# Scottish MPA Project Management Options Paper

#### NORTH-EAST FAROE-SHETLAND CHANNEL NATURE CONSERVATION MARINE PROTECTED AREA

#### JULY 2014

JNCC developed the present paper to support discussions with stakeholders about the management of activities within this Nature Conservation MPA. The paper should be considered a starting point for discussions around the ongoing process of developing any management necessary to deliver the conservation objectives of the designated features; the process will continue after site designation.

The paper does not attempt to cover all possible future activities and does not consider likely cumulative effects that could result from different types of activities being carried out within the MPA. However, it does consider a range of activities and developments considered to be taking place within the MPA at the point of writing, and focuses on where we considered there could be a risk of the protected features not achieving their Conservation Objectives.

The following documents provide further information about the protected features in terms of confidence in the evidence base and assessment of the MPA against the MPA Selection Guidelines and should be read alongside this Management Options Paper:

- Site Summary Document
- Data Confidence Assessment
- Detailed assessment against the MPA Selection Guidelines

These documents are all available at www.jncc.defra.gov.uk/page-6483

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## DEVELOPMENT OF MANAGEMENT OPTIONS FOR THE NORTH-EAST FAROE-SHETLAND CHANNEL MPA

## **1** Management Options Summary

This section summarises JNCC's management options for the North-east Faroe-Shetland Channel MPA. The options are being considered to eliminate or manage the risk of not meeting the conservation objective to conserve the protected features within the MPA. The full detail on these options is provided in the subsequent sections of the Management Options Paper. Discussions between sea users, scientists and managers will be needed to develop any subsequent management measures.

# Activity

# Management options

| Activity  | Management options   |
|---|--|
| Fishing activity:<br>Bottom contacting n<br>gear<br>(e.g. otter trawling) | <b>No additional management -</b> There is a risk of not<br>achieving the conservation objectives for <b>offshore subtidal</b><br><b>sands and gravels</b> and <b>offshore deep-sea muds</b> . The<br>conservation objective would not be achieved for <b>deep-sea</b><br><b>sponge aggregations</b> and JNCC recommend that this<br>option should not be applied in areas where deep-sea<br>sponge aggregations occur (depths between 400 and<br>600m).   |
|   | Reduce/limit pressures – This option would reduce, but<br>not entirely eliminate, the risk of not achieving the<br>conservation objectives for offshore deep-sea muds and<br>offshore subtidal sands and gravels. Appropriate<br>management could include a zoned approach where<br>management measures are introduced to protect specific<br>depth corridors representative of the range of sedimentary<br>communities on the continental slope. The depth corridors<br>selected would need to take into consideration any<br>management proposed within the other MPAs on the<br>continental slope, to ensure that the depth-based variation<br>of sedimentary communities are adequately represented<br>within managed zones. There may be a greater requirement<br>for restrictions on gears that penetrate deeply into the<br>sediment. The location of areas to be covered by<br>management restrictions would be decided in consultation<br>with fishers. Restrictions could be permanent in some cases<br>or temporary/adaptive in others.<br>The conservation objective for deep-sea sponge<br>aggregations would not be achieved and JNCC<br>recommend that this option should not be applied in areas<br>where deep sea sponge aggregations occur (depths<br>between 400 and 600m). |
|   | <b>Remove/avoid pressures:</b> This option would reduce the risk of not achieving the conservation objectives for offshore deep-sea muds and offshore subtidal sands and gravels to the lowest possible levels. This is the only option that would allow the conservation objective to be achieved for deep-sea sponge aggregations and JNCC recommend that this option should be applied in areas where deep-sea sponge aggregations occur (depths  |
|   | where deep-sea sponge aggregations occur (depths between 400 and 600m).  |

| Fishing activity:<br>Bottom contact static gear<br>(e.g. line fishing and set<br>netting) | No additional management: This option is considered to<br>be sufficient for bottom contacting static gear, to achieve the<br>conservation objectives for offshore deep sea muds and<br>offshore subtidal sands and gravels. However, the<br>conservation objective would not be achieved for deep-sea<br>sponge aggregations and JNCC recommend that this<br>option should not be applied in areas where deep-sea<br>sponge aggregations occur (depths between 400 and<br>600m). |  |  |  |
|---|--|--|--|--|
|   | <b>Remove/avoid pressure:</b> This is the only option that would achieve the conservation objective for <b>deep-sea sponge aggregations</b> and JNCC recommend that this option should be applied in areas where deep-sea sponge aggregations occur (depths between 400 and 600m).   |  |  |  |
| Oil and gas activity:<br>Telecommunications   | The potential impacts of oil and gas activity and/or<br>developments on the protected features within the MPA will<br>be assessed through the existing EIA process on a case-by-<br>case basis. Early dialogue with DECC and JNCC would help<br>identify and resolve any issues at an early stage.   |  |  |  |
| activity:   | Early discussions between JNCC and the operator would be   |  |  |  |
|   | welcomed for all plans relating to cables within the MPA,<br>including installation, maintenance and removal. It is<br>recommended that a voluntary Environmental Impact<br>Assessment is undertaken to support plans for any new<br>cable installation to assess the impacts of the associated<br>activities on the protected features present.   |  |  |  |

