proposed management option and asked for information about the location, condition and sensitivity of designated features as well as the level or nature of fishing within the site.

Stakeholders also had the option to answer the questions under consideration in the formal consultation letter via email. A number of responses were received in this way.

5.2 MMO conclusion following formal consultation

During the formal consultation, 42 responses were received in relation to South Dorset MCZ. These included responses from individuals, fishers, non-governmental organisations, industry groups and other government departments. Of these, the

majority were in support of management being introduced. Responses have been collated and summarised below.

No further information about the location, condition, or sensitivity of the designated features beyond that provided by respondents during the call for evidence was provided at the formal consultation.

In addition to the information provided by respondents during the call for evidence, respondents provided information regarding vessels that visited the MCZ in recent years, and the species and tonnage landed by these vessels. Respondents indicated that fixed gear, light monofilament drift netting, purse-seining and bottom and midwater trawls were some of the main gears in use within the MCZ.

The subjects raised during the formal consultation fall within the following overarching categories:

- management pros and cons;
- further restrictions;
- displacement of fishing activity;
- non-licensable activity management;
- process timeline and ambition;
- full network protection / highly protected marine areas;
- automatic identification system (AIS) data; and
- additional fishing activity management.

MMO would like to thank everyone who responded to the formal consultation. We have considered all responses and taken these into account in our management decision for this site. Please see Annex 2 for detailed MMO responses to site specific consultation responses received through formal consultation.

6. Decision and next steps

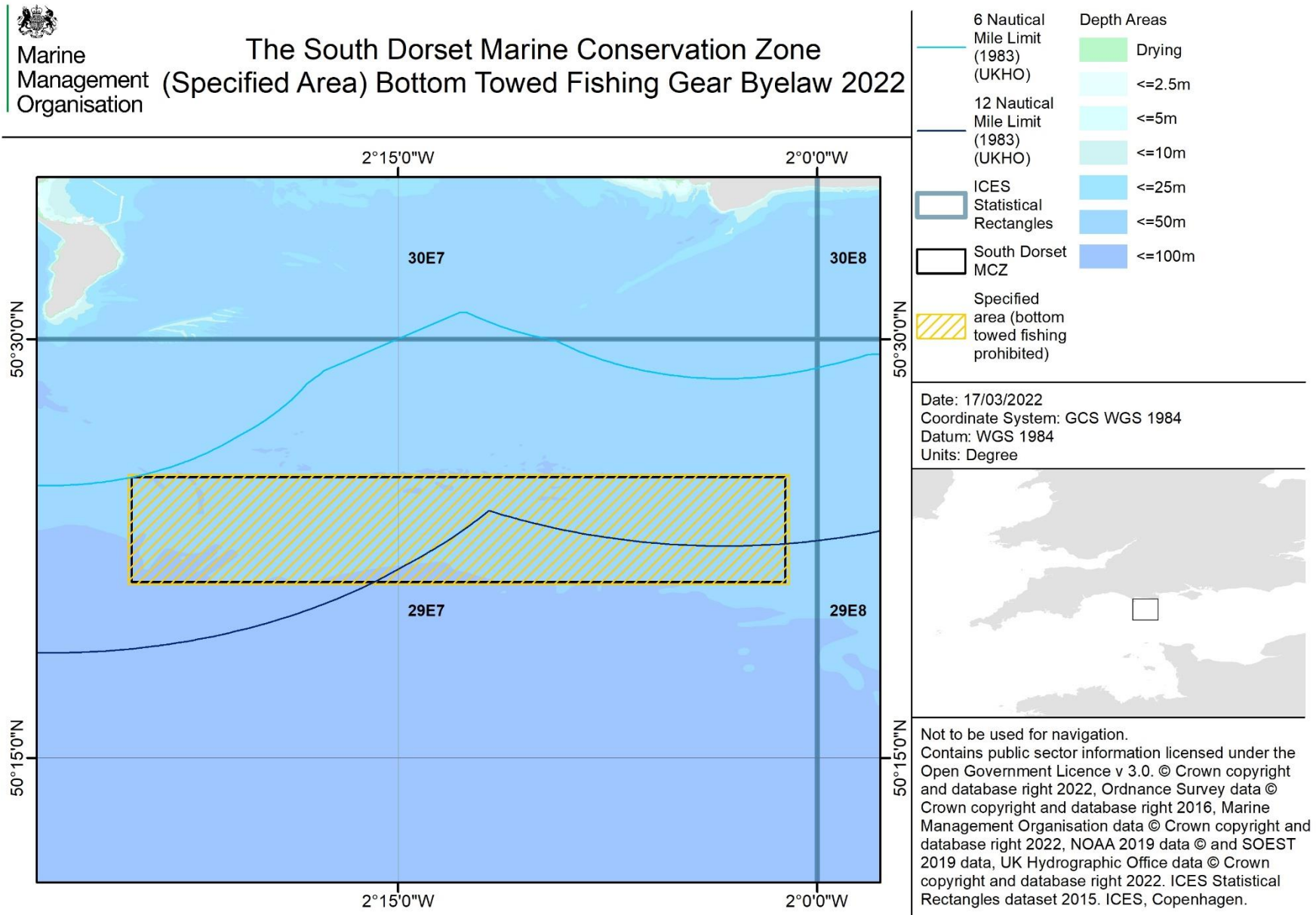
Having analysed all evidence and stakeholder views received during the call for evidence and formal consultation and updated the MMO assessment of the impacts of fishing in the South Dorset MCZ, **MMO has concluded that in order to further the conservation objectives of the site, bottom towed fishing will be prohibited across the whole site (option 3).**

