

Response ID ANON-EF9T-VY9A-1

Submitted to **Formal consultation of MMO Margate and Long Sands European Marine Site (Specified Areas) Bottom Towed Fishing Gear Byelaw 2016**
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Introduction

1 What is your name?

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3 What is your organisation?

Organisation:

ClientEarth and the Marine Conservation Society

Margate and Long Sands MPA fisheries assessment - Part A of assessment

4 Do you agree with the conclusions of part A of the assessment (i.e. the gear/feature interactions taken through to part B)?

No

5 If you do not agree with part A, which aspect of the assessment you do not agree with: description of activities; description of designated features (eg location, extent or sensitivity); description of the impact of relevant activities on the conservation objectives of the site.

Please provide a brief explanation. :

1. Description of activities

The assessment process seems to accurately identify those activities that are taking place within the site. We note that certain activities have been excluded from further assessment as they do not take place and "are not likely to take place in the future" (Section 3.1, pp.8-9, Margate and Longsands MMO MPA Assessment, Final v0.6, 12/10/2016 ('MPA Assessment')). We would question the basis on which these activities have been excluded. Table 6 (pp.8-9, MPA Assessment), which records those activities that will not be assessed further and why, states as the 'justification' for this decision simply that "Activity does not occur at the site". This is not a justification for why activities are considered not likely to take place in future. In our view, this begs the question whether this question has been adequately considered and thus whether the assessment and consequently the proposal provide adequate future-proofing, in view of the risk that these activities might in fact take place in future.

2. Description of the impact of relevant activities on the conservation objectives of the site

The assessment process seems to accurately identify those gear-feature interactions that are, alone, most likely to have an influence on site integrity. In relation to in-combination effects on the other hand, while it is clear that these were considered as part of the Part B 'appropriate assessment' stage (see for example Table 4, p.7, MPA Assessment), we can see no evidence that such effects have been considered as part of the Part A 'screening for likely significant effects' stage. Article 6(3) of the Habitats Directive ('HD') requires the likely significant effects of plans and projects on a European site to be considered "either individually or in combination with other plans or projects". We know that assessments carried out under Article 6(2) must achieve the same level of protection as those carried out under Article 6(3). This is because jurisprudence of the Court of Justice of the European Union has found that Articles 6(2) and 6(3) "are designed to ensure the same level of protection" (Case C-258/11, Judgment of the Court (Third Chamber) of 11 April 2013, Peter Sweetman and Others v An Bord Pleanála [2013] ECR-000 (paras 32-33)), with Article 6(2) setting out 'the general obligation' of protection under Article 6, and Article 6(3) addressing the specific circumstances of a plan or project. Therefore, in-combination effects do need to be considered – at both the Part A and Part B stages. Draft guidance issued by Defra corroborates this approach, stating that a test for likely significant effects should "identify the potential effects of the plan or project on the site, alone or in combination with other plans or projects" (p.34, 'The Habitats and Wild Birds Directives in England and its seas: Core guidance for developers, regulators & land/marine managers', Defra, December 2012).

The MMO should take action to remedy this omission of in-combination effects and document its findings.

Margate and Long Sands MPA fisheries assessment - Part B of assessment

6 Do you agree with the conclusions of part B of the assessment?

No

7 If you do not agree with part B, which aspect of the assessment you do not agree with: description of activities; description of designated features (eg location, extent or sensitivity); description of the impact of relevant activities on the conservation objectives of the site.

Please provide a brief explanation. :

1. Description of activities

We have some concerns about knowledge gaps regarding fishing effort within the site. Specifically, we are concerned that the MMO does not have definitive knowledge about the location and number of vessels using bottom-towed gears operating in the site. VMS is recognised as the most accurate source of knowledge in this regard – however, this does not record use of the site by vessels less than 12m in length. Other knowledge sources are not as reliable as VMS, as recognised by the MMO's own confidence scoring in the MPA Assessment.

We also disagree with the confidence scoring ('high') for landings data in relation to vessels less than 12m in length. This is because we cannot understand the basis for the assumption that "Landings from all vessels were spatially attributed based on the patterns of fishing observed in vessels of 15m length or over. Therefore, it was assumed that under 15m vessels show the same patterns of fishing as those 15m and over".