## 2 Introduction

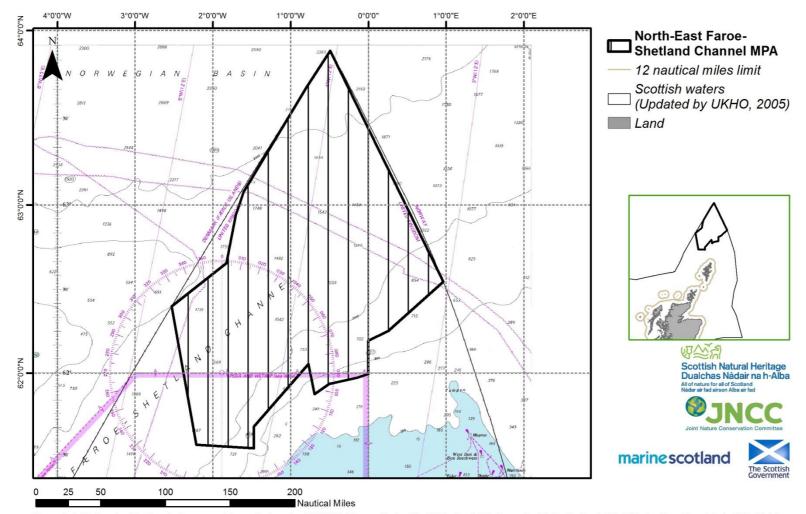
The North-east Faroe-Shetland Channel Marine Protected Area (MPA) is located offshore in the far north of Scotland, and includes part of the Faroe-Shetland Channel in Scottish waters (see Map 1). The habitats within the MPA are strongly influenced by the range of environmental conditions present, including a dynamic zone of mixing where warmed Atlantic waters flow northwards over southward-flowing sub-zero Arctic waters. The continental slope plays an important role in funnelling ocean currents that bring food and nutrients to the region, which in turn support a wide diversity of life. The area of the North-east Faroe-Shetland Channel MPA is 23,682 km<sup>2</sup>.

Further details on the MPA can be found in the North-east Faroe-Shetland Channel MPA Site Summary Document available at <a href="http://www.jncc.defra.gov.uk/page-6483">www.jncc.defra.gov.uk/page-6483</a>

Relatively low levels of fishing currently take place within the MPA, predominantly otter trawling on the upper slope (shallower than 400m) for mixed whitefish, with a small amount of net fishing for monkfish. There is also evidence of a lower intensity deep-water trawl fishery targeting Greenland halibut. Evidence from the available VMS data suggests a multinational fleet is present within the MPA, including vessels from a number of EU countries together with Norway and the Faroe Islands. Three telecommunication cables cut through the MPA, and there is one oil well on the upper slope that has been suspended. The upper slope overlaps with license blocks identified by the Department of Energy and Climate Change (DECC) and may be subject to further oil and gas development in the future.

JNCC produced the present document to provide background information on the development of management options for the North-east Faroe-Shetland Channel MPA, and will use it to support ongoing stakeholder discussions.

The document describes the known location and extent of protected features and our current knowledge of where activities take place within the MPA. It also presents the management options for each of those activities that are considered capable of having an effect on the protected features. The document supports those with an interest in the area to input to the development of appropriate management measures that will ensure the North-east Faroe-Shetland Channel MPA makes a genuine and long-lasting contribution to the protection of Scotland's marine environment.



Map 1 Location of the North-east Faroe-Shetland Channel MPA

Map projected in Mercator (World) projection, geographic coordinate system WGS1984. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright). Landmass, Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005. MPA © JNCC and SNH, 2014. All rights reserved. Admiralty Chart © Crown Copyright, 2013. All rights reserved. License No. EK001-20130405. NOT TO BE USED FOR NAVIGATION

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## 3 Roles

JNCC provides conservation advice to Scottish Government on how it might be possible to achieve the conservation objectives for the protected features. JNCC's advice includes possible management options for controlling human activities in the North-east Faroe-Shetland Channel MPA.

Marine Scotland lead the discussions on developing appropriate management with stakeholders, taking account of JNCC's and others' advice, identify the preferred management option and develop specific management measures with relevant authorities. Marine Scotland is responsible for making recommendations to Scottish Ministers on any necessary measures and any review of site management in the future. Scottish Ministers will decide whether to implement these measures. Marine Scotland expects that licensed activities taking place within, or nearby, the MPA will continue to be managed through the existing licensing system. For MPAs in offshore waters, the expectation is that the process already in place for delivering any fisheries management requirements under the EU Common Fisheries Policy for Special Areas of Conservation will be followed.

Stakeholders can provide additional evidence to support the development of management measures including local knowledge of the environment and of activities. Discussions with stakeholders will be one way of highlighting the implications of any management measures to JNCC, Scottish Government, and other regulators. This input will contribute to the development of well-designed and effective management measures.

## 4 Protected features and conservation objectives

The North-east Faroe-Shetland Channel MPA has been designated as part of a network of new Nature Conservation MPAs that is being established to help conserve a range of Scotland's important marine habitats, wildlife, geology and landforms. The North-east Faroe-Shetland Channel MPA has been designated for the following protected features (Map 2):

- Deep-sea sponge aggregations\*
- Offshore subtidal sands and gravels
- Offshore deep sea muds
- Continental slope
- Geodiversity features prograding wedge, slide deposits, contourite sand/silt, mud diapirs\*\*

\*In March 2013, the ICES/NAFO Joint Working Group on Deep-water Ecology (WGDEC) recommended fisheries management bodies instigate closure to all bottom-contact fishing practices in the area of the known extent of deep-sea sponge aggregations in the North-east Faroe-Shetland Channel MPA<sup>1</sup>. The recommendation aims to protect vulnerable marine ecosystems, which includes the deep-sea sponge aggregations within the MPA. Map 2 shows the extent of the recommended closure.

\*\*These geodiversity features are considered to have a low sensitivity to the pressures associated with marine activities taking place within the MPA<sup>2</sup>. As such, JNCC considers there is no significant risk of the features not achieving their conservation objectives and so they have not been reported further in the context of the management options presented below.

