Annex G Advice on impacts of MCZs on marine licence proposals

This Annex presents advice that was used to inform assumptions made in the IA concerning impacts of MCZs on marine licence proposals. This advice was developed to inform analysis for the IA. It reflects understanding at the time, may be subject to subsequent change and some of the information presented may now be out of date.

Contents

Other published advice that informed the IA but is not included in this Annex (for brevity):

JNCC & Natural England. 2011. *General Advice on Assessing Potential Impacts of and Mitigation for Human Activities on MCZ Features, Using Existing Regulation and Legislation*.

Draft assumptions for use in the Impact Assessment for Marine Conservation Zones (MCZs) about the additional mitigation of impacts from certain licensed activities that is likely to be required for features protected by MCZs. 24.6.2011

Version	Date	Source of comments addressed.	Editor
1	28.4.11		R Clark
2	15.5.11	Incorporates feedback provided by James Bussell and Finlay Bennet.	R Clark
3	18.5.11	Incorporates feedback provided by Victoria Copley and James Bussell.	R Clark
4	25.5.11	Justification for the assumptions added	R Clark
5	8.6.11	Revised to address feedback provided by Finlay Bennet (JNCC), James Bussell (NE), Ian Reach (NE), Evelyn Pizzolla (DECC), Shaun Nicholson (MMO) and Lizzy Pearson (Defra).	R Clark
6	9.6.11	Revised to address feedback from Lizzy Pearson	R Clark
7	14.6.11	Revised to address feedback from Caroline Cotterell (NE)	R Clark
8	21.6.11	Revised to address outstanding query from Caroline Cotterell (NE)	R.Clark
9	24.6.11	Revised to address feedback from James Marsden (NE)	R Clark

Purpose

This document presents the assumptions that will be made in the impact assessment for Marine Conservation Zones (MCZs) about the additional mitigation of impacts of the following activities that is likely to be needed to achieve the conservation objectives of features protected by MCZs compared with the mitigation that is required in the absence of MCZs:

- aggregate extraction,
- gas and oil exploration and production, interconnectors transporting natural gas, storage and unloading of natural gas, and carbon capture and storage,
- power and telecommunications cables,
- renewables (wind farms and generation of electricity from tidal stream energy and wave energy, including their cables).

These are realistic assumptions that have been developed based on advice from specialists in the JNCC, Natural England and advice provided by the Department of Energy and Climate Change and the Marine Management Organisation. The impact assessment is using assumptions about the additional mitigation that is likely to be needed because the outcome of future licensing decisions is not known. The assumptions do not pre-judge the outcome of licensing decisions for applications for specific proposals. This document builds on and is consistent with JNCC and Natural England's advice on the mitigation of impacts of human activities on MCZ features (JNCC and Natural England (2011a)) and their supplementary advice on the impact of MCZs on marine licensing proposals (Natural England and JNCC (2011)) (references listed at the end of this document).

The assumptions apply to features that will be protected by MCZs that are listed in the Ecological Network Guidance (attached here in Annex I). As in the Guidance, the features are grouped in to broadscale habitats, habitats of conservation importance and species of conservation importance). As is explained in the Annex, the habitats and species of conservation importance (but not the broadscale habitats) are included in the following:

- OSPAR List of Threatened and/or Declining Species and Habitats,
- UK List of Priority Species and Habitats (UK BAP)

- Schedule 5 of the Wildlife and Countryside Act.

The assumptions apply to MCZs that are **not** reference areas. Guidance on the mitigation of impacts that is needed for reference areas is provided in JNCC and Natural England (2011b).

For the purpose of the IA these assumptions are assumed to apply to MCZs (that are not reference areas) that have a conservation objective of recover[1] as well as those that have a conservation objective of maintain. This is because in most foreseeable cases a conservation objective of recover is likely to be applied to features because of widespread, broadscale, impacts of human activities derived cumulatively over time[2]. For these sites, the advice on the mitigation of impacts needed for activities that have one-off impacts with a very spatially restricted footprint (such as impacts that might be associated with renewables, cables and activities related to gas and oil) may not be the same as the advice on the mitigation needed for activities that have wider more sustained damaging impacts. The assessment of the vulnerability of features that will inform this advice will incorporate assessment of sustained exposure and one-off exposure. The advice will be based upon the circumstances of each plan or project or on-going activity and so will be case-specific.

The assumptions apply only to the mitigation of impacts of activities. It is anticipated that as a result of MCZs the costs to operators of undertaking Environmental Impact Assessment in future could increase for plans and projects that could impact on features protected by MCZs. Further information on this is provided in Natural England and JNCC (2011).

1. Aggregate extraction

For the purposes of the impact assessment it is assumed that:

- for broadscale habitats protected by MCZs, aggregate extraction is not permitted because it would have a significant direct impact on the habitat resource.
- for broadscale habitats protected by MCZs that are sensitive to smothering, aggregate extraction is generally not permitted within 0.5km to mitigate indirect impacts. The most recent advice from JNCC and Natural England (based on research, environmental monitoring and peer-reviewed literature) is that this is the distance of the halo of smothering impact associated with sediment plumes generated by aggregate dredging. Beyond 0.5km direct impacts of smothering of benthic fauna are not detected. Between 0.5 and 2km one can reasonably expect to encounter altered seabed bedforms (sandwaves, sand streaks etc) which may not be present if aggregate activity was absent. Where these bedforms are present they can cover over seabed habitats that would normally be exposed at the surface. However, these bedforms are demonstrated to react in the same manner as naturally occurring transient bedforms present within all of the aggregate regions.
- The mitigation of impacts from aggregate extraction that is required for habitats and species of conservation interest protected by MCZs is the same as that required if they are not protected by MCZs. This is because impacts on habitats and species that are on the OSPAR List of Threatened and/or Declining Species and Habitats, the UK List of Priority Species and Habitats (UK BAP) and in Schedule 5 of the Wildlife and Countryside Act are mitigated against outside protected areas.