MMO has conducted a comprehensive assessment of the impacts of commercial fishing within South Dorset MCZ and consulted widely upon a byelaw required to protect the features of the site. MMO has considered each of the points raised through consultation when making its decision and are satisfied that all points have been addressed. Figure 2 shows the final management area.

Having considered all of the above information and best available evidence, MMO have now made The South Dorset Marine Conservation Zone (Specified Area)

Bottom Towed Fishing Gear Byelaw 2022 and will seek confirmation of the byelaw from the Secretary of State.

Figure 2 - South Dorset MCZ management area



Annex 1: MMO responses to site specific consultation responses received through call for evidence – South Dorset MCZ

1. Site specific consultation responses

Responses have been collated and summarised below.

1.1. Respondents outlined information on the sensitivity of the designated features:

- Benthic habitats are sensitive to bottom towed gear which can adversely affect the integrity of sites and the species dependant on them. The features and sub-features of South Dorset MCZ are sensitive to such methods of fishing.
- There is a wide range of scientific literature and evidence showing the major impacts and degrading effects bottom trawling has on benthic habitats including reducing species diversity of infauna and epifauna communities and resulting in bycatch of non-target species. Some of these are referenced in the MMO assessment for this site and a literature review of the seabed impacts of bottom trawling was provided.

MMO response:

- These comments confirm the conclusion of the MMO MPA fisheries assessment. In addition, the following documents were reviewed, and additional evidence was included in the assessment where appropriate: 'Review of impacts of bottom trawling on the seabed, with focus on Marine Protected Areas and sensitive coastal habitats in European waters', The Natural England Commissioned Report, NECR330 (Natural England, 2020).

1.2. Respondents outlined several different fishing activities occurring in the area including:

- Fishing with rod and line for bass, bream, cod, pollack, brill and turbot. The season runs from the start of April to the end of January. This activity has been operational in the area for approximately 25 years.
- Static gear fishing, including pots primarily targeting crab and lobsters and, more recently, whelks. Approximately 1000 pots are worked by 2 fishing boats. The usual season is Spring, subject to French trawler activity. Shellfish potting activity has been operational in the area for approximately 30 years.
- Trawling occurs in the area using approximately 50 cm nets. Oceana analysis found only a very limited number of fishing hours recorded in 2019 using bottom towed gear in South Dorset MCZ. The Marine Conservation Society have also mapped all offshore >15 m vessel activity from 2015 to 2018 for fishing vessels using bottom towed gear (such as beam trawls, otter, Danish and Scottish seine,

scallop dredge) using the Global Fishing Watch data resource. They identified very low fishing effort at the site by UK large trawler vessels at only around 7 hours of effort overlapping with the site for the entirety of the 4-year period, with no member states with large trawlers or dredgers operating in the site. The Global Fishing Watch data only captures active fishing rather than steaming, transiting, by collating data on vessel speed and direction/change of direction.

MMO response:

- An estimate of the approximate number of pots hauled per day (500) was used to update our calculations within the Pr-value model.
- Global Fishing Watch data primarily uses automatic identification system (AIS) data, which can be turned off by vessels and is only mandatory on vessels larger than 15 metres in length. In the MMO MPA fisheries assessment vessel monitoring system (VMS) data is used which provides high level confidence for the activity of fishing vessels greater than 12 m in length. This suggests that higher levels of fishing using bottom towed gear occur within the site, particularly from non-UK vessels. For example, from 2014 to 2019 there were 52 VMS reports at fishing speed from UK vessels using bottom towed gear compared to 369 VMS reports from non-UK vessels.