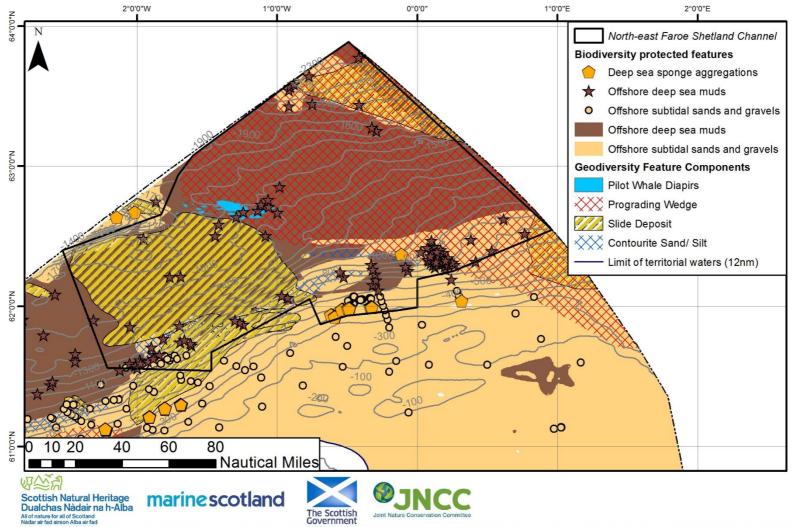
<sup>&</sup>lt;sup>1</sup> ICES. (2013). Report of the ICES\NAFO Joint Working Group on Deep-water Ecology (WGDEC), 11-15<sup>TH</sup> March 2013, Floedevigen, Norway, ICES CM 2013\ACOM:28. 95pp

<sup>&</sup>lt;sup>2</sup> Brooks, A.J., (2013). Assessing the sensitivity of geodiversity features in Scotland's seas to pressures associated with human activities. *Scottish Natural Heritage Commissioned Report No. 590.* 

North-east Faroe-Shetland Channel MPA Management Options Paper v4.0 July 2014

Conservation objectives set out the desired quality of the protected features within each MPA. JNCC recommend that the conservation objectives for the protected features within the North-east Faroe-Shetland Channel MPA are '*conserve*' for all features. The condition of the features has not been verified by direct evidence so the uncertainty of the feature condition is noted alongside the objective (feature condition uncertain).

Improved evidence on the condition of these features collected as part of the six-year reporting cycle required under the Marine (Scotland) Act 2010 and the Marine and Coastal Access Act 2009, or through provision of other evidence, may result in modifications to JNCC's recommendations for management to achieve the features' conservation objectives.



Map 2 The known distribution of protected features within the North-east Faroe-Shetland Channel MPA

Map displayed in geographic coordinates WGS84. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright). Landmass Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005. Bathymetry © GEBCO, 2011. Bio data from Geodatabase of Marine features in Scotland (GeMS v4) © Crown copyright, ICES WGDEC VME database 2014. MPA & geodiversity data © JNCC & SNH, 2014.

# 5 Overview of activities

Table 1 below lists the human activities which are believed to take place within or close to the North-east Faroe-Shetland Channel MPA. Further discussions with those who use the area will continue to improve our understanding of these activities particularly in terms of their spatial distribution and intensity and impact on the condition of the protected features.

Those activities to which the protected features are sensitive are explored in detail in the next section. Activities to which the protected features are not thought to be sensitive (i.e. any interaction between the activity and the protected features is considered to be minimal) will not be considered further within this document. Any future change in the way the activities listed in Table 1 occur, or the introduction of other activities not currently identified within the table would need to be considered on a case-by-case basis should they occur, to establish the appropriate management actions.

| Table 1: Overview of existing activities believed to take place within or close to the | North- |
|--|--------|
| east Faroe-Shetland Channel MPA  |        |

| Activities considered capable of affecting the protected features   | Activities <i>not</i> considered capable of affecting the protected features |
|---|--|
| Fishing activities:<br>• Line fishing   | Shipping:<br>• Commercial shipping   |
| <ul><li>Otter trawling</li><li>Set netting</li></ul>  | Fishing activities*:   |
| <ul> <li>Licensed activities:</li> <li>Oil and gas industry developments,<br/>including drilling of wells, pipelines and<br/>other subsea infrastructure, and their<br/>ongoing use and maintenance.</li> </ul> | <ul> <li>Pelagic trawling and purse seining</li> </ul>                       |
| Telecommunications cables   |  |

\*Only the specific examples of the activity listed have been excluded, rather than the broad activity types.

## 6 Development of management options

JNCC developed management options for each MPA where we consider that some form of management action may be necessary to achieve the conservation objective for each protected feature. We adopted a risk-based approach to identify appropriate management options i.e. our advice is focused where we believe there is a risk that the protected features will not achieve their conservation objectives. To do this, we have used existing data and information on protected features and relevant activities, and also our understanding of the relationships between the protected features and activities. JNCC expect on-going discussions with stakeholders during the development of any management actions.

Our management options focus on the activities that cause a pressure to which a protected feature is sensitive. Pressures can be physical (e.g. abrasion of the seabed), chemical or biological. Different activities may cause the same pressure, e.g. fishing using bottom gears and aggregate dredging both cause surface abrasion that can damage the seabed although the scale and intensity of the pressure can vary between activities. Thus, the protected features of an MPA are considered sensitive to activities that could adversely affect their conservation value, especially if they are unable or are very slow to recover from damage.

The Features Assessment Sensitivity Tool (FeAST) reflects our current understanding of the interactions between activities, pressures and features and supports the first steps of the assessment of the risk that features will not achieve their conservation objectives in the MPAs. The tool highlights that activities can give rise to a range of pressures, to which the protected features of the MPA may be sensitive. The online tool provides more detailed information including the evidence that has been used in developing these recommendations.

Risks to not achieving the conservation objectives have been identified where there is an overlap between protected features and the activities associated with any pressures to which the features are sensitive. We have recommended management options to manage this risk. Specific details of the recommended management options for each activity are provided in the following sections. The overlap between different ongoing activities and/or planned developments and the protected features is described and mapped where appropriate. The text focuses on interactions in terms of physical overlap but the assessment of risk in the future should also take account of the intensity and frequency of activities within, or nearby, the MPA.