[1] Paragraph 8.3 of (Natural England and JNCC, 2011) states "Where advice relates to an MCZ that contains features with a conservation objective of **recover**, the advice from the SNCB may differ from advice provided for a similar set of circumstances outside a designated site to reflect the need to allow one or more features of the site to recover."

[2] This is the case for the most recent marine Special Areas of Conservation that have a conservation objective to restore the features that they protect to favourable condition

These assumptions apply only to MCZs that are not reference areas. They do not pre-judge the outcome of licensing decisions for applications for specific proposals. The assumptions are informed by advice on the impacts that these activities could have on the features (JNCC and Natural England, 2011) and understanding of the mitigation that is required in the absence of MCZs for this highly regulated activity.

2. Gas and oil exploration and production, interconnectors transporting natural gas, storage and unloading of natural gas, and carbon capture and storage

For features protected by MCZs that are listed in the Ecological Network Guidance, it is assumed that no additional mitigation of impacts is required compared with the mitigation of impacts required if the features are not protected by an MCZ. This is because:

- mitigation of impacts from the activities listed above that is required for habitats and species of conservation interest protected by MCZs is the same as that required if they are not protected by MCZs. Impacts on habitats and species that are on the OSPAR List (of Threatened and/or Declining Species and Habitats), the UK List of Priority Species and Habitats (UK BAP) and in Schedule 5 of the Wildlife and Countryside Act are mitigated against outside protected areas.
- impacts of pipelines on sensitive habitats that are not protected by MCZs are mitigated against outside protected areas.
- the footprint of oil and gas structures is unlikely to significantly impact on broadscale habitats.

This assumption applies only to MCZs that are not reference areas. It has been made for purposes of the impact assessment and does not pre-judge the outcome of licensing decisions for applications for specific plans and projects. The assumption is informed by advice on the impacts that these activities could have on the features (JNCC and Natural England, 2011), advice of the Department of Energy and Climate Change and understanding of the mitigation that is required in the absence of MCZs for these highly regulated activities.

3. Power and telecommunications cables (excluding cables for renewables developments)

3.1 For telecommunications cables beyond 12nm:

It is assumed that no mitigation of impacts is required. This is because under the United Nations Convention for Law of the Sea telecommunication cables laid on the continental shelf can be installed and maintained as required. Under Section 81 of the Marine and Coastal Access Act 'Exemptions', submarine cables laid on the continental shelf outside of territorial sea are exempt from licensing. Cables laid below mean high water to limit of territorial waters require a Marine Licence. Where a cable runs through territorial waters and beyond the territorial waters a Marine Licence is required for the section running through territorial seas.

3.2 For telecommunications cables within 12nm and for all power cables within and beyond 12nm (excluding cables for renewables developments see 4 below):

For features protected by MCZs that are listed in the Ecological Network Guidance, it is assumed that no additional mitigation of impacts will be required compared with the mitigation of impacts required if the features are not protected by an MCZ. This is because:

- The mitigation of impacts from cables that is required for habitats and species of conservation interest protected by MCZs is the same as that required if they are not protected by MCZs. Impacts on habitats and species that are on the OSPAR List (of Threatened and/or Declining Species and Habitats), the UK List of Priority Species and Habitats (UK BAP) and in Schedule 5 of the Wildlife and Countryside Act are mitigated against outside protected areas.
- The footprint of cables is unlikely to significantly impact on broadscale habitats.

This assumption applies only to MCZs that are not reference areas. It has been made for purposes of the impact assessment and does not pre-judge the outcome of licensing decisions for applications for specific plans and projects. The assumption is informed by advice on the impacts that these activities could have on the features (JNCC and Natural England, 2011) and understanding of the mitigation that is required in the absence of MCZs for these highly regulated activities.

4. Renewables (wind farms and generation of electricity from tidal stream energy and wave energy, including their cables)

For features protected by MCZs that are listed in the Ecological Network Guidance, no additional mitigation of impacts will be required compared with the mitigation of impacts required if the features are not protected by MCZ. This is because:

- the mitigation of impacts from the renewable activities specified above that is required for habitats and species of conservation interest protected by MCZs is the same as that required if they are not protected by MCZs. Impacts on habitats and species that are on the OSPAR List (of Threatened and/or Declining Species and Habitats), the UK List of Priority Species and Habitats (UK BAP) and in Schedule 5 of the Wildlife and Countryside Act are mitigated against outside protected areas.
- the footprint of renewables devices and their cables is unlikely to significantly impact on broadscale habitats provided that the EIA process has identified potential impacts and recommended the mitigation for protection of features that would be required in the absence of an MCZ (which it should do).

This assumption applies only to MCZs that are not reference areas. It has been made for purposes of the impact assessment and does not pre-judge the outcome of licensing decisions for applications for specific plans and projects. The assumption is informed by advice on the impacts that these activities could have on the features (JNCC and Natural England, 2011) and understanding of the mitigation that is required in the absence of MCZs for these highly regulated activities.

For further information please contact Tammy Smalley in Natural England or Finlay Bennet in JNCC.

References

Natural England and JNCC (2011) *Supplementary advice on the impacts of MCZs on information provision and decisions in relation to marine licensing proposals.*

JNCC and Natural England (2011a) *General advice on assessing potential impacts of and mitigation for human activities on MCZ features, using existing regulation and legislation.*

JNCC and Natural England (2011b) *Marine Conservation Zone Reference Areas: Guidance document for regional MCZ projects.*

Annex 1

Table 1: Broad-scale habitats to be protected within MPAs in each regional MCZ project area where they occur.