1.3. The following summarises the impacts respondents stated for each of the options. These are either impacts to themselves or other impacts.

Option 1: No fisheries restrictions. Introduce a monitoring and control plan within the site.

- This option was considered by all respondents during the call for evidence to be not acceptable. Some respondents provided reasons as to why it was unacceptable such as option 1 leading to the destruction of the environment and option 1 being counter to the Marine and Coastal Access Act 2009, Marine Strategy Regulations 2010 and other national and international laws.
- Respondents stated that there will be no change in fishing activities, and this would be insufficient to have any positive impact on the site.

Option 2: Reduce/limit pressures. Due to the potential impacts of bottom towed gear on the features of the site, management would be introduced to reduce the risk of the conservation objectives not being achieved. This may be through a zoned management approach and/or limiting the activity/intensity of these activity types.

Some respondents to the call for evidence believed that this option was not sufficiently strong, providing reasons such as:

- Option 2 being counter to the Marine and Coastal Access Act 2009, Marine Strategy Regulations 2010 and other national and international laws.
- Full protection of seabed habitats is required to enable blue carbon and biodiversity targets to be met, although a modicum (with set limits) of static gear could be set at the site that would enable some benefits.

- Some respondents stated that this option is insufficient for the site's protection and a zoned approach would not meet biodiversity targets. There was also suggestion that placing strong limits on static gears could enable recovery of the site to meet conservation and climate objectives.
- Respondents thought this option is only likely to affect crab potters and foreign fishing vessels, with a reduction in bottom towed gear fishing positively impacting other fishing gear industries. However, there could be a displacement of fishing effort which could negatively affect habitats and species outside of the site.
- Alternatively, this option was considered by some respondents to the call for evidence to have a positive impact on other industries, with improved opportunities for recreational diving and a reduction in damage to static gear caused by bottom-towed gear vessels.

Option 3: Remove/avoid pressures (whole site prohibition). Demersal and semi-pelagic trawls, demersal seines and dredges will be prohibited in all areas of the site.

All respondents to the call for evidence apart from one agreed that this option would be beneficial to the site, with respondents providing the following reasons:

- Necessary to conserve the integrity of the whole site as required by the Marine and Coastal Access Act 2009, Marine Strategy Regulations 2010 and other national and international laws.
- Improved biodiversity which would lead to spill over. For example, in the Benyon Review (2019) research has shown “that the numbers of some species have increased by nearly 400% since this NTZ was established. It states that since protection has been in place, biodiversity has increased substantially, along with the size, age and density of species such as the king scallop and the European lobster”⁵.
- Improved opportunities for other industries, such as a reduction in damage on static gear due to bottom towed gear and less competition for fishing areas. This could also reduce fishing pressures on inshore grounds if static gear fishing could continue within the site.
- The Global Fishing Watch data (which is based on AIS records from fishing vessels greater than 15 metres in length) showed limited bottom towed fishing occurs within the site, suggesting that there would be limited financial impacts on the fishing industry. However, as the site is fished to a small degree, this may have a greater impact than if the site were regularly trawled or dredged. Therefore, a whole site prohibition is necessary to prevent the severe impact of infrequent use of bottom towed gear.

⁵ https://www.wildlifetrusts.org/sites/default/files/2020-06/Benyon%20Review%20on%20Highly%20Protected%20Marine%20Areas_Book.pdf

- Respondents stated that option 3 as well as option 2 could lead to positive impacts for other fishing gear industries, although there could also be a displacement of fishing effort. Some respondents thought this would be the most beneficial option for species within the site, although one respondent thought the option was overly prescriptive for the area.
- From data based on Luisetti *et al.*, (2019), the Marine Conservation Society estimated the carbon assets of the site. The model in Luisetti *et al.* (2019) estimates that there are approximately 205 megatonnes of stored organic carbon in shelf sediments. The Marine Conservation Society have assessed the modelled distribution of shelf sediment carbon at the site (EUNIS A5 sediment layer) as being 89% of the site. Extrapolating the data of carbon from the entire continental shelf to the 172 km square area of the site with (A5) sediments, suggests a potential stored carbon value of 71,532 tonnes. If bottom towed fishing activity continues to be permitted in the site, the potential cost of mitigating the loss of this stored carbon could be £3.18 million up until 2040. As fishing is at such low effort, a cost-benefit-analysis using these data would suggest that there is a greater benefit to society of a permanent closure of the area to bottom trawling rather than keeping the site open for such minimal returns.
- The Marine Conservation Society also outlined that there is multi-sectoral support for a 'whole site' management approach such as outlined in Solandt *et al.*, 2020 and Rees *et al.*, 2020. Two further scientific papers under review detail the benefits of protecting mosaic habitats, which provide benefits to benthic biodiversity and fish populations beyond discrete designated features. The papers' findings are from Southern England, principally around the Lyme Bay area, so it could be assumed that the positive biodiversity, biomass and density responses within the South Dorset site would be replicated by similar strict and comprehensive management measures.