JNCC identify the following three management options:

- no additional management action required
- management action to reduce/limit pressures
- management action to remove/avoid pressures

All of the management options provided are based on the best available evidence of existing activities taking place within the MPA. The options do not preclude the introduction of management measures in the future for new activities starting or where an existing activity occurs at an increased intensity.

#### 7 Management options

Management options have been considered by activity, please click on the activities below to be directed to the relevant section:

#### **Fishing Activity**

Mobile bottom contact gear

- Otter trawling
- Static bottom contact gear
  - Line fishing
  - Set netting

#### Licensed activities

Oil and gas activity

#### Telecommunication cables

#### 7.1 Fishing activity

JNCC evaluated the management options to manage the risk of the protected features not achieving their Conservation Objectives in the North-east Faroe-Shetland Channel MPA. A gradient of management options have been considered to reduce exposure to pressures; these options are described below under three potential management scenarios. Protected features may require a combination of these options to ensure that they achieve their conservation objective. North-east Faroe-Shetland Channel MPA Management Options Paper v4.0 July 2014

#### a) No additional management

**b)** Additional management to reduce/limit pressures – where fisheries managers may wish to consider a range of measures that could be used to reduce the risk to features by reducing fishing pressure or preventing its increase to unacceptably high levels. These options could include:

- Area restrictions (e.g. permanently closing some or the entire extent of the feature)
- Temporal restrictions (e.g. closing parts of the extent of the feature on a rotational basis)
- Seasonal restrictions
- Gear restrictions (e.g. restriction on the use of more damaging gears)

Ideally, any measures would generally apply only to the part of the site where the feature is present. However, there may be circumstances where it could be desirable to extend management measures beyond the known distribution of a feature, for example, where conditions are suitable for a feature to exist but there are insufficient data to confirm its presence.

**c)** Additional management to remove/avoid pressures – where those fishing activities known to adversely affect the feature would be excluded and prevented from occurring in the future. Such exclusion would generally apply only to the part of the site where the feature is present, unless it was necessary to apply to a larger area or the whole MPA.

The likely effects on the feature condition and the risk to the conservation objectives were assessed using the evidence described in the <u>JNCC/SNH MPA fisheries management</u> <u>guidance</u>.

An estimation of >15m fishing activity taking place within the region of the MPA was derived from Vessel Monitoring System (VMS) data, with an average 2 hourly ping rate. VMS data for UK vessels were linked to skipper logbook information, which was used to determine the fishing gear being employed for each ping. For non-UK registered vessels where logbook information was not available, information on fishing gear employed was obtained from the 'primary gear' listed on the EU vessel register. All data were filtered using a simple speed rule of between 1 and 6 knots to indicate fishing activity for all gear types. Between 2006 and 2009, generalised values for intensity of effort were estimated by aggregating VMS data to a 0.05 x 0.05 decimal degree grid. Gridding has the advantage of enabling the quantification of effort at a discrete spatial scale (hours per unit area (grid resolution) per year), however, it precludes analysis of patterns of activity below the resolution of the grid. As a result, independent "pings" were also analysed for the period 2009 to 2011. To ensure anonymity of the data source, discrete VMS ping data is presented only in instances where it would not compromise the anonymity of an individual vessel (i.e. there are multiple vessels operating in the same area).

North-east Faroe-Shetland Channel MPA Management Options Paper v4.0 July 2014

#### 7.1.1 Fishing activity: Mobile bottom contact gear

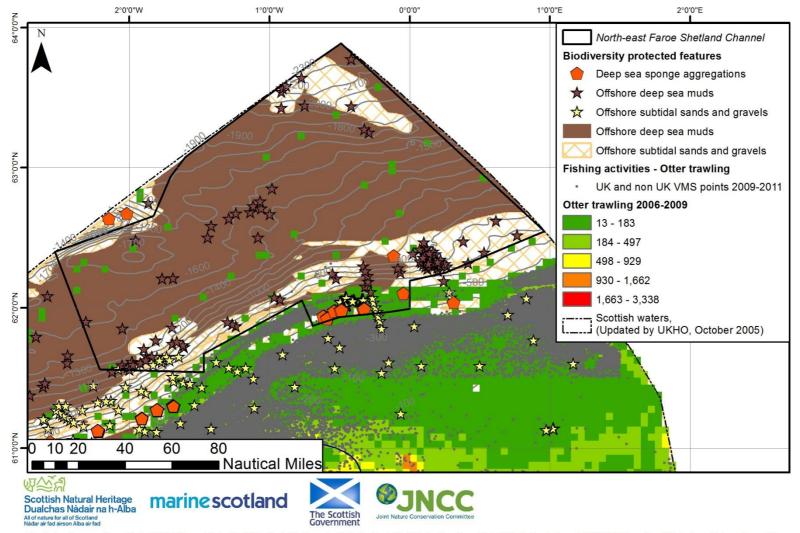
#### Otter trawling

Both UK and non-UK otter trawling effort in the MPA follow a similar pattern whereby activity is concentrated towards the southern and south-eastern boundaries (maximum effort in any overlapping fishing grid <917 hours 2006-2009). A second smaller scale fishery also exists along the 500-600m depth contour (maximum effort in any overlapping fishing grid <80 hours 2006-2009), as shown in Maps 3 and 3a. There is good evidence of activity from both French and German demersal trawlers, and there is also potential Norwegian otter trawling effort along the entirety of the shallower shelf portion of the MPA (<600m). Based on the VMS data available (maximum effort for combined Norwegian demersal gears in any overlapping fishing grid <292 hours 2006-2009) it has not been possible to distinguish between Norwegian long line and demersal otter trawl vessels, as shown in Maps 4 and 4a.

Norwegian vessels are known to fish within the MPA. However, because Norway is not a Member State of the EU, they do not have to supply VMS data to the same level of detail as EU Member States. Norwegian effort is shown in Maps 4 and 4a in relation to protected features, however, it is noted that the type of fishing taking place is not fully known.