Therefore, fishing effort has not been mapped at the scale of resolution or accuracy that is required to effectively manage fishing in individual parts of the site. Until such time as VMS is installed on every towed gear fishing vessel, the understanding of gear-feature interactions in the context of fishing intensity and recoverability over time will remain unclear and open to conjecture.

Where such knowledge gaps exist, there should be full closure to bottom-towed gears throughout the SCI, as only this will ensure that vulnerable habitats in the site are protected. Under the Habitats Directive, speculation about the impacts of an unknown level of fishing effort and its impact on biodiversity should prompt precautionary management to ensure site integrity. At the very least, if towed gears (of any kind) are allowed into the site, they should be required to use VMS (under byelaw), showing their positions and activity, such that a measure of their impact on seabed habitats and biodiversity can then be recorded.

In addition, the information about fishing effort that we do have is not presented in a way that facilitates analysis of its impacts on the site and its features. This is because the MPA Assessment does not provide a clear picture of overall fishing effort across the SCI and its component biotopes. A variety of separate maps showing fishing effort across the site from different gear types, data sources and countries have been provided at Annexes 2-5b of the MPA Assessment, but there is no overall map showing total actual or estimated current fishing effort.

Finally, according to Table 16 (p.24 MPA Assessment), most of the activity from otter trawls in the site is from "low impact gear components (ground rope)". We disagree with the assumption that ground ropes are low impact gear components. In fact, it has been established that ground ropes also have contact with the seabed (to varying degrees) and can have similar (negative) impacts to bridles (Grieves et al 2014).

2. Impact of relevant activities on the conservation objectives of the site

a. Favourable conservation status

As you will know, Article 2(2) HD says that management of European Marine Sites ('EMSs') must ensure that 'favourable conservation status' is achieved, or recovered, for a site's designated or classified features. There is often an (incorrect) assumption that EMSs were at 'favourable conservation status' when designated, with the legal obligation on Member States being to 'avoid deterioration'. However, this is not correct. As outlined above, the legal obligation is plainly to maintain or, where necessary, restore the site to favourable conservation status.

We acknowledge that setting the baseline conditions to which we wish habitats to recover is difficult, not least because society is largely unaware of the historical richness of the seabed environment. However, in this specific case there is strong evidence from historic literature (sometimes non-scientific basis) that the southern North Sea was able to host biogenic reef communities (Robinson Frid, 2000). Therefore, effective management measures should allow for the natural recolonisation and recovery of habitats as well as maintaining what is there now.

Furthermore, the European Court has confirmed that the scope of 'favourable conservation status' includes "lasting preservation of the constitutive characteristics of the site concerned that are connected to the presence of a [habitat] whose presence was the objective justifying the designation of the site" (Case C-258/11 Sweetman, para. 39). The definition of 'favourable conservation status' therefore includes consideration of factors beyond the state of the designated or classified feature itself, and specifically extends to supporting habitat and species.

When considering the management of the overarching sandbank feature, and its constituent sub-features and biotopes, the MMO must therefore consider both maintaining the physical habitats, but equally importantly, the biodiversity that is typical of those habitats. However, Table 10 (p.15, MPA Assessment) reveals that the indicator 'presence and abundance of typical species' has not been identified as an 'important favourable condition target for identified pressures' because "Key species not identified therefore cannot be assessed". As a result, it appears that the impacts of the pressures identified during the Part A assessment process on typical species, are not considered during the Part B assessment process. Given the foregoing, this approach is clearly inconsistent with the requirements of Article 6 HD.

The failure to consider the impact of fishing activities on the site's typical species is a fundamental problem.

b. Article 6 of the HD and the precautionary principle

Background

Our position is that fishing in an EMS is a plan or project within the meaning of Article 6(3) of the Habitats Directive (see Case C-127/02 Waddenzee). Whether or not it is agreed that fishing is a "plan or project" for the purposes of Article 6, it is clear that fishing with bottom towed gear can only be undertaken in the site if there is certainty that it will not have an adverse effect on the integrity of the site. This is because, as already referred to in our response to question 2 above, Articles 6(2) and 6(3) are designed to ensure the same level of protection (Case C-258/11, Sweetman, paras 32-33) and therefore the purpose and scope of the assessment must be the same, whether undertaken in respect of Article 6(2) or 6(3).

Therefore, fishing with demersal gear in a EMS can only take place if it is certain the activity will not have an adverse effect on the integrity of the site concerned. In order for site integrity not to be adversely affected, the site must be preserved at 'favourable conservation status' (see above for information on the meaning of this).