MMO response:

- The MMO assessment concludes that there is not a significant risk of trap fishing (alone or in-combination with other activities), hindering the conservation objectives of the site, and therefore no management measures for static gear will be introduced at this time. However, MMO will review this assessment every five years or earlier if significant new information is received, such as updated conservation advice or advice on the condition of the feature or a significant change in activity levels. To coordinate the collection and analysis of information regarding activity levels, and to ensure that any required management is implemented in a timely manner, a monitoring and control plan will also be implemented for this site.
- The assessment indicates that bottom towed gears are adversely affecting the designated features. As such the potential impact of displacement to areas outside of South Dorset MCZ does not remove the requirement to ensure that fishing is managed to further the conservation objectives of South Dorset MCZ. Further, there appears to be relatively limited activity from both UK and non-UK vessels using bottom towed gears occurring across the site and therefore this impact may not be significant. Further, due to the dispersed distribution and

sensitivity of the designated features across the site options 1 and 2 are not viable to further the conservation objectives of the MCZ.

1.4. All respondents believed that 100% of the site should be subject to a prohibition of bottom towed gears.

Some respondents expanded on this, stating that bottom towed fishing is highly damaging to seabed habitats and benthic communities and is not compatible with the site's conservation objectives. Prohibiting these fishing gears across the entire site would protect the features from further damage and foster their recovery as soon as possible. This would also result in more benefits to the wider society such as an improvement in essential fish habitat, an increase in biodiversity, species richness and carbon capture and storage potential.

MMO response: It is concluded that option 3 (prohibition of bottom towed gear; demersal and semi-pelagic trawls, demersal seines and dredges, across the whole site) is the preferred option.

1.5. Other comments received via other means than survey responses included the following:

Respondent comment: One respondent noted that a reduction in the potential impacts of gears that directly impact the seabed could also cause an inadvertent reduction in the discovery of known or presently unknown archaeological materials. It is possible that the reporting of impacts or accidental recovery of new archaeological discoveries could diminish. For further detail about the interaction between the historic environment and commercial fishing activity please see Firth *et al.*, 2013.

MMO response: The MMO MPA fisheries assessment could not rule out a significant risk that bottom towed gears will hinder the conservation objectives for which the site is designated. As such the potential for an inadvertent reduction in archaeological discoveries does not remove the requirement to ensure that fishing is managed to further the conservation objectives of the MCZ.

Respondent comment: One respondent commented that in relation to the draft South Dorset MCZ fisheries assessment, with reference to the statement on p.37, section 4.2.1: "this can be especially damaging to soft substrates such as chalk reefs, with evidence of one pot scraping 200 mm of chalk relief from the reef surface (Spray and Watson, 2011)", that caution should be used with the following reference as no context to this claim is made and under what circumstances the damage occurred and is not derived from a scientific study. It is an anecdotal claim without peer review and therefore is therefore not clear what relevance it has to the assessment.

MMO response: Spray and Watson, 2011 is a report on marine surveys conducted by Seasearch East. On p.10 it includes a picture of a lobster pot on chalk relief with the caption 'This lost (unbuoyed) lobster pot off Sheringham has worn away 200 mm of chalk relief from the reef surface as it has been scrubbed back and forth by the tide.' Therefore, MMO consider this evidence to be relevant although unlikely to be representative of potting on chalk reef. Therefore MMO will include an amendment to the sentence to state that it is a 'lost' pot and an additional caveat 'although, this amount of damage is not likely to be representative for potting due to the limited amount of time pots remain on the seabed when fishing.'

Respondent comment: One respondent stated that potential levels of exposure given the operational nature of potting would provide further information on the potential for impacts to occur. Without the possibility for pots to be displaced in circumstances of high bed shear stress, our own calculations based on knowledge of fishing densities suggest that pots do not interact with the seabed more than one in 30 years⁶.