Broad-scale habitat types	EUNIS Level 3 habitat code
High energy intertidal rock	A1.1
Moderate energy intertidal rock	A1.2
Low energy intertidal rock	A1.3
Intertidal coarse sediment	A2.1
Intertidal sand and muddy sand	A2.2
Intertidal mud	A2.3
Intertidal mixed sediments	A2.4
Coastal saltmarshes and saline reedbeds	A2.5
Intertidal sediments dominated by aquatic angiosperms	A2.6
Intertidal biogenic reefs	A2.7
High energy infralittoral rock*	A3.1
Moderate energy infralittoral rock*	A3.2
Low energy infralittoral rock*	A3.3
High energy circalittoral rock**	A4.1
Moderate energy circalittoral rock**	A4.2
Low energy circalittoral rock**	A4.3
Subtidal coarse sediment	A5.1
Subtidal sand	A5.2
Subtidal mud	A5.3
Subtidal mixed sediments	A5.4
Subtidal macrophyte-dominated sediment	A5.5
Subtidal biogenic reefs	A5.6
Deep-sea bed***	A6

*Infralittoral rock includes habitats of bedrock, boulders and cobbles which occur in the shallow subtidal zone and typically support seaweed communities.
**Circalittoral rock is characterised by animal dominated communities, rather than seaweed dominated communities.
*** The deep-sea bed broad-scale habitat encompasses several different habitat sub-types, all of which should be protected in the MPA network. The broad-scale deep-sea bed habitat is only found in the south-west of the MCZ Project area and MCZs identified for this broad-scale habitat should seek to protect the variety of habitat sub-types known to occur in the region.

Table 2: Habitats of conservation interest to be protected within MPAs in each regional MCZ project area where they occur.*

Habitats of conservation importance (Habitat FOCI)
Blue Mussel beds (including intertidal beds on mixed and sandy sediments)**
Cold-water coral reefs***
Coral Gardens***
Deep-sea sponge aggregations***

Estuarine rocky habitats
File shell beds***
Fragile sponge & anthozoan communities on subtidal rocky habitats
Intertidal underboulder communities
Littoral chalk communities
Maerl beds
Horse mussel (*Modiolus modiolus*) beds
Mud habitats in deep water
Sea-pen and burrowing megafauna communities
Native oyster (*Ostrea edulis*) beds
Peat and clay exposures
Honeycomb worm (*Sabellaria alveolata*) reefs
Ross worm (*Sabellaria spinulosa*) reefs
Seagrass beds
Sheltered muddy gravels
Subtidal chalk
Subtidal sands and gravels
Tide-swept channels

*Habitat features of conservation interest (FOCI) have been identified from the OSPAR List of Threatened and/or Declining Species and Habitats and the UK List of Priority Species and Habitats (UK BAP). Those habitats that are known to be sufficiently conserved under the EC Habitats Directive, or are not known to occur in the area covered by the regional MCZ projects are excluded from this list of habitats of conservation importance (see Annex 2 of the ENG for full details).
**Note that this habitat only covers 'natural' beds on a variety of sediment types, and excludes artificially created mussel beds, and mussel beds which occur on rock and boulders.
***Cold-water coral reefs, coral gardens, deep-sea sponge aggregations and file shell beds currently do not have distribution data which demonstrate their presence in the MCZ Project area, but expert knowledge of their broad geographic distribution suggests they may occur within the MCZ Project area and if new distribution information becomes available they should be protected.

Table 3: Low or limited mobility species of conservation interest to be protected within MPAs in each regional MCZ project area where they occur.*

Scientific name	Common Name	Taxon group
Padina pavonica	Peacock's tail	Brown alga
Cruoria cruoriaeformis	Burgundy maerl paint weed	Red alga
Grateloupia montagnei	Grateloup's little-lobed weed	Red alga
Lithothamnion corallioides	Coral maerl	Red alga
Phymatolithon calcareum	Common maerl	Red alga
Alkmaria romijni	Tentacled lagoon-worm**	Annelid (worm)
Armandia cirrhosa	Lagoon sandworm**	Annelid (worm)
Gobius cobitis	Giant goby	Bony fish
Gobius couchi	Couch's goby	Bony fish
Hippocampus guttulatus	Long snouted seahorse	Bony fish
Hippocampus hippocampus	Short snouted seahorse	Bony fish
Victorella pavida	Trembling sea mat	Bryozoan (seamat)
Amphianthus dohrnii	Sea-fan anemone	Cnidarian

Scientific name	Common Name	Taxon group
Eunicella verrucosa	Pink sea-fan	Cnidarian
Haliclystus auricula	Stalked jellyfish	Cnidarian
Leptopsammia pruvoti	Sunset cup coral	Cnidarian
Lucernariopsis campanulata	Stalked jellyfish	Cnidarian
Lucernariopsis cruxmelitensis	Stalked jellyfish	Cnidarian
Nematostella vectensis	Starlet sea anemone	Cnidarian
Gammarus insensibilis	Lagoon sand shrimp**	Crustacean
Gitanopsis bispinosa	Amphipod shrimp	Crustacean
Pollicipes pollicipes	Gooseneck barnacle	Crustacean
Palinurus elephas	Spiny lobster	Crustacean
Arctica islandica	Ocean quahog	Mollusc
Atrina pectinata	Fan mussel	Mollusc
Caecum armoricum	Defolin`s lagoon snail**	Mollusc
Ostrea edulis	Native oyster	Mollusc
Paludinella littorina	Sea snail	Mollusc
Tenellia adspersa	Lagoon sea slug**	Mollusc

*Species features of conservation interest (FOCI) have been identified from the OSPAR List of Threatened and/or Declining Species and Habitats, the UK List of Priority Species and Habitats (UK BAP) [3] and Schedule 5 of the Wildlife and Countryside Act. Those species that are known to be sufficiently conserved under the EC Habitats Directive, or are not known to occur in the area covered by the regional MCZ projects, or are considered to be vagrant to the UK waters are excluded from this list of species of conservation importance (see Annex 2 for full details and Annex 3 of the ENG for further explanation).
**Those lagoonal species of conservation importance may be afforded sufficient protection through coastal lagoons designated as SACs under the EC Habitats Directive. However, this needs to be assessed by each of the regional MCZ projects.

