

<b>Scottish MPA Project Management Options Paper</b>
<b>HATTON ROCKALL BASIN NATURE CONSERVATION MARINE PROTECTED AREA</b>
JULY 2014

JNCC developed the present paper to support discussions with stakeholders about the management of activities within this Nature Conservation Marine Protected Area (MPA). The paper should only 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

The documents are all available at [www.jncc.defra.gov.uk/page-6482](http://www.jncc.defra.gov.uk/page-6482)

<b>Document Distribution List and Version Control</b>				
<b>Format</b>	<b>Version</b>	<b>Issue date</b>	<b>Version development and review</b>	<b>Issued to</b>
Electronic	1.0	16/04/2013	Internal drafting and review of pre-version 1.0 drafts by JNCC SMPA team, Offshore Industry Advisors, Fisheries Advisors and Marine Scotland prior to release to MPA Sub Group	MPA Sub Group
Electronic	1.82	18/06/2013	Review of documents to take account of MPA Sub Group comments and release to Marine Scotland	Marine Scotland
Electronic	2.0	24/07/2013	Review of document to take account of Marine Scotland Science and Marine Scotland comments.	Marine Scotland
Electronic	3.0	24/07/2013	Revision to take account of editorial review and Grade 7 review prior to release of document for public consultation.	Uploaded to JNCC website
Electronic	4.0	07/07/2014	Document update to align with designation status and revise text in response to consultation responses	Delivery to Marine Scotland to support MPA designation and upload to website

## DEVELOPMENT OF MANAGEMENT OPTIONS FOR THE HATTON-ROCKALL BASIN MPA

### 1 Management Options Summary

This section summarises JNCC's management options for the Hatton Rockall Basin MPA. The options are being considered in order to eliminate or manage the risk of not meeting the conservation objective to conserve the protected features within the MPA. Full details on these options are provided later in the Management Options Paper. Discussions between sea users, scientists and managers will be needed to inform the development of subsequent management measures.

Activity	Management options
<b>Fishing activity:</b> <b>All bottom contact gears</b>	<p><b>No additional management:</b>  There is a risk of not achieving the conservation objective for <b>offshore deep-sea muds</b>.  The conservation objective would not be achieved for <b>deep-sea sponge aggregations</b>. JNCC recommend this option is not applied in areas where deep-sea sponge aggregations occur.</p> <p><b>Reduce/limit pressures:</b>  This option would reduce, but not entirely eliminate, the risk of not achieving the conservation objective for <b>offshore deep-sea muds</b>. Appropriate management could include closure of a proportion of the site to damaging gears. The location of areas to be covered by management restrictions would be decided in consultation with fishers. Restrictions could be permanent in some cases or temporary/adaptive in others.  The conservation objective would not be achieved for <b>deep-sea sponge aggregations</b>. JNCC recommend this option is not applied in areas where deep-sea sponge aggregations occur.</p> <p><b>Remove/avoid pressures:</b>  This option would reduce the risk of not achieving the conservation objective for <b>offshore deep-sea muds</b> to the lowest possible levels.  This is the only option that would allow the conservation objective to be met for <b>deep-sea sponge aggregations</b> and JNCC recommend this option is applied to known areas of sponge aggregations.</p>
<b>Telecommunication cables</b>	<p>JNCC welcome early discussions with the operator for all plans relating to cables within the MPA, including installation, maintenance and removal. JNCC recommend 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.</p>

## 2 Introduction

The Hatton Rockall Basin Marine Protected Area (MPA) is located in the far west of Scotland's offshore waters. At approximately 1.1km depth, the muddy basin hosts a range of animals adapted to living in the deep-sea. The seabed within this area is criss-crossed with unique examples of polygonal faults, creating an unusual relief on the seabed that provides habitat for deep-sea sponges. The area of the Hatton Rockall Basin MPA is approximately 1,256 km<sup>2</sup>.