MMO response: MMO has estimated the spatial footprint of pots within the MCZ based on VMS data in section 4.1.6. This indicates that the total area impacted by potting fishing gear is very low, due to the relatively small footprint of pots on the seabed and the little fishing activity occurring within the site.

Respondent comment: One respondent stated that the Natural England Commissioned Report, NECR330 aimed to develop a novel DNA-based method for monitoring inshore fish communities using programmable in-Depth eDNA samplers (Natural England, 2020). During the course of undertaking this project, in-Depth eDNA samplers were placed in or near the South Dorset MCZ and over the course of the programmed sampling period collected eDNA data covering the South Dorset MCZ. In this area, up to 55 species of fishes, including sharks and rays were characterised.

MMO response: MMO notes this response.

Respondent comment: Natural England and JNCC jointly provided formal advice on 30/04/20 based on the conservation advice package for the site. Natural England support MMO's conclusions that there is a pathway for disturbance from bottom-towed gear, and the impacts alone are of significant risk to hinder the conservation objectives of the site, hence management will be required. Natural England agree with the conclusion that trap fishing alone is not of significant risk to hinder the conservation objectives of the site, however it is advised that this conclusion may need to be re-visited should fishing intensity changes in the future.

MMO response: MMO notes this response.

2. General call for evidence responses

MMO received consultation responses which apply to the general assessment process which do not relate to specific MPAs. Therefore, MMO has summarised these consultation responses in the section below together with MMO's response to the comments.

2.1 Assessment format

Respondent comment: It is not appropriate to discount fishing activities from the in-combination assessment where it is concluded the activities will have an adverse effect on the site alone. Due to the uncertainty around the management measures being put in place for fishing activities which are causing an adverse effect, the

⁶ <http://nffo.org.uk/uploads/attachment/92/potting-intensity-calculations.pdf>

respondent has no confidence that management will be effective and therefore suggest these activities must also be included in the in-combination assessment.

MMO response: The MMO MPA fisheries assessments aims to assess whether there are adverse effects on designated features from fishing pressures and suggest appropriate management measures to ensure the site's conservation objectives are met, in accordance with scientific advice provided by JNCC and NE⁷.

The assessment is completed in several parts: Part A provides a coarse sensitivity assessment to identify which fishing activities can be discounted from further assessment (Part B) as they are not taking place or are not a significant concern. Part B provides an in-depth analysis to assess the pressures of fishing activities relevant for the site. Part C considers the effects of activities in-combination with other relevant activities taking place. These can include:

- Fishing activity/pressure combinations which were excluded in Part A due to not having a significant effect on features alone but could have an in-combination affect.
- Fishing interactions assessed in Part B but not resulting in a significant risk to the site's conservation objectives or an adverse effect on site integrity.
- Plans or projects such as marine development works requiring a marine licence.

Where activities have been identified in Part B to result in an adverse effect/significant risk alone, their consideration during Part C depends on the mitigation identified as a result of impacts identified in Part B. Where an activity is identified in Part B as having an adverse effect/significant risk alone, and mitigation is introduced to reduce, but not entirely remove the impacts of this activity, the residual impact will be considered in Part C to ensure all in-combination impacts are captured.

Where mitigation will be introduced to entirely remove a pathway for a pressure from the activity to affect the feature, this pressure from this activity will not be considered in Part C. For example, where the identified mitigation is a prohibition of use of a certain fishing gear type within the site, all of the pressures from this activity would be removed from the site and it is not therefore considered during the in-combination assessment, the methodology is Annex 1 of each assessment.

Respondent comment: The fisheries assessments would benefit from a glossary of terms and consistent use of them throughout the documents, and that an

⁷ <https://jncc.gov.uk/our-work/marine-activities-and-pressures-evidence/>

overarching assessment methodological conceptualisation would help communicate how the assessments are undertaken.

MMO response: The MMO MPA assessments aim to use clear accessible language and provide explanation where required for use of non-standard terminology. MMO recognises it would be valuable to provide some supporting information to aid interpretation of the assessments for wider audiences and so have developed a glossary for the current and future assessments. Annex 1 of the MMO MPA assessment fully details the methodology and aims of the assessment as well as referencing the need for assessment in a manner consistent with section 126 of the Marine and Coastal Access Act, 2009. Evidence sources and SNCB advice packages are referenced in our assessments where appropriate.

2.2 Displacement of fishing effort

Respondent comment: Any spatial management measure to reduce fishing pressure must also consider the potential displacement effects, and the wider impacts this could have on the benthic communities and mobile species associated with them.