Table 4: Highly mobile species of conservation interest to be protected within MPAs in each regional MCZ project area, where appropriate spawning, nursery or foraging grounds occur.*

Scientific name	Common Name	Taxon group
Osmerus eperlanus	Smelt	Bony fish
Anguilla anguilla	European eel	Bony fish
Raja undulata	Undulate ray	Bony fish

***Species features of conservation interest (FOCI) have been identified from the OSPAR List of Threatened and/or Declining Species and Habitats, the UK List of Priority Species and Habitats (UK BAP) [12] and Schedule 5 of the Wildlife and Countryside Act. Those species that are known to be sufficiently conserved under the EC Habitats Directive, or are not known to occur in the area covered by the regional MCZ projects, or are considered to be vagrant to the UK waters are excluded from this list of species of conservation importance (see Annex 2 of the ENG for full details and Annex 3 for further explanation).

[3] In the revised 2007/8 lists of UK BAP species and conservation actions, spatial protection was considered to be a priority conservation action for many UK BAP marine species and habitats.

Draft: Increases in costs for assessing environmental impacts of future plans and projects arising as a result of Marine Conservation Zones (MCZs). 8.11.11.

Update on 23.6.12: This note exists only as a draft

Version	Date	Comments addressed	Editor
1	1.6.2011	Input made by James Bussell (Natural England)	R. Clark
2	9.6.2011	Input made by Tammy Smalley, Ian Reach and Jen Ashworth (Natural England)	R. Clark
3	20.6.2011	Input made by Finlay Bennet (Joint Nature Conservation Committee, JNCC)	R. Clark
4	14.7.11	Input made by Evelyn Pizzolla (Department of Energy and Climate Change, DECC), Finlay Bennet (JNCC) and Jen Ashworth, Angela Moffat and Sarah Wiggins (Natural England).	R. Clark
5	18.7.11	Input made by Brain Hawkins (Marine Management Organisation)	R. Clark
6	22.7.11	Input made by Evelyn Pizzolla (DECC)	R. Clark
7	12.8.11	Input made by Emma Cole (DECC), Shaun Nicholson (MMO), Sevvy Palmer (Department for Transport, who also consulted with policy colleagues in the Department for Transport and the Maritime and Coastguard Agency), James Bussell (Natural England) and Finlay Bennet (JNCC)	R. Clark
8	15.8.11	Input made by James Bussell (Natural England)	R. Clark
9	22.9.11	Input made by Finlay Bennet (JNCC)	R. Clark
10	28.11.11	Input made by Evelyn Pizzolla (DECC)	R. Clark

Purpose

This document describes the aspects of assessing environmental impacts of future plans and projects that are likely to increase in cost as a result of MCZs. It has been developed to inform the impact assessment for MCZs. It is based on advice from specialists in the Joint Nature Conservation Committee (JNCC), Natural England, the Marine Management Organisation, and the UK government's Department of Energy and Climate Change (DECC), Department for Transport and Department for Environment, Food and Rural Affairs (Defra) marine biodiversity. This document builds on JNCC and Natural England's supplementary advice on the impact of MCZs on marine licensing proposals (Natural England and JNCC, 2011). The advice does not prejudge the assessment of environmental impacts that is required for specific proposals. It presents current understanding and may be subject to change.

The increases in costs of assessing environmental impacts will arise only for future plans and projects that may affect features that are protected by MCZs. For future plans and projects that are unlikely to affect features that are protected by MCZs, it is assumed that costs of assessing the environmental impacts will be unaffected by MCZs. The increase in costs applies to Environmental Impact Assessments (EIAs) and other assessments of environmental impacts that are undertaken (such as the assessment of environmental impacts of cable laying).

Assessment of environmental impacts by operators:

For future plans and projects that could impact on habitats of conservation importance and species of conservation importance protected by MCZs, no additional assessment of environmental impacts on these features should be required compared with the assessment required in the absence of MCZs. This is because impacts on these features should be assessed outside MCZs because the features are on the OSPAR List (of Threatened and/or Declining Species and Habitats) or the UK List of Priority Species and Habitats (UK BAP). However, the operator will need to take some additional time to identify whether features listed on the OSPAR List (of Threatened and/or Declining Species and Habitats) or the UK List of Priority Species and Habitats (UK BAP) are protected by an MCZ.

For future plans and projects that could impact on broad-scale habitats protected by MCZs, the environmental impacts on the broad-scale habitat will need to be assessed. The increase in costs arising from this needs to be considered relative to the assessment of environmental impacts of future plans and projects that would be provided without MCZs. In the absence of MCZs, the operator characterises the habitats and in some instances produces a biotope map of the seabed for the area in and around the proposed development in the EIA. In the presence of an MCZ the operator would need to take some additional time to identify whether those habitats are broad-scale habitats that are protected by an MCZ. In the absence of MCZs, in the EIA the operator would assess the impact of the proposed plan or project on the identified habitats. In the presence of MCZs, the operator will need to assess whether the proposed plan or project will impact on delivery of the conservation objective of broad-scale habitats protected by the MCZ as set out in EIA guidelines. This will involve additional assessment but will not require additional collection of data. Any additional costs of assessing impacts are likely to be of a similar scale to those accrued when a proposal is likely to impact any type of designated site.

For projects that do not require an EIA (such as maintenance dredging) and that may significantly affect the features protected by an MCZ (or significantly affect any ecological or geomorphological process on which the conservation of any protected feature of an MCZ is wholly or in part dependent), public authorities may advise the operator to produce an Environmental Statement (or information to a similar level of detail). This is to enable the public authority to assess the impacts of the proposals on the features. Such an assessment may not be required for projects that do not impact on features protected by an MPA. Where an environmental statement is required, its production would be an additional cost to the operator that would arise as a result of the MCZ.