Authorities must adhere to the precautionary principle when making decisions. Therefore, 'certainty' in this context means situations "where no reasonable scientific doubt remains as to the absence of such [adverse] effects" (our emphasis) (Case C-127/02 Waddenzee - answer to question 4 put to the Court).

This means that an authority cannot decide not to ban a particular activity within an EMS if there is insufficient evidence forthcoming from its assessment to

exclude the possibility of harm to site integrity arising out of that measure or activity.

The European Court has confirmed that in the case of permanent damage a small loss may still amount to a loss of site integrity (Case C-258/11 Sweetman).

Implications for proposed site closures

The zonal site closures proposed within the 6-12nm area by this bye-law are restricted to the habitat types SS.SBR.PoR (Polychaete worm reefs *Sabellaria spinulosa* and *Polydora* spp on stable circalittoral mixed sediment) and SS.SSa.CMuSa.AalbNuc (*Abra alba*, *Nucula nitida* and *Corbula gibba* in circalittoral muddy sand or slightly mixed sediment).

We welcome the closure of the biotopes SS.SBR.PoR and SS.SSa.CMuSa.AalbNuc to bottom contacting gear types. Further, we recognise that mobile sands support less diverse fauna and flora and that some biotopes are more vulnerable to pressures from fishing activities than others. However, the habitat types SS.SSa.CFiSa (Circalittoral fine sand) and SS.IGS.FaS.FabMag (*Fabulina fabula* and *Magelona mirabilis* with venerid bivalves in infralittoral compacted fine sand) support a diversity of flora and fauna in relatively stable conditions (including troughs and slopes found within the SS.IGS.FaS.FabMag biotope), some of which are likely to be vulnerable to pressures from bottom-towed gear types. Both of these biotopes are currently impacted by bottom-towed gears, (e.g. otter trawls over 15m – see Table 16, p.24, MPA Assessment), but have not been protected by the proposed bye-law.

The decision not to close these biotopes to bottom-towed gears is also inconsistent with Natural England's advice in relation to proposed closures in the 0-6nm area of the site. In that area, the advice is that parts of the SS.IGS.FaS.FabMag biotope should be closed to fishing with bottom-towed gears. It is difficult to understand the logic behind the decision to close this biotope in one area of the site, but not in another.

Natural England has said that this advice was provided on the basis of the presence or absence of sand mason at certain survey points in the site. However, this information is not by itself an accurate indicator of habitat sensitivity, because: (i) the survey information is not sufficiently accurate to obtain a full picture of the presence/absence of sand mason in the site – a broad-scale survey of the site's entire seabed would need to have been undertaken to obtain this information; and (ii) broader considerations including the presence/absence of other typical species that are sensitive to fishing with bottom-towed gears should also have been taken into account, as explained below.

Further, Natural England has said that the presence of sand mason is an indicator that the reef-forming ross worm *Sabellaria spinulosa*, which is sensitive to fishing with bottom-towed gears, is likely to be present in (or could recolonise) those parts of the site. However, the MPA Assessment suggests that crusts of *Sabellaria spinulosa* are already found widely throughout the site: "There is a significant amount of the reef-forming ross worm (*Sabellaria spinulosa*) at this site, which when formed as a reef qualifies as an Annex I habitat (biogenic reef)" (p. 3, MPA Assessment). This suggests that the entire site should be protected from potentially damaging fishing activities, as at present there is no certainty about exactly where these crusts (which are a typical species of the site and should therefore be protected), are present.

Biotope SS.SSa.CFiSa (Circalittoral fine sand)

According to Table 28 of the MPA Assessment (p. 64), the biotope "Circalittoral fine sand" ('SS.SSa.CFiSa') is characterised by "Clean fine sands with less than 5% silt/clay in deeper water, either on the open coast or in tide-swept channels of marine inlets in depths of over 15-20m. The habitat may also extend offshore and is characterised by a wide range of echinoderms (in some areas including the pea urchin *Echinocyamus pusillus*), polychaetes and bivalves. This habitat is generally more stable than shallower, infralittoral sands and consequently supports a more diverse community."

Table 16 of the MPA Assessment (p.24) confirms that 12% of this biotope (7.1km²) is currently impacted by otter trawls over 15m, with 1% of the biotope being impacted by high-impact trawl doors.