MMO response: MMO MPA assessments use the best available evidence to fully consider all impacts against the conservation objectives, as identified by scientific evidence. If the assessment concludes that use of certain fishing gear types are not compatible with the site's conservation objectives, management measures may be put in place which could cause displacement of this fishing to other areas. This potential impact of displacement to areas outside of the MPAs or management areas does not remove the requirement to ensure that fishing is managed to further the conservation objectives of the site. However, MMO has regard to displacement and monitor every MPA by undertaking annual reports of fishing activities and pressures within MPAs in our jurisdiction, and by regularly reviewing and updating the MPA assessments to reflect any such changes that have been observed. See section 8 of the MMO MPA fisheries assessment for further details on the MMO process on reviewing assessments.

2.3 Additional management required

Respondent comment: The outcome of this call for evidence and any subsequent consultations will not provide the proper protection needed for the most ecologically important parts of our seas. The process lacks ambition, both in the number of MPAs included and the management options proposed. It is also unnecessarily slow and cumbersome as a process for delivering the scale and extent of ambition required to protect our oceans.

The respondent highlighted that bottom trawling took place in 71 offshore MPAs in 2019 and advocated a ban on all destructive fishing gears starting with bottom trawlers and supertrawlers, across the entire MPA network. The respondent suggests these bans should be introduced from 1 January 2021, by removing licenses for supertrawlers and bottom trawlers to fish in MPAs, via powers in the Fisheries Act 2020.

MMO response: The purpose of the call for evidence was to gather additional evidence and stakeholder views on the draft MMO assessments and management options for fishing in four offshore MPAs: Dogger Bank SAC, Inner Dowsing, Race Bank and North Ridge SAC, South Dorset MCZ and The Canyons MCZ. MMO MPA fisheries assessments contain detailed assessments of the impacts of fishing in these sites and set out a range of management options. The outcomes of updated MMO assessments, taking into account evidence received and advice from NE and JNCC, were used to develop ambitious and proportionate draft management measures which were subject to public consultation.

2.4 SNCB advice

Respondent comment: More explicit reference to SNCB advice within Part B would provide greater transparency on how the assessment is drawing its conclusions. The management objectives for mobile species were also identified as lacking clarity and purpose.

MMO response: Mobile species are not a designated feature of any of the sites assessed within the call for evidence or formal consultation. NE and JNCC conservation advice packages may include species (including mobile species) as a component part of a feature and impacts on certain species may influence a target attribute for a site feature (feature target attributes are set out in NE or JNCC conservation advice packages). Where fishing impacts (for example the removal of target and non-target species) have the potential to impact a sites' conservation objectives, we have used the best available evidence to assess this, in accordance with the pressures activities database published by JNCC and NE⁸.

2.5 Data analysis

Respondent comment: The spatial footprint analysis (Pr-values) methodology uses vessel speeds of than 0 to 6 knots. The respondent suggested applying a rule of using vessel speeds of 1-6 knots instead.

⁸ <https://jncc.gov.uk/our-work/marine-activities-and-pressures-evidence/#jncc-pressures-activities-database>

MMO response: The Pr-values presented incorporate gear specific fishing speeds which are used to identify relevant vessel pings to be included within the values presented. Annex 2 in the MMO MPA assessments provides information regarding the speeds that have been included for each of the fishing gears included. It is acknowledged in the description, that there are strengths and limitations of fishing activity data provided in the assessments, and that this may overestimate, or in some cases, underestimate the true level of fishing activity.

Annex 2: MMO responses to site specific consultation responses received through formal consultation – South Dorset MCZ

1. Site specific consultation responses

1.1. The majority of respondents were in support of the proposed management option.

In addition to the points raised by respondents during the call for evidence, respondents highlighted the following:

- Respondents stated that the proposed management option would provide environmental benefits. Respondents stated that trawling has a damaging effect on the seabed and can result in lost or discarded fishing gear. It was noted that where specific gear types are assessed as incompatible with feature conservation then exclusion of those gears from the site appears warranted.
- Respondents were supportive of the management option due to the beneficial effect it would have on the recovery of benthic communities, the regeneration of slow-growing species the maintenance of habitat. It was also noted that the protection of the seabed from trawling will have beneficial effects on carbon sequestration. It was stated that bottom trawling releases huge amount of CO₂ stored in sediments globally, equivalent to the aviation sector, with Europe and notably the UK contributing significant high proportions.
- One respondent noted that other animals such as cetaceans are located within South Dorset MCZ, and seabirds rely upon feeding grounds within the MCZ to survive. Protection of the site is regarded as beneficial to these populations.
- Some respondents highlighted that other activities that take place within South Dorset MCZ may benefit from the introduction of a trawling prohibition. Respondents stated that activities such as kayaking and scuba diving may benefit from improved water quality, more abundant fauna and a reduction in discarded fishing gear.