In the event that the impact of a plan or project on the ecological coherence of the Marine Protected Area (MPA) network (which MCZs will be a component of)[4] needs to be assessed, the IA assumes that this assessment would be undertaken by the statutory nature conservation adviser. These circumstances will arise if:

- assessment of environmental impacts indicates that a future plan or project prevents the conservation objective being met for any feature protected by MCZs listed in the Ecological Network Guidance
- and the statutory nature conservation adviser identifies that the plan or project could impact on the ecological coherence of the MPA network.

These assessments will take time for the statutory nature conservation advisers to undertake. If this delays the licensing/permitting process it will result in additional costs for developers.

References

Natural England and JNCC (2011) *Supplementary advice on the impacts of MCZs on information provision and decisions in relation to marine licensing proposals.*

[4] The government aims to have the MPA network substantially complete by the end of 2012. It will comprise Sites of Special Scientific Interest, European marine sites, Marine Conservation Zones and Ramsar Sites.

Advice on the impacts of MCZs on information provision and decisions in relation to marine licensing proposals

Advice from Natural England and the Joint Nature Conservation Committee to the Regional MCZ Projects

June 2011

Version 5.0 (formal issue)

In fulfilling our obligations under the Marine and Coastal Access Act 2009 to support the Regional Marine Conservation Zone Projects, Natural England and the Joint Nature Conservation Committee have produced this advice to inform the development of the IA for proposed Marine Conservation Zones (MCZs).

The advice sets out the process for the environmental assessment of licensing proposals and details potential differences in the information provision for licensing proposals, the advice that may be offered by the Statutory Nature Conservation Bodies and the outcome of licensing decisions were an MCZ in place compared with no designated site for similar features.

Whilst we have endeavoured to make this advice as fit for purpose as possible, including seeking external input, it should be recognised that licensing proposals differ and therefore the advice of the Statutory Nature Conservation Bodies (SNCBs) and the outcomes of a specific licensing application will vary on a case by case basis. For individual MCZs the advice should be used alongside site specific information, local knowledge and with the support of the relevant regulator and statutory conservation adviser. This advice does not pre-judge decisions of, nor bind the SNCBs or regulatory authorities in any way.

Version Control:

Copy	Version	Authors	Issue Date	Issued To
Electronic	1.0	Rebecca Clark	13-02-11	Finlay Bennet, James Bussell, Victoria Copley, Jamie Davies, Cristina Herbon, Simone Pfeifer
Electronic	2.0	Rebecca Clark	22-02-11	Steve Benn, Victoria Copley, Finlay Bennet, Jamie Davies, Cristina Herbon, Simone Pfeifer, Ian Reach, James Bussell, Ginny Swaile
Electronic	3.0	Angela Moffat	13-03-11	Jen Ashworth, Steve Benn, Richard Broadbent, Victoria Copley, Finlay Bennet, Jamie Davies, Cristina Herbon, Simone Pfeifer, Ian Reach, James Bussell, Ginny Swaile, Sarah Wiggins, DECC, MMO.
Electronic	4.0	Angela Moffat	20-04-11	Regional MCZ Projects, Natural England and JNCC staff (as a working draft), MMO, DECC; MCZ Project Board (for sign-off)
Electronic	5.0	Angela Moffat	13-06-11	Final version

Contents

A. Background

1. Introduction

1.1 This advice has been compiled with input from the Marine Management Organisation (MMO) and the Department of Energy and Climate Change (DECC) and has been produced solely to inform the development of a robust Impact Assessment (IA) for marine conservation zones (MCZs). The advice sets out the existing arrangements for the environmental assessment of licensing proposals and addresses the following questions:

- Will the information required to consider a licence application differ for licence applications for activities where there is no MCZ compared with if an MCZ was in place?
  - How will the information operators need to provide to inform JNCC and Natural England statutory advice on licence applications differ for licence proposals that may affect an MCZ compared with those that will not affect an MCZ?
  - Whether, and if so how will, the statutory advice that JNCC and Natural England provide differ in relation to licence proposals where there is an MCZ compared with if there is no MCZ?
- Whether, and if so how, will the outcome of licensing decisions made by regulators differ for licence applications for activities where there is no MCZ compared with if an MCZ was in place?

1.2 Public authorities and regulators licence marine projects under a range of legislation including the new marine licensing system which will be introduced in spring 2011 to implement Part 4 of the Marine and Coastal Access Act 2009 (MCAA 2009)[5]. The new marine licensing system will largely replace existing regulatory regimes under Part 2 of the *Coast Protection Act 1949*, Part 2 of the *Food and Environment Protection Act 1985* and *The Environmental Impact Assessment and Natural Habitats (Extraction of Minerals by Marine Dredging) (England and Northern Ireland) Regulations 2007*.

1.3 Offshore oil and gas, gas storage and unloading and carbon dioxide storage activities are covered by a comprehensive environmental regime that requires consent under the Petroleum Act 1998[6] and Energy Act 2010[7]. It is envisaged that, for these activities, this process will be applied for the assessment of potential impacts on MCZs.

[5] See: http://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf for the full text of the Act.
[6] http://www.legislation.gov.uk/ukpga/1998/17/contents
[7] http://www.legislation.gov.uk/ukpga/2010/27/contents

1.4 Before giving consent to a project, public authorities and regulators must ensure that applications are processed in line with relevant requirements under the EIA[8] and Habitats Directives[9]. Whether or not a project triggers these requirements will depend on its potential impact on the environment and protected habitats. Applications must also take account of relevant marine plans (where available), and the Marine Policy Statement.

1.5 Public authorities also have specific duties in relation to MCZs when they are exercising any functions, or when considering authorising activities, that may affect the conservation objectives of an MCZ.