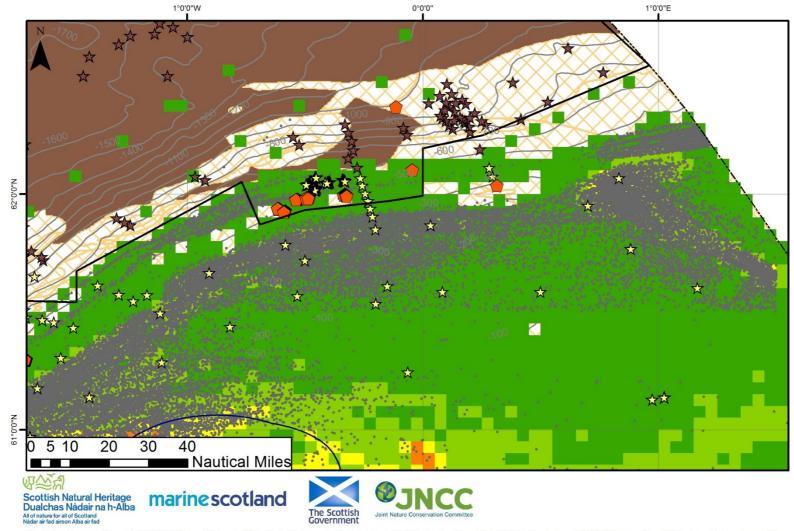
| Management options<br>(e.g. otter trawling) | No additional management - There is a risk of not<br>achieving the conservation objectives for offshore subtidal<br>sands and gravels and offshore deep-sea muds. The<br>conservation objective would not be achieved for deep-sea<br>sponge aggregations and JNCC recommend that this<br>option should not be applied in areas where deep-sea<br>sponge aggregations occur (depths between 400 and<br>600m).  |
|---|--|
|   | Reduce/limit pressures – This option would reduce, but<br>not entirely eliminate, the risk of not achieving the<br>conservation objectives for offshore deep-sea muds and<br>offshore subtidal sands and gravels. Appropriate<br>management could include a zoned approach where<br>management measures are introduced to protect specific<br>depth corridors representative of the range of sedimentary<br>communities on the continental slope. The depth corridors<br>selected would need to take into consideration management<br>proposed within the other MPAs on the continental slope, to<br>ensure that the depth-based variation of sedimentary<br>communities are adequately represented within managed<br>zones. There may be a greater requirement for restrictions<br>on gears that penetrate deeply into the sediment. The<br>location of areas to be covered by management restrictions<br>would be decided in consultation with fishers. Restrictions<br>could be permanent in some cases or temporary/adaptive in<br>others.<br>The conservation objective would not be achieved for deep-<br>sea sponge aggregations and JNCC recommend that this<br>option should not be applied in areas where deep sea<br>sponge aggregations occur. |
|   | Remove/avoid pressures: This option would reduce the risk of not achieving the conservation objectives for offshore deep-sea muds and offshore subtidal sands and gravels to the lowest possible levels.   |

This is the only option that would allow the conservation objective to be achieved for **deep-sea sponge aggregations** and JNCC recommend that this option should be applied in areas where deep-sea sponge aggregations occur.



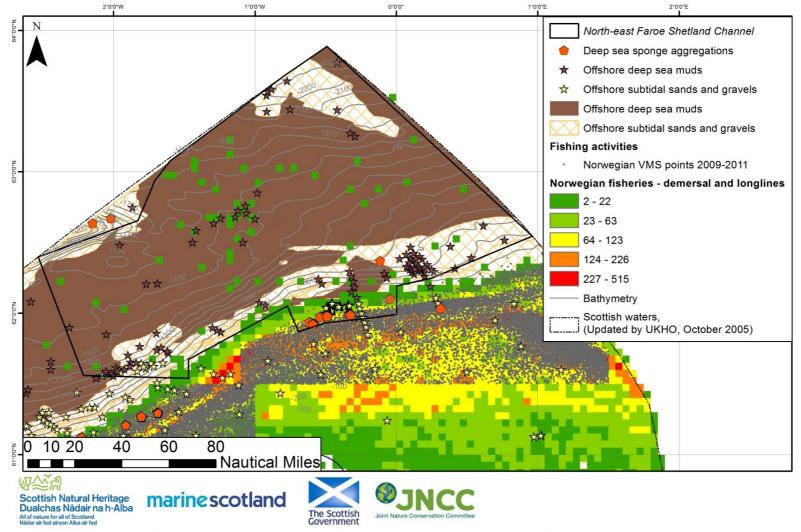
Map 3: Location of otter trawling activity in relation to protected features

Map displayed in geographic coordinates WGS84. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright). Landmass Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Fisherwet. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005. Bathymetry © GEBCO, 2011. Biological data from Geodatabase of Marine features in Scotland (GeMS v4) © Crown copyright). ICES WGDEC VME database 2014. MPA and geodiversity features © NLC and SNH 2012.



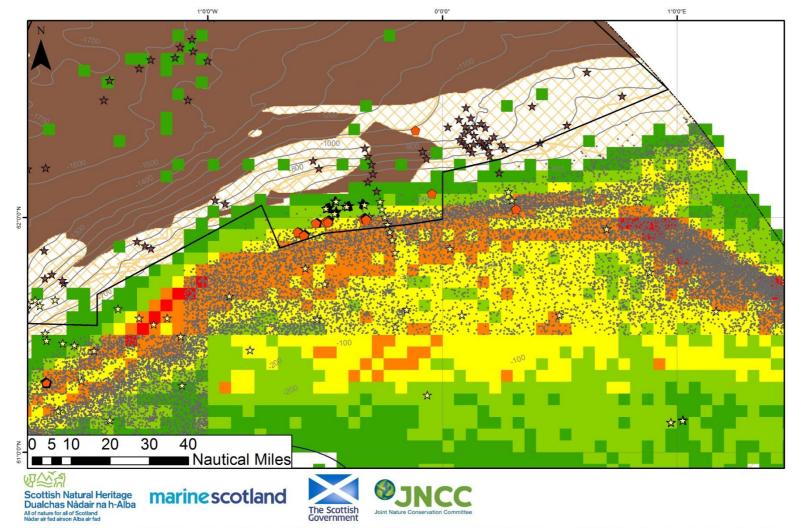
Map 3a: Zoomed map of location of otter trawling in relation to protected features (see Map 3 for legend)