- Respondents also stated that there may be an increase in catches for sea-anglers as a result of the proposed management option. A respondent stated that the number of holidays taken in the UK is likely to grow in the future, and that sea angling is an important industry in the area with regards to tourism, so increased fish stocks in the area will spill out and benefit everyone.

1.2. Some respondents called for further restrictions to be considered:

- Respondents stated that Marine Conservation Zones should be given 100% protection against trawling, dumping and aggregate extraction. Some respondents stated that all bottom fishing should be stopped in all marine protected areas due to the damage it causes to the marine environment, and two respondents stated that all commercial fishing should be restricted within the South Dorset MCZ.
- One respondent stated that the bottlenose dolphin population along this coast numbers only about 40 individuals and the white-beaked dolphin population in Lyme Bay is small and vulnerable too, at about 130 individuals. The respondent stated all cetaceans are strictly protected within UK waters, so all measures should be taken to guarantee that they will not end up as bycatch in gillnets that have replaced the bottom-towed gear in the MCZ.
- One respondent stated that Government must designate highly protected marine areas that allow full recovery of the marine environment and its ecological processes by prohibiting extractive, destructive and depositional uses and allow only non-damaging levels of other activities.

MMO response:

- See section 2 of Annex 1 for the MMO response regarding mobile species such as cetaceans and the MMO response on highly protected marine areas.
- MMO assessment concluded that there is not a significant risk of fishing gears other than bottom towed gear, either alone or in-combination with other activities, hindering the conservation objectives of the site, and therefore no management measures for gears other than bottom towed fishing gears will be introduced at this time. However, MMO will review this assessment every five years or earlier if significant new information is received, such as updated conservation advice or advice on the condition of the feature or a significant change in activity levels. Activities such as aggregate extraction require a marine licence, and during licence determination are subject to MCZ assessments to ensure that there is not a significant risk of them hindering the conservation objectives of the site.

1.3. Some respondents believed that the proposed management option is too restrictive:

- A respondent stated that the ground in South Dorset MCZ is already fished sustainably due to MMO and IFCA management measures, and that they are concerned that the proposed management option will eventually progress into a no-take zone. There will be more pressure put on fishermen from these areas

with added restrictions, which will inevitably put more fishermen out of work in already uncertain times.

MMO response:

- The MMO MPA fisheries assessment could not rule out a significant risk of bottom towed gears hindering the conservation objectives of the site, and therefore management measures are required to further the site's conservation objectives. MMO will review this assessment every five years or earlier if significant new information is received, such as updated conservation advice or advice on the condition of the feature or a significant change in activity levels.

1.4. Some respondents raised concerns about the effects of displacement of fishing activity from South Dorset MCZ.

Concerns about displacement were raised by both respondents who agreed with the proposed management option and by those who did not agree:

- One respondent stated that due to the location of the site in the English Channel, there is a high density of activity, it is difficult to report activity elsewhere. They also raised concerns about the cumulative effect on available fishing space of implementing trawling management measures across several sites in the North Sea, English Channel and the Celtic Sea.
- A respondent stated that unless managed, displaced fishing effort can impact on the marine environment, within and outside MPAs, including on the seabed and benthic communities, mobile species and commercial fish and shellfish stocks. The net effect will depend on the balance between improvements within MPAs, and increased levels of effort in the remaining areas. Any proposed spatial closures should also examine potential displacement effects and the wider impacts this could have on the benthic communities and mobile species associated with them.
- Prohibition of bottom towed fishing could result in displacement to other locations and that this may have a number of effects on the historic environment. For further detail about the interaction between the historic environment and commercial fishing activity please see Firth *et al.*, 2013⁹.

MMO response:

- See section 2 of Annex 1 related to MMO's response on displacement.

⁹ <https://research.historicengland.org.uk/Report.aspx?i=15757>

2. General formal consultation responses

MMO received consultation responses during formal consultation which do not relate to specific MPAs and concern fishing activity data or the general assessment process. Therefore, MMO has summarised these consultation responses in the below section together with MMO's response to the comments.

2.1 Respondent data: One respondent provided fishing activity data including landings figures for ICES rectangles which intersect the management areas.