1.6 The statutory nature conservation bodies (SNCBs) (Natural England and JNCC) can provide advice to operators on the information to be provided in environmental impact assessments and to regulators to inform their decisions on licence applications. The SNCBs are statutory consultees in the EIA process and are consulted on all licence, consent or permit applications requiring an EIA that are administered by DECC and by the MMO.

1.7 Advice from the SNCBs includes advising on the determination of significant effect as part of the screening process for EIAs, advising on the possible impacts of proposals on designated sites (including Sites of Special Scientific Interest (SSSIs) and European marine sites[10]) and on the wider marine environment. Advice on the impacts on designated sites includes advice on the potential impacts of the proposal on delivery of the conservation objectives for the features for which the site has been designated.

1.8 The impact assessment (IA) for the MCZ recommendations being produced by the regional MCZ projects will consider the costs and benefits of MCZs. Assessment of the costs will involve considering the way in which the outcome of licensing decisions, and the information and advice required to inform the decisions, might change where a proposal might impact on an MCZ compared with if there was no MCZ. This should also include any potential requirement for monitoring the impacts of the marine activity on the MCZ. The IA will also assess the potential costs and benefits to regulators and operators of any changes.

2. Duties on public authorities in the Marine and Coastal Access Act in relation to MCZs

2.1 The MCAA 2009 contains a number of provisions for the conservation and protection of those features[11] for which MCZs are designated.

2.2 Section 125 of the Act requires public authorities which exercise any function that is capable of affecting the protected features of an MCZ or any ecological or

[8] Directive 85/337/EEC
[9] Directive 92/43/EEC
[10] European marine sites comprise marine Special Areas of Conservation designated under the Habitats Directive and Special Protection Areas classified under the Wild Birds Directive
[11] A feature can be a marine habitat, marine flora or fauna, geological or geomorphological entity for which an MPA is identified and managed. See s.117(1) (a) to (c) of the Marine and Coastal Access Act 2009.

geomorphological process on which the conservation of any protected feature of an MCZ is (wholly or in part) dependent to exercise those functions in a manner which the authority considers:

- best furthers the conservation objectives for the MCZ or, where this is not possible;
- least hinders the achievement of the conservation objectives.

2.3 Section 126 of the Act requires public authorities with responsibility for determining an application that is capable of affecting (other than insignificantly) the protected features of an MCZ or any ecological or geomorphological process on which the conservation of any protected feature of an MCZ is (wholly or in part) dependent to, if the authority believes that there is or may be a significant risk of the act hindering the achievement of the conservation objectives stated for the MCZ, to notify the statutory conservation body. The appropriate statutory conservation body in respect of England is Natural England and, in respect of an area outside the seaward limits of the territorial sea, the Joint Nature Conservation Committee [12]. The authority must then wait 28 days before granting the authorisation and have regard to any advice received from the statutory conservation body[13].

2.4 In addition, the statutory conservation bodies can provide advice and guidance under their general functions. The scope of the advice and guidance they may provide in relation to MCZs is set out in Section 127 of the Act. Advice can be provided on:

- The matters which are capable of damaging or otherwise affecting any protected feature or features;
- The matters which are capable of affecting any ecological or geomorphological process on which the conservation of any protected feature or features is (wholly or in part) dependent;
- How any conservation objectives stated for an MCZ may be furthered, or how the achievement of any such objectives may be hindered;
- How the effect of any activity or activities on an MCZ or MCZs may be mitigated;
- Which activities are, or are not, of equivalent environmental benefit (for the purposes of section 126(7)(c)) to any particular damage to the environment (within the meaning of that provision).

3. Environmental impact assessment (EIA)

3.1 The EIA Directive has been transposed into UK law through *The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)*[14] and, for activities consented under the Petroleum and Energy Acts, through the *Offshore*

[12] See s.147(1) of the Marine and Coastal Access Act 2009.
[13] See s. 126(10) of the Marine and Coastal Access Act 2009.
[14] http://www.legislation.gov.uk/uksi/2007/1518/regulation/2/made

Petroleum Production and Pipelines (Assessment of Environmental Effects) Regulations 1999 (as amended)[15]. Amendments proposed by Defra to *The Marine Works (Environmental Impact Assessment) Regulations*, due to be introduced in spring 2011, will apply existing EIA processes to the new marine licensing regimes in England.

3.2 Projects listed on Annex I of the Environmental Impact Assessment (EIA) Directive require an EIA. Annex I projects include extraction of minerals and construction of marinas. Projects on Annex II must be assessed to see whether they require an EIA. The assessment determines whether, because of its size, nature or location, a project is likely to have significant effects on the environment.

3.3 The screening process for projects on Annex II of the Directive means that an EIA will not be required for every project. For example the MMO has determined that maintenance dredging for navigational purposes is not covered in Annex II[16]. Maintenance dredging is addressed, in relation to European sites[17], by the Maintenance Dredging Protocol[18] whilst navigational dredging is covered by the Regulations only where it is associated with an infrastructure project. For developments to be located in or close to SSSIs, especially those which are also international conservation sites such as Ramsar sites or Special Protection Areas for birds, the likely environmental effects will often be such as to require an EIA.

3.4 Where a project needs to undergo an EIA the operator must provide details of a project, including its potential impacts and the management or mitigation of adverse impacts, to the regulator.