Generally speaking, circalittoral and offshore medium to fine sand is characterised by the pea urchin *Echinocyamus pusillus*, the polychaete *Ophelia borealis* and the bivalve *Abra prismatica*. It may also support other typical species, such as the polychaetes *Spiophanes bombyx*, *Pholoe* sp., *Exogone* spp., *Sphaerosyllis bulbosa*, *Goniada maculata*, *Chaetozone setosa*, *Owenia fusiformis*, *Glycera lapidum*, *Lumbrineris latreilli* and *Aricidea cerrutii* and the bivalves *Thracia phaseolina* and *Moerella pygmaea* and to a lesser extent *Spisula elliptica* and *Timoclea ovata*.

The species that are present in the biotope can be broadly characterised as either opportunist species that rapidly colonise disturbed habitats and increase in abundance, or species that are larger and longer-lived and that may be more abundant in an established, mature assemblage. Species with opportunistic life strategies (such as the polychaetes *Spiophanes bombyx* and *Chaetozone setose*) are likely to recolonise disturbed areas first, although the actual pattern will depend on recovery of the habitat, season of occurrence and other factors (Gilkinson et al., 2005; Boyd et al., 2005). The recovery of bivalves that recruit episodically and the establishment of a representative age-structured population for other larger, longer lived organisms may require longer than two years (Foden et al., 2010; Blyth et al., 2004). Indeed, studies have shown that damage caused by bottom towed gears (beam and otter trawls) in Southern North Sea waters can have significant early effects on mortality of benthic invertebrates and particularly some bivalve species (Bergman et al., 2000). Benthic productivity (and therefore the ecosystem function) is also negatively impacted by benthic trawling, even in less sensitive habitats (Hiddink et al., 2007).

The polychaetes in this biotope are therefore likely to recover more rapidly than the characterising bivalves and the biotope classification may revert, during recovery, to a polychaete-dominated biotope. However, although they are able to recolonise areas quickly, biomass recovery of longer-lived polychaetes such as *Glycera* spp. is predicted to take several years (MES, 2010).

The information provided in the MPA Assessment about the typical species present in this biotope has been left vague – presumably because this information is not known. This makes it difficult to comment on the soundness of the decision not to close this biotope to bottom-towed gears and goes only to strengthen the argument that there are doubts as to the absence of adverse effects from these gear types on the biotope. However, the precautionary principle means that, where there is any such doubt, these areas should be closed to potentially damaging activities.

Even in the event that the biotope is characterised by more opportunistic species such as the polychaetes, this may simply be an indicator that the biotope has already been disturbed, and must now be left to recover, in order to achieve 'favourable conservation status'. Indeed, studies from areas that have been historically not subject to trawling effects in sandy sediments have revealed a relative abundance of epibenthic organisms (e.g. Small Isles in Scotland (see <http://www.snh.gov.uk/docs/A978513.pdf>), Lyme Bay and Start Point in South Devon) (e.g. Rees et al, 2013; Sheehan et al., 2013; Blyth et al., 2004).

Irrespective of the species currently present in the biotope, the current state of knowledge (i.e. lack of certainty about absence of adverse effects) means that the only legally compliant option would be to close this biotope to bottom-towed fishing.

SS.IGS.FaS.FabMag (Fabulina fabula and Magelona mirabilis with venerid bivalves in infralittoral compacted fine sand)

Table 16 of the MPA Assessment (p.24) confirms that 22% of this biotope (17.7km²) is currently impacted by otter trawls over 15m, with 2% of the biotope being impacted by high-impact trawl doors.

The characterising species of this biotope are fragile, for instance, Fabulina fabula with a 'thin, brittle shell' and Magelona mirabilis with 'long, delicate palps'. It is likely that Fabulina fabula and Magelona mirabilis are absent from more dynamic areas with high sediment transport, where they are replaced by more robust species, such as Spisula elliptica and Nephtys cirrosa. The biotope is likely to contain elements of both relatively stable sands, characterised by climax species such as Fabulina fabula and Nephtys hombergii, and more dynamic sands, characterized by Spisula elliptica and Nephtys cirrosa.