Map displayed in geographic coordinates WGS84. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright). Landmass Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office Orbober 2005. Bathymetry © GEBCO, 2011. Biological data from Geodatabase of Marine features in Scotland (GeMSv4) © Crown copyright). CES WGDEC VIME database 2014. MPA and geodiversity features © MXC and SH1 2014. All rights reserved. Fisheres were DEFRA 2010. Fisheries VIMS point data @MS-2012.



Map 4: Location of Norwegian fishing effort in relation to protected features

Map displayed in geographic coordinates WGS94. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright), Landmass Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005. Bathymetry © GEBCO, 2011. Biological data from Geodabase of Marine features in Scotland (GeMSv4) © Crown copyright. ICES WGDEC VME database 2014. MPA and geodiversity features © JNCC and SNH 2014. All rights reserved. Fisheries raster data ©DEFRA 2010. Fisheries VMS point data ©MS-2012.



Map 4a: Zoomed map of Norwegian fishing effort (see Map 4 for legend)

Map displayed in geographic coordinates WGS84. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright). Landmass Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005. Bathymetry © GEBCO, 2011. Biological data from Geodatabase of Marine features in Scotland (GeMS v4) © Crown copyright, ICES WGDEC VME database 2014. IPA & geodiversity features © INCC & SNH, 2014. Fisheries rate rate and EPERA 2010. Fisheries rates 2012.

# 7.1.2 Fishing – static gear

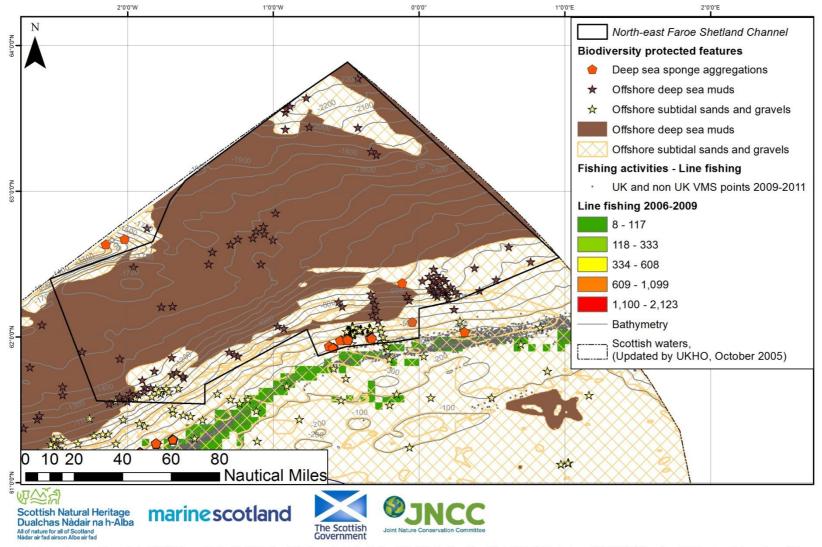
#### Line fishing

According to available VMS data, the majority of long-lining effort on the continental slope is focused in waters shallower than 400m. Consequently, long-line fishing effort in the Northeast Faroe-Shetland Channel MPA is likely to be negligible (i.e. fewer than 2 hours effort between 2006-2009 in any potentially overlapping VMS grid) as shown in Maps 5 and 5a. However, there is clearly annual variation in intensity of line fishing effort in the MPA with evidence of a more concentrated long-line fishery across the south east of the MPA in one of the six years analysed. There is also potential Norwegian long line effort along the southern edge of the MPA, although, it has not been possible to distinguish between Norwegian long line and demersal otter trawl vessels based on the data available (see Map 4).

### Set netting

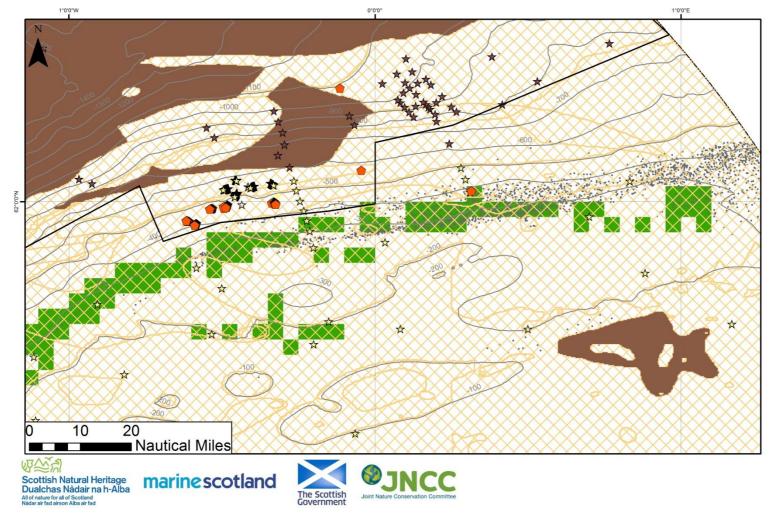
There is evidence of both UK (maximum effort in any overlapping fishing grid <210 hours 2006-2009) and German registered (maximum effort in any overlapping fishing grid <53 hours 2006-2009) demersal set netters operating along the southern and south-eastern boundary of the MPA, as shown in Maps 6 and 6a.