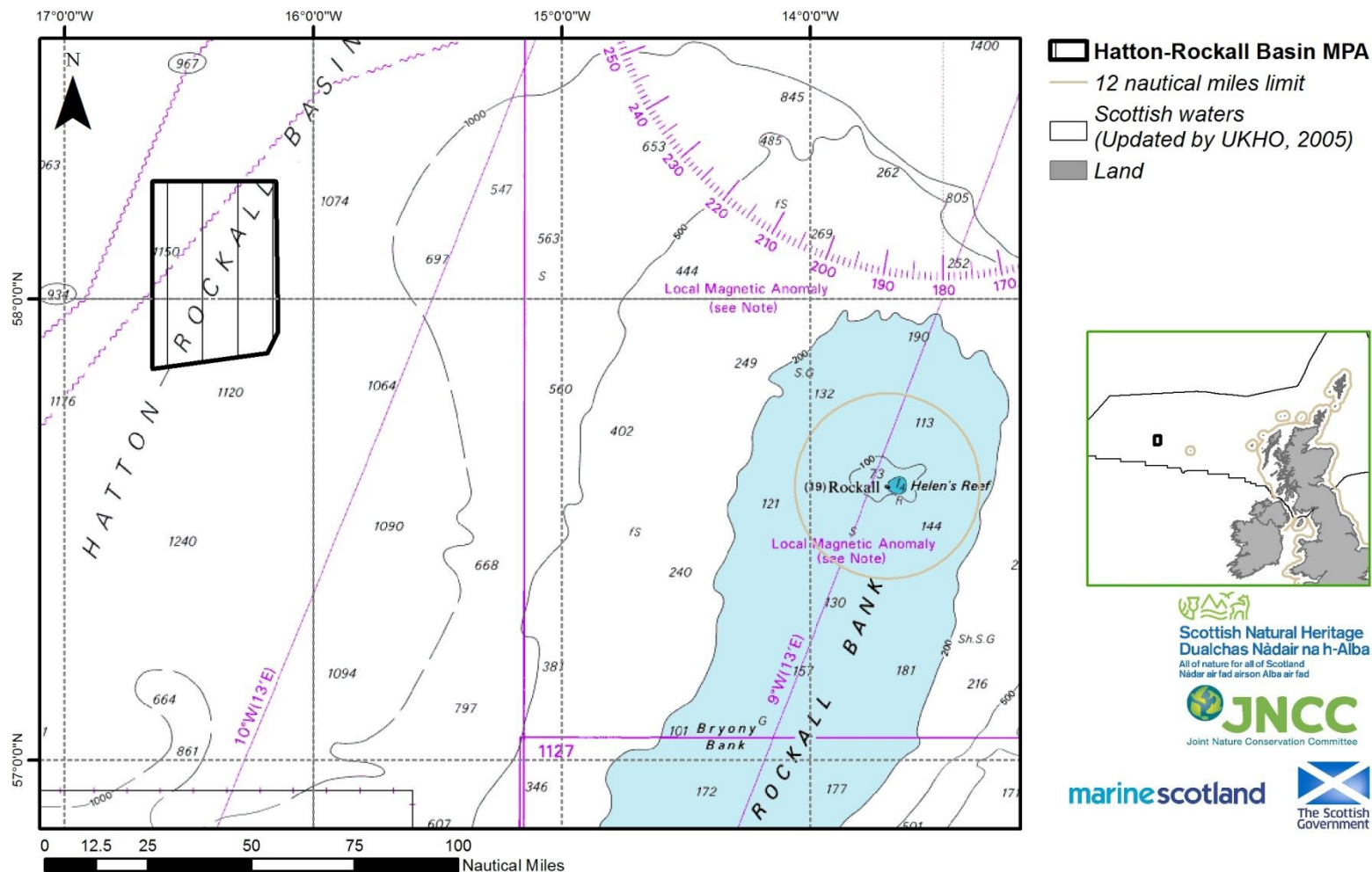
Further details of the MPA can be found in the Hatton Rockall Basin MPA Site Summary Document available at [www.jncc.defra.gov.uk/page-6482](http://www.jncc.defra.gov.uk/page-6482).

Limited human activity currently takes place within the MPA, mostly as a result of its far west location and the water depth. The MPA lies outside of UK fishery limits and therefore fishing activity and its associated Vessel Monitoring System data are managed by the North East Atlantic Fisheries Commission (NEAFC). Evidence of fishing activity taking place within the region of the MPA is limited, although non-UK fishing vessels are known to be present in the region and thus management options are presented on the basis of potential rather than documented activity. One telecommunication cable currently intersects the MPA.

This document has been produced to provide background information on the development of management for the Hatton Rockall Basin MPA, and will be used to support 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 JNCC currently consider capable of delivering the conservation objectives for protected features. The document encourages stakeholders with an interest in the area to input to the development of appropriate management measures that will ensure the Hatton Rockall Basin MPA makes a genuine and long-lasting contribution to the protection of Scotland's marine environment.

Map 1 Location of the Hatton Rockall Basin 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

### 3 Roles

JNCC provides conservation advice to Scottish Government on how it might be possible to achieve the conservation objectives for the protected features within MPAs. JNCC's advice includes possible management options for controlling human activities in the Hatton Rockall Basin 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 these measures. As the North East Atlantic Fisheries Commission (NEAFC) is responsible for management within the NEAFC regulatory area, Scottish Ministers will decide whether to make a request via the European Union to NEAFC for the introduction of fisheries management measures. NEAFC Measures are agreed upon with the contracting parties which make up the Commission, taking into account any independent scientific advice provided by ICES. Proposals for closures must be without prejudice to the sovereign rights of Coastal States over the continental shelf in accordance with the United Nations Convention on the Law of the Sea. However, it is the responsibility of the flag-state that licenses the vessel to fish to ensure that it complies with all the regulations.