MMO response – MMO have estimated impacts to UK and non UK fishing fleets in the regulatory triage assessment (RTA) provided for each site. The data submitted has been considered in the development of these assessments

2.2 Respondent comment: One respondent commented it was insensitive to impose management on fisheries activities when activities such as anchoring over sensitive areas is unmanaged.

MMO response – MMO is currently considering management options for the first site for marine non-licensable activities. MMO appreciate that activities such as anchoring of large vessels can damage sensitive habitats and is fully considering appropriate action regarding such activities within MPAs.

2.3 Respondent comment: One respondent commented that the timing of the formal consultation on proposed management could be giving weight to recent unlicensed boulder deposits within MPAs.

MMO response – The unlicensed boulder deposits in MPAs occurred between the call for evidence and formal consultation periods, the proposed management of the four sites assessed is coincidental to this occurrence.

2.4 Respondent comment: Some respondents commented that proposing management following EU exit and COVID-19 was unfair when impacts of both on the fishing industry are not yet fully understood.

MMO response – MMO must consider appropriate management in MPAs to achieve conservation goals in accordance with its legal obligations in relation to MCZs and European marine sites (EMS) under the Conservation of Habitats Regulations 2017, Conservation of Offshore Marine Habitats and Species Regulations 2017 and Marine and Coastal Access Act 2009. The RTA provided for each site fully explore the impacts of management within these sites on the UK fishing industry.

2.5 Respondent comment: Some respondents commented that the scope of proposed management is insufficient and the speed of MPA management processes is too slow for the Government to reach its conservation goals.

MMO response – MMO has followed the process as detailed in section 8 of each assessment to fully consider appropriate management in accordance with the site's conservation objectives. Whilst MMO has followed this process for these sites, MMO will continue to review procedures and processes in order to aim to reach its conservation goals.

2.6 Respondent comment: Some respondents commented that in proposing management in the English offshore waters for four MPAs, MMO has acted against the principles of the Trade and Cooperation Agreement following EU exit. The respondent also commented the development of any proposed management should be done so in consultation with EU member states with mutual interest within the site.

MMO response – MMO has followed article FISH.4(3) of the UK-EU Trade and Cooperation Agreement and has notified the EU of new measures that are likely to affect the vessels from the EU. By running the call for evidence and formal consultation periods as detailed above we have allowed additional opportunities for EU bodies and stakeholders to provide comments or seek clarification.

2.7 Respondent comment: One respondent commented that ‘supertrawlers’ should be banned from all MPAs.

MMO response – MMO has presented management options in relation to four MPAs, which show considerations of gear feature interactions in accordance with the conservation objectives of the sites. Pelagic gear has minimal impact on the benthos. MMO will continue to assess activities within MPAs under MMO’s remit on this basis and consider appropriate management in due course.

2.8 Respondent comment: One respondent commented on the importance of a well-established network of MPAs in its importance to protection and recovery of marine ecosystems, as detailed in the Benyon Review for the introduction of highly protected marine areas.

MMO response – MMO acknowledge the importance of a well-protected network of MPAs and welcomes further information on the introduction of highly protected marine areas and the benefits these may bring to the delivery of government’s ambitions.

2.9 Respondent comment: One respondent commented to give support to proposed management whilst providing additional information in the form of AIS data for each of the sites.

MMO response – MMO welcome the additional evidence provided, however we have used VMS as the principal source of data for vessel activity within each of the sites. This is because not all fishing vessels currently use AIS, therefore it does not provide full insight to the activity levels occurring to assess interactions with site features.

2.10 Respondent comment: One respondent commented to say it was regrettable that MMO had chosen to implement management without consideration of technological advancements. The respondent suggested areas of the sites should remain open to allow for use of modified gear to monitor impacts on protected habitats.

MMO response – MMO has concluded that bottom towed gears are required to be managed within the four sites, this is based on the evidence currently provided, in accordance with the conservation objectives of the sites. MMO will review its

assessments for the sites as detailed in section 8 of the assessments provided, at such points we will fully consider impacts from gears at that time including technological advancement when considering appropriate measures for the sites at that time.

2.11 Respondent comment: One respondent commented that although they supported the proposed management, they felt that the use of gill nets should also be managed due to the impacts of bycatch on cetaceans.

MMO response – MMO has fully considered the fishing activities taking place in accordance with the conservation objectives of the site. Although bycatch of such species remains a concern, cetaceans are not a feature of the sites assessed and therefore management of gillnets due to bycatch has not been considered further as it is deemed to be compatible with the site's conservation objectives. Where cetaceans are not a feature of an MPA, consideration of bycatch of fishing activities will be considered separately to MPA management.

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