| Management options<br>(e.g. line fishing and<br>set netting) | No additional management: This option is considered to<br>be sufficient for bottom contacting static gear, to achieve the<br>conservation objectives for offshore deep sea muds and<br>offshore subtidal sands and gravels.<br>The conservation objective would not be achieved for deep-<br>sea sponge aggregations and JNCC recommend that this<br>option should not be applied in areas where deep-sea<br>sponge aggregations occur (depths between 400 and<br>600m). |
|--|--|
|  | <b>Remove/avoid pressure:</b> This is the only option that would achieve the conservation objective for <b>deep-sea sponge aggregations</b> and JNCC recommend that this option should be applied in areas where deep-sea sponge aggregations occur.   |



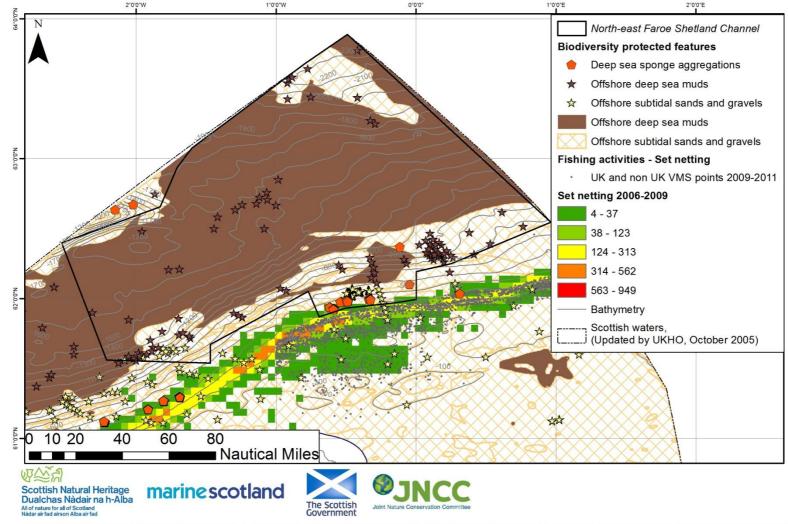
Map 5: Location of line fishing activity in relation to protected features

Map displayed in geographic coordinates WGS84. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright). Landmass Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005. Bathymetry © GECO, 2011. Biological data from Geodatabase of Marine features in Scotland (AeBVs4) © Crown copyright). ICES WGDEC VME database 2014. MPA and geodiversity features © JNCC and SNH 2014. All rights reserved. Fisheries raster data ©DEFRA 2010. Fisheries VMS point data @MS-2012.



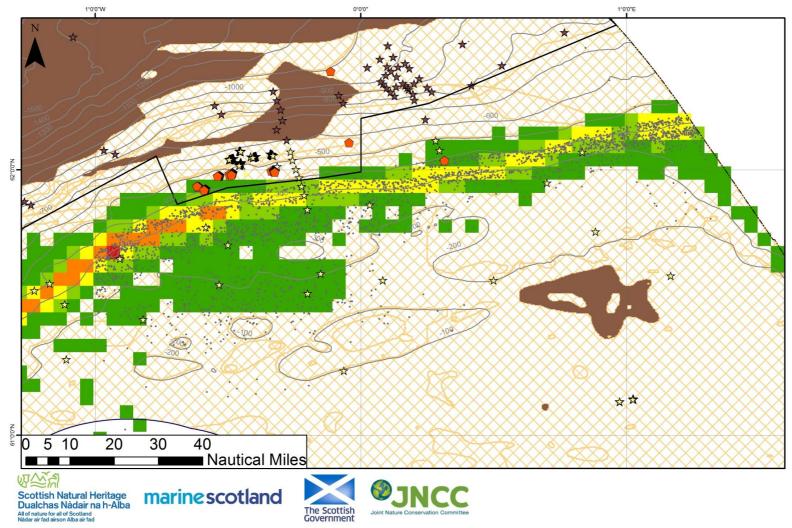
Map 5a: Zoomed in map of line fishing in relation to protected features (please see Map 5 for legend)

Map displayed in geographic coordinates WGS84. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright). Landmass Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005, Bathymetry © GEBCO, 2011. Biological data from Geodatabase of Marine features in Scotland (GeMS v4) © Crown copyright. ICES WGDEC VME database 2014. MPA and geodiversity Faures © JNCC and SNH 2014. All rights reserved. Fishenes Faster data DEFERA 2010. Fisheries WMS-2012.



Map 6: Location of set netting in relation to protected features

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Map 6a: Zoomed map of location of set netting activity in relation to protected features (please see Map 6 for legend)

Map displayed in geographic coordinates WGS84. The exact limits of the UK Continental Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright). Landmass Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Sociatind (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005. Bathymetry © GEBCO, 2011. Biological data from Geodatabase of Marine features in Sociatiand (GeMSv4) © Crown copyright). ILCES WOBCE 2014. Division, But exerved. Fishers exerved. Fishers Reserved. Fishers Reserved. Fishers VMS point data ©MS-2012.

### 7.2 Licensed Activities: Oil and gas

Oil and gas activity is limited within the MPA, with one well with activity currently suspended present in the south-east of the MPA (Map 7). However, part of the MPA overlaps with license blocks identified by the Department of Energy and Climate Change (DECC) and may be subject to further oil and gas development in the future.

The Department of Energy and Climate Change (DECC), as the regulator for oil and gas activity in the UK, would be responsible for making the decision as to whether a proposed activity and/or development is capable of affecting (other than insignificantly)<sup>3</sup> the protected features of a Nature Conservation MPA.

For those activities and/or developments that DECC considers require an EIA, JNCC is willing to engage at an early stage with DECC and the operator to discuss the specific details of the proposed operation and/or development and offer advice on any potential effects. In so doing, JNCC will make reference to information on the sensitivity of the protected features to proposed activities and/or developments that is publicly available through 'FEAST' – The FEatures, Activities, Sensitivities Tool (Marine Scotland, 2013).