According to UN Resolution (61/105) regional fisheries management organisations such as NEAFC are specifically charged with protecting vulnerable marine ecosystems (VME) from bottom-contact fishing activities that may have significant adverse impacts on such ecosystems<sup>1</sup>. In their role as scientific advisors, ICES may be called upon to assess the evidence for feature presence/distribution within the Hatton Rockall Basin MPA and assess the appropriateness of any management measures proposed in delivering the features' conservation objectives.

### 4 Protected features and conservation objectives

The Hatton Rockall Basin MPA has been designated as part of a network of Nature Conservation MPAs which are being established to help conserve a range of Scotland's important marine habitats, wildlife, geology and landforms. The Hatton Rockall Basin MPA has been designated for the following protected features, as shown in Map 2:

- Deep sea sponge aggregations\*
- Offshore deep sea muds
- Geodiversity features - Sediment drifts and polygonal fault systems\*\*

\*In March 2013, the ICES\NAFO Joint Working Group on Deep-water Ecology (WGDEC)<sup>2</sup> recommended a closure to all bottom-contact fishing practices which encompasses the known extent of deep-sea sponge aggregations in the Hatton-Rockall Basin MPA. The recommendation is for the protection of Vulnerable Marine Ecosystems (VMEs), which in this case encompasses the deep-sea sponge aggregations MPA feature.

\*\*These geodiversity features are considered to have a low sensitivity to the pressures associated with marine activities taking place within the MPA<sup>3</sup>. As such, there is not considered to be a significant risk to the features achieving their conservation objectives and

---

<sup>1</sup> FAO. (2009). International Guidelines for the Management of Deep-sea Fisheries in the High Seas [http://www.fao.org/fileadmin/user\\_upload/newsroom/docs/i0816t.pdf](http://www.fao.org/fileadmin/user_upload/newsroom/docs/i0816t.pdf)

<sup>2</sup> The EU, Denmark (in respect of the Faroe Islands and Greenland), Norway, Iceland and the Russian Federation

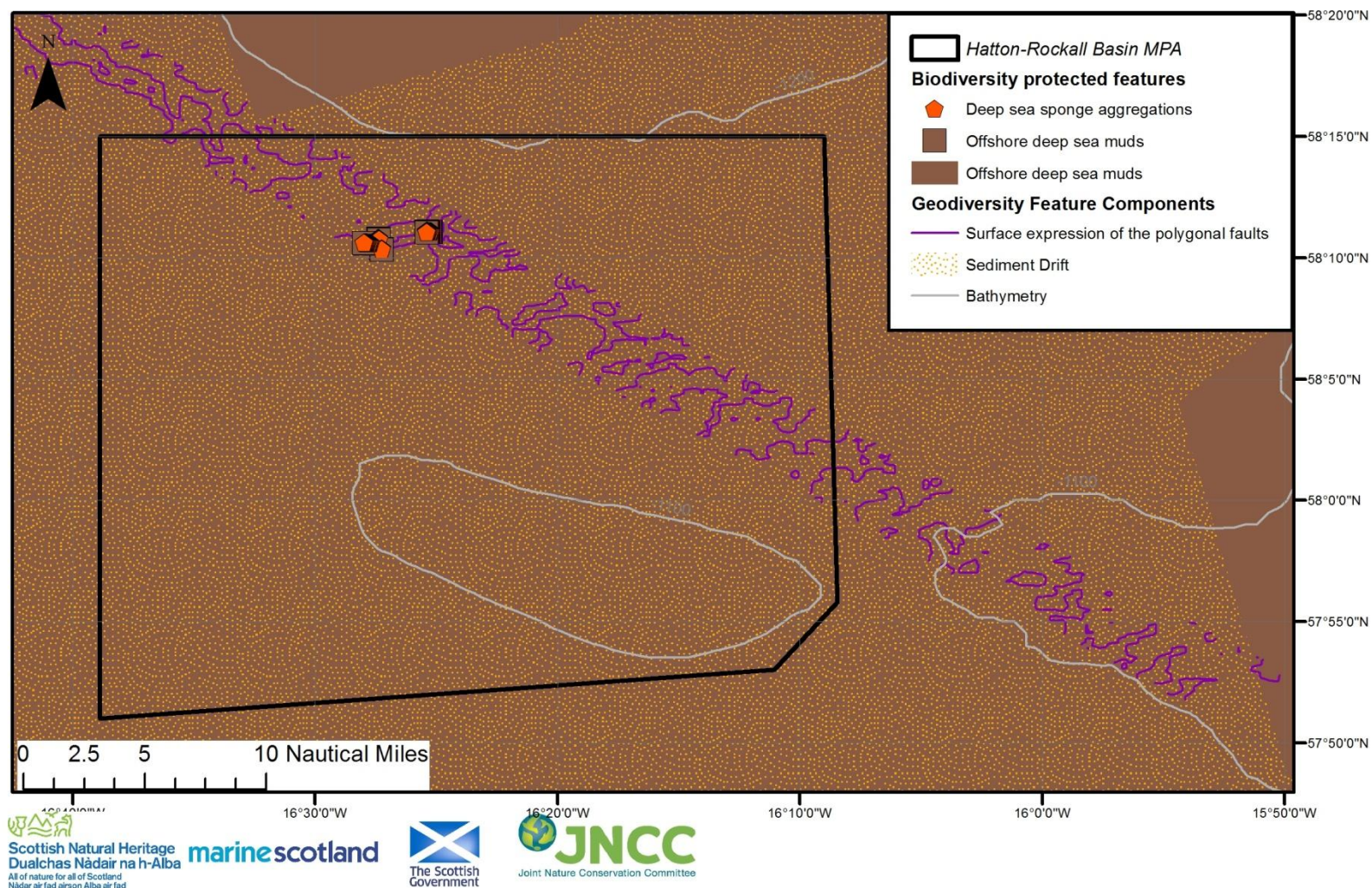
<sup>3</sup> Brooks, A.J., (2013). Assessing the sensitivity of geodiversity features in Scotland's seas to pressures associated with human activities. *Scottish Natural Heritage Commissioned Report No. 590*.