3.5 Schedule 3 of the Marine Works Regulations require a description of the environment likely to be significantly affected by the project to be provided, including:

- human beings, fauna and flora;
- soil, water, air and the landscape;
- material assets and the cultural heritage;
- the interaction between any two or more of the things mentioned above.[19]

3.6 The impacts on flora, fauna and geology, including for all relevant designations, should be considered within the EIA for the proposal. Once MCZs have been designated, this will include the impact of the proposals on MCZ features and will entail consideration of the effects of the project on flora, fauna and geology, including[20]:

[15] http://www.legislation.gov.uk/uksi/1999/360/contents/made
[16] http://marinemanagement.org.uk/works/licensing/documents/marine_works_practice.pdf
[17] Special Areas of Conservation and Special Protection Areas are designated/classified in accordance with the Wild Birds or Habitats Directives for their habitat and/or species interest
[18] http://www.defra.gov.uk/wildlife-pets/wildlife/protect/bird-habitat/mdpe.htm
[19] See Schedule 3.2 of the Marine Works Regulations.
[20] See Appendix 5 section 3
http://www.communities.gov.uk/documents/planningandbuilding/pdf/157989.pdf

- Loss of, and damage[21] to, habitats and plant and animal species;
- Loss of, and damage to, geological, palaeontological and physiographic features;
- Other ecological considerations, which would include the impact on achievement of the conservation objectives for the features that the site has been designated to protect.

4. Other regimes

4.1 There is already a comprehensive environmental regime for offshore oil and gas, gas storage and unloading and carbon dioxide storage. All activities that require consent under the Petroleum and Energy Acts are underpinned by environmental approval. The legislation can be accessed from the DECC website[22].

B. Implications of a marine conservation zone

5. Implications for an operator

5.1 For projects that require an EIA, or which may affect an MCZ and where the regulator advises it is necessary, the operator will need to consider the effects, and any associated impacts, of the proposed activity on the features for which the MCZ is designated as set out in 3.6 above. This may take additional time since the operator will need to obtain information on the MCZ (its boundary, the features it protects and their conservation objectives) and will need to consider the impacts of the proposed project on the MCZ as set out in EIA guidelines[23,24]. Any additional costs of assessing impacts are likely to be of a similar scale to those accrued when a proposal is likely to impact any type of designated site, though the assessment may be more complex and collecting and presenting evidence could be more time consuming and costly.

5.2 Currently EIAs do not assess the impact of proposals on the MPA network[25], which Government is aiming to have substantially complete by the end of 2012. Once an ecologically coherent network of MPAs is in place it is possible that EIAs will need to consider the impact of proposals on the coherence of the MPA network[26] and consider network design principles such as connectivity, replication, viability and adequacy[27], though at present MCZ conservation objectives do not incorporate a

[21] Damage could include consideration of disturbance
[22] https://www.og.decc.gov.uk/environment/environ_leg_index.htm
[23] http://www.communities.gov.uk/documents/planningandbuilding/pdf/157989.pdf
[24] http://marinemanagement.org.uk/works/licensing/documents/marine_works_practice.pdf
[25] The Marine Protected Area network will comprise Sites of Special Scientific Interest, European marine sites, Marine Conservation Zones and Ramsar Sites.
[26] Currently MCZ conservation objectives do not incorporate a network component (see Section 5.6)
[27] More information on the network design principles can be found in the Ecological Network Guidance (http://www.naturalengland.org.uk/Images/100608_ENG_v10_tcm6-17607.pdf)

network component (see Section 5.6). A requirement to take account of network considerations would result in additional costs to the operator in time and effort.

5.3 For projects that do not require an EIA (see sections 3.2 and 3.3) and which may significantly affect the protected features of an MCZ or any ecological or geomorphological process on which the conservation of any protected feature of an MCZ is (wholly or in part) dependent, public authorities will be required to assess proposals according to the provisions of Section 126 of the MCAA 2009. For these proposals, operators may accrue additional costs because they may be advised by the regulator to produce an Environmental Statement (or information to a similar level of detail) to enable public authorities to fulfil their duty under Section 126. Although for these proposals an Environmental Statement would not be mandatory, operators generally accept the advice of the regulator. This would result in the licensing application requiring additional time to progress. DECC administers a process that allows the operator to request a Direction that a project need not be accompanied by an Environmental Statement where the proposed activity for which a Direction is sought is not likely to have a significant effect on the environment. Such a request is accompanied by a reduced but robust EIA to demonstrate there will not be a significant effect. This process is subject to a 28 day review process by the SNCBs. .

5.4 Section 126 (7) of the MCAA 2009 sets out the conditions that have to be met when an applicant seeking authorisation is not able to satisfy the authority that there is no significant risk of an act hindering the achievement of the conservation objectives stated for an MCZ. These conditions include requiring the operator to undertake, or make arrangements for the undertaking of, measures of equivalent environmental benefit to the damage which the proposal will or is likely to have in or on the MCZ[28]. Meeting this condition will result in additional cost to the operator.

5.5 Where a proposal would constitute an extractive, depositional and/or disturbing and damaging activity in relation to an MCZ that was, in whole or in part, a reference area, then the operator would need to be aware that delivering the conservation objective for the reference area will require exclusion of that activity[29]. This would entail a cost to the operator who would be required either to find a new location for the activity or, if the conditions set out in 5.4 (above) were met, deliver measures of equivalent environmental benefit.

5.6 The provisions of Section 126 (7) of the Act require public authorities to take impacts into account in relation to the conservation objectives of an MCZ. Conservation objectives[30] for MCZs do not currently include network considerations so public authorities are not required to take account of network effects under this section of the Act. However, in response to advice from the SNCBs, public authorities may request information on network impacts from operators. This would involve additional costs to the operator, regulator and SNCB.

6. Implications for regulators and SNCBs

[28] See s. 126(7)(c) of the Marine and Coastal Access Act 2009.
[29] http://www.naturalengland.org.uk/Images/MCZ-regional-guidance_tcm6-23451.pdf
[30] http://www.naturalengland.org.uk/Images/conservation-objective-guidance_tcm6-24853.pdf

6.1 Additional time will be required by the SNCBs and regulators to consider and assess the impacts set out in paragraph 3.6 above and to provide advice, particularly on mitigation of impacts and, in relation to Section 127(1)(e) of the MCAA 2009, on those measures that are, or are not, of equivalent environmental benefit (for the purposes of section 126(7)(c)) to any particular damage an activity may have in, or on, an MCZ. The amount of additional time, data and interpretation that will be required will depend upon the extent and/or type of development, though it is anticipated that for typical proposals the additional time required in relation to each proposal is unlikely to be significant, since the information normally required through the EIA process for a designated site is likely to suffice. However, for novel or contentious proposals inputs of significant additional time to consider impacts on the conservation objective (and, in time, on the MPA network) could be required for the operator, regulator and SNCB and, in addition, the designation of MCZs will increase the number of applications requiring the higher level of information and assessment.