JNCC will consider the nature, scale, timing and duration of activities in providing advice. Early engagement will facilitate discussions on the information required for JNCC to advise on any possible implications to the protected features achieving their conservation objectives. If JNCC identify a potentially significant effect, mitigation measures may be advised. Any such advice provided as part of the licensing process will need to be site and operation specific. On this basis, the information JNCC provides as part of the (present) Management Options Paper is necessarily generic and therefore indicative.

Further information on the regulatory framework concerning oil and gas activity within Nature Conservation MPAs is included in the <u>MPA Management Handbook</u>.

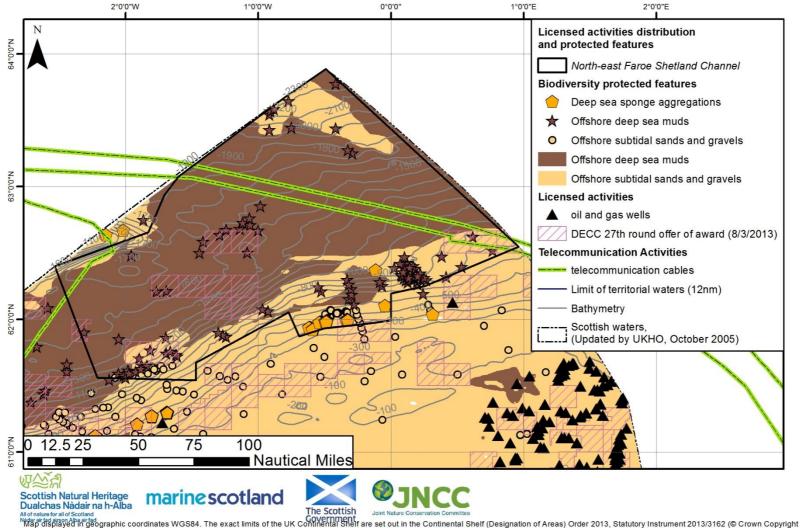
| Management options   | The  | potential  | impacts    | of   | oil    | and    | gas    | activity | and/or  |
|----------------------|--|------------|------------|------|--------|--------|--------|----------|---------|
| Oil and gas activity | deve   | lopments o | n the prot | ecte | d fea  | tures  | within | the MPA  | will be |
|                      | assessed through the existing EIA process on a case-by-case  |            |            |      |        |        |        |          |         |
|                      | basis. Early dialogue with DECC and JNCC would help identify |            |            |      |        |        |        |          |         |
|                      | and r  | esolve any | issues at  | an e | arly s | stage. |        |          |         |

#### 7.3 Telecommunication cables

Three telecommunication cables cut through the MPA. Telecommunications cables are not subject to assessment under the EIA regulations (2009) and therefore do not, in general, go through the marine licensing process. As such, it is not possible to develop specific management options for unlicensed activities such as cables. Instead, discussions with operators would be welcomed at the earliest opportunity regarding plans for new cable installations, or for the maintenance or removal of existing cables.

| Management options | Early discussions between JNCC and the operator would be           |
|--------------------|--|
| Telecommunication  | welcomed for all plans relating to cables within the MPA,          |
| activity           | including installation, maintenance and removal. It is             |
|                    | recommended that a voluntary Environmental Impact                  |
|                    | Assessment is undertaken to support plans for any new cable        |
|                    | installation to assess the impacts of the associated activities on |
|                    | the protected features present.                                    |

<sup>&</sup>lt;sup>3</sup> Reference to 'affecting the status of (other than insignificantly)' relates to the requirements on public authorities set out in the UK and Scottish Marine Acts (Sections 125 and 82 respectively) in relation to licensed activities taking place within MPAs.



Map 7: Location of oil and gas activity and pipelines and telecommunication cables in relation to protected features

"Map displayed in geographic coordinates WGS84. The exact limits of the UK Continential'Shelf are set out in the Continental Shelf (Designation of Areas) Order 2013, Statutory Instrument 2013/3162 (© Crown Copyright Landmass Ordnance Survey © Crown Copyright and database right 2011. All rights reserved. Scotland (Adjacent waters) Updated by the Law of the Sea Division, United Kingdom Hydrographic Office October 2005. Bathymetry © GEBCO, 2011. Biological data from Geodatabase of Marine features in Scotland (GeMS v4) © Crown copyright. ICES WGDEC VME database. MPA and geodiversity features © JNCC and SNH 2014. All rights reserved. Licensed activities ©UKDEAL 2011-2012, UKCPC 2011, DECC 2013.

# 8 Conclusions and further recommendations

Marine Scotland will be responsible for making recommendations to Scottish Ministers on any management measures that may be required. These measures will be developed through discussion with stakeholders following MPA designation. Any statutory measures will be subject to consultation and the processes normally required by the legislation will be utilised. Where fisheries management measures are necessary and the Nature Conservation MPA is located where Scottish Ministers do not have exclusive competence, then the intention is that an application will be made to the European Commission for measures using the mechanisms of the Common Fisheries Policy. This process will include consultation on the measures at the EU level.

# 9 Further information

The following documents are available for background information:

- SNH and JNCC MPA network advice (December 2012) <u>www.jncc.defra.gov.uk/page-5510</u>
- The MPA Management Handbook <u>www.scotland.gov.uk/Topics/marine/marine-</u> <u>environment/mpanetwork/engagement/ManagementHandbook</u>
- Features Activities Sensitivity Tool (FEAST) www.marine.scotland.gov.uk/FEAST/Index.aspx
- JNCC and SNH Fisheries guidance <u>www.jncc.defra.gov.uk/page-6498</u>

The following documents about the North-east Faroe-Shetland Channel MPA are also available at <u>www.jncc.defra.gov.uk/page-6483</u>:

- Site summary
- Data confidence assessment
- Detailed assessment against the MPA Selection Guidelines