As with the biotope SS.SSa.CFiSa, the more mobile, opportunistic species are better adapted for disturbance, while the less mobile, longer-lived species find it more difficult to recover when there has been disturbance. As acknowledged in the MPA Assessment, the biotope "may be sensitive to dredging when it is occurring on the more stable gravelly and muddy sand communities which will be more associated with the troughs" (Table 28, p. 64).

The fragile, brittle nature of the typical species commonly associated with this biotope coupled with the likelihood that longer-lived typical species in the troughs/on slopes are less likely to be able to recover from disturbance, suggests that potentially damaging fishing activities should not be permitted where the troughs/slopes in this biotope occur. However, the MPA Assessment provides no information about where troughs/slopes in this biotope occur, or are likely to occur. This indicates that this information is not available and therefore did not form part of the MPA Assessment. A systematic survey of all potential Vulnerable Marine Ecosystem ('VME') species associated with this biotope would need to be undertaken across the entirety of the biotope in order to obtain this information and thus have the certainty about this element of the assessment of the impact on site integrity.

Furthermore, levels of abrasion associated with beam and otter trawling can lead to more upright forms of epibenthic species, such as the fragile species associated with this biotope, being reduced in diversity and abundance. Areas of Lyme Bay, Start Point and the Irish Sea (Bradshaw et al., 2003; Hinz et al., 2009) and the Small Isles in Scotland show assemblages of upright seabed species that could recruit into these areas but cannot do so when subjected to bottom towed fishing gears. It has to be proven beyond reasonable scientific doubt that such assemblages of epibenthic species would not be damaged (and thus prevented from recruiting) by trawling before such activities can be permitted. Furthermore, the typical species associated with feeding in and around such seabed species, such as fish, seals and seabirds (in some cases) that use the site, must also attain favourable conservation status. This is not possible if this habitat is not protected from bottom towed fishing, due to the changes in the ecosystem that such activities cause.

Given the potential for long-term, possibly permanent, adverse impacts on typical species associated with this biotope, even a "low" level of disturbance or a small loss may be sufficient to constitute an adverse effect on site integrity. Where there is a lack of certainty about absence of adverse effects such as this, the potentially damaging activity should not be permitted. Given the current state of knowledge, the only legally compliant option would be to close this biotope to bottom-towed fishing.

3. Conclusion

There is no scientific certainty about the vulnerability of the species and habitat types in this specific site to inform appropriate management measures, because there is no control area to show what the ecosystem can and should be in the absence of all fishing and/or fishing with certain gears. Such controls would need to be in place for at least 20 years in order to allow the community to change based on the stochastic nature of recruitment and ecological succession.

Further, Natural England's Conservation Advice for the SCI states that the impact of biological disturbance from trawling on sandbanks is 'moderate'. This is a very vague assessment, but in itself is a strong indicator that closure of the entire site to these gears is appropriate.

The current lack of clear information about fishing effort, vulnerability of species and therefore impacts on the SCI, coupled with difficulties with monitoring and enforcement, suggest that full site closure is the only legally compliant option. At the very least however, the proposed areas to be closed to bottom-towed gears should be extended to include the vulnerable biotopes SS.SSa.CFiSa and SS.IGS.FaS.FabMag. In addition, if towed gears (of any kind) are allowed into the site, they should be required to use VMS (under the byelaw).

MMO Margate and Long Sands MPA byelaw and impact assessment

8 Do you have further information on additional costs to the industry which are not covered in the impact assessment (IA)?

• If yes, please provide details of these :

9 If restricted from using this area, are there alternative areas or methods you would use?

If yes, please provide details of these:

10 Can you suggest any other measures that would support the features within the site?

Please provide a brief explanation. :

See our answer to question 7 above.

11 What changes do you foresee in the sites biodiversity and/or fish stocks if the proposed closure is implemented?

Please provide a brief explanation. :

A slight improvement in habitat condition, benthic productivity, epibenthic biomass. However, the closures are not large enough to have significant ecological impact relative to the scale of the entire site because of their minimal area and the fact that not all vulnerable biotopes have been closed to damaging activities. As such, these measures cannot be certain to achieve favourable conservation status, nor to avoid adverse effects on site integrity.

Further information

12 Please use the box below to supply any further information you require.

Please provide additional details below.:

This a joint response submitted by ClientEarth and the Marine Conservation Society (Alice Puritz: apuritz@clientearth.org and Jean-Luc Solandt: jean-luc.solandt@mcsuk.org).