6.2 Regulators may also need additional time to consider the impacts set out in paragraphs 3.6 in relation to MCZs and to consider the SNCB's advice, particularly if the advice is in relation to effects of a proposal on the MPA network. Public authorities have a legal obligation to have regard to any advice and guidance provided by the SNCBs under Section 127(10) of the MCAA 2009 in relation to an MCZ.

C. Information provisions from operators to inform SNCB advice

7. Information from operators

7.1 Operators with proposals that impact a European site are generally expected to provide more detailed analysis in relation to the potential effects on the integrity of the site and its designated features given the legal tests involved in relation to these sites. It can be expected that a similar level of information and analysis would be required from operators in relation to MCZs to inform the assessment of impacts on the conservation objectives. For example, an EIA would need to consider the impact of an activity in the context of the distribution and abundance of the designated features of an MCZ within the MCZ, rather than assess the impact of an activity over, for example, a specified distance from the activity which would be the preferred approach for features occurring outside a designated site.

7.2 Information that operators are required to provide (even in the absence of a protected area) includes general benthic survey for characterisation of seabed habitats associated with the footprint of a licensed activity (at pre-application) to determine or confirm the seabed environment. This allows identification of any sensitive receptors (e.g. natural habitats, fishery critical spawning habitat, palaeo-landscapes, wrecks). The characterisation is not biased to identification of any particular features and simply provides a snap shot of what is where. These data must be appropriate to address assessment of environmental impacts.

7.3 Once licensed, but before the activity starts, the operator may be required to carry out a time-zero baseline survey if sufficient time has elapsed from characterisation to start-up, though this is not normally required as activities are usually commenced within a short time period from receipt of relevant permits but is a possible requirement whether or not a protected area is involved. The project baseline is to allow environmental condition and thresholds to be determined to act as a benchmark against which environmental monitoring will report.

7.4 Data collected through these processes will address seabed features, and should be fit-for-purpose to satisfy tests against MCZ conservation assessments including for broadscale habitats, habitats features of conservation interest (FOCI), non-mobile and mobile species FOCI and localised features (e.g. biogenic reefs) .

7.5 In terms of data analysis, the analyses currently provided by the aggregate extraction and renewables sectors in EIAs are likely to be sufficient. For EIAs produced by the oil and gas sector, it is possible that, in relation to MCZs, more detailed survey data processing and interpretation may sometimes be required compared to that provided at present (for example, faunal interpretation of grab survey data and sediment data). Any such requirement would need to be assessed on a case by case basis and, where further data processing and interpretation was required, there would be additional costs for the operator in terms of extra time required for data analysis.

D. Advice from the SNCBs in relation to licensing proposals

8. Advice from JNCC and Natural England

8.1 It is anticipated that a site-specific assessment of the impact of proposed activities on features will be undertaken by the operator, in discussion with the SNCBs, that includes consideration of the impact on the feature's conservation objectives (in a similar approach to that adopted for European marine sites). The onus will be on the operator to demonstrate no significant impacts and the SNCBs will screen for effects against the conservation objectives based on the assessments provided by the operator. It is expected that this will follow standard protocols such as those which have been established through the EIA and Habitats Directives.

8.2 Where advice relates to an MCZ with conservation objectives of **maintain**, the advice provided by the SNCB is unlikely to differ from advice provided for a similar set of circumstances outside a designated site.

8.3 Where advice relates to an MCZ that contains features with a conservation objective of **recover**, the advice from the SNCB may differ from advice provided for a similar set of circumstances outside a designated site to reflect the need to allow one or more features of the site to recover.

8.4 The advice that is provided by the SNCBs will depend on factors including the feature, location and pressures as well as the type of impact and the level of understanding of the impact on features and will differ on a case by case basis.

8.5 Advice on the management of activities in reference areas[31] has been published by the SNCBs and sets out in more detail the management of activities required for reference areas.

E. Decision-making by regulators

9. Decisions by regulators

9.1 Regulators set conditions on a license that are proportionate to the scale and nature of the impact and which would identify any mitigation measures required. They would also have regard to the advice of the SNCBs and, since the advice from the SNCB may differ for MCZs containing features with a conservation objective of **recover**, it is possible that conditions on a license may also differ in these cases. For MCZs with conservation objectives of **maintain**, any license conditions, including mitigation requirements are likely to be similar to those in the same circumstances outside a designated site.

9.2 A public authority would also require an operator, under section 126(7)(c) of the MCAA 2009, to undertake, or make arrangements for the undertaking of, measures of equivalent environmental benefit to the damage which an act will or is likely to have in or on an MCZ in circumstances in which that operator is unable to satisfy the authority that there is no significant risk of the act hindering the achievement of the conservation objectives stated for an MCZ but can meet the conditions set out under section 126(7)(a)-(b). If an operator is not able to satisfy the public authority that the conditions set out under section 126(7)(a)-(b) have been met and is unwilling to undertake, or arrange to undertake, measures of equivalent environmental benefit to the damage likely to occur the public authority must not grant authorisation for the doing of that act under section 126(5) of the MCAA 2009.

F. Conclusions

10. Summary

10.1 In general, the designation of MCZs are likely to increase the regulatory burden on applications, regulators and consultees.

10.2 For licences which would already require an EIA (for reasons other than the location of MCZs), additional information requirements to support assessments on MCZs may be small.

[31] http://www.naturalengland.org.uk/Images/MCZ-regional-guidance_tcm6-23451.pdf