so the features have not been considered further in the context of the management options presented below.

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 Hatton Rockall Basin MPA are '*conserve*' for all features. The condition of the features has not been verified by direct evidence of ecological condition 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 Hatton Rockall Basin 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. Biological data from Geodatabase of Marine features in Scotland (GeMSv4) © Crown copyright. MPA and geodiversity features © JNCC and SNH 2014. All rights reserved.



## 5 Overview of activities

Limited information is available on the human activities taking place within the Hatton-Rockall Basin MPA. Only non-UK fishing effort has been recorded, but it is not known what fleet or gear types are being used because of the coarse resolution of the data. There is anecdotal evidence that otter-trawling and static gear fishing activity takes place in the wider region that overlaps with the MPA. Further discussions with fishermen and their managers who know the region will be required to improve our understanding of these activities (e.g. distribution and intensity etc).

Those activities to which the protected features are sensitive are explored in detail in the following 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. Should other activities not considered occur in the future, they would need to be considered on a case-by-case basis.

## 6 Development of management options

Management options have been developed for each MPA where JNCC consider that some form of active management intervention may be necessary to achieve the conservation objective for each protected feature. A risk-based approach was used to identify appropriate management options i.e. the advice was focused where it was believed there is a risk to not achieving the conservation objective for the protected features. 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.

Management options have focused 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 which 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 risk to the features not achieving 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 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 where appropriate, mapped. 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 the activities occurring within, or nearby, the MPA.

JNCC identify the following three management options:

- no additional management required
- management to reduce/limit pressures
- management 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 a management measure in the future for new activities, 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

### Telecommunication cables

#### 7.1. Fishing activity

JNCC has evaluated management options to manage the risk of not achieving the conservation objectives for the protected features of the Hatton Rockall Basin MPA. A gradient of management options have been considered to reduce exposure to pressures, these have been described under three potential management option categories below. Protected features may require a combination of these options to ensure that they achieve their conservation objective.

##### 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 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 in which it could be desirable to extend management measures beyond the known area of feature distribution, 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 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 [JNCC/SNH MPA fisheries management guidance](#).

### **Fishing activity in the MPA**

Due to the far west location of the Hatton-Rockall Basin MPA, any fishing vessels active in the region will be greater than 15m in length and thus will be fitted with VMS transponders. However, the MPA is located outside of UK fishery limits, and so UK agencies have no authority to collect VMS data for non-UK vessels active in the area. Instead, monitoring of vessel activity is administered by the North East Atlantic Fisheries Commission (NEAFC). Currently JNCC has no formal data sharing agreements with NEAFC, although access to NEAFC data for 2001-2006 was provided by the International Council for the Exploration of the Sea (ICES). Due to the nature of the data available, (i.e. no vessel identifier and no associated vessel speed information) it was not possible to distinguish between vessels steaming and fishing events, as such, interpretation of the data has been limited to presence/absence of vessels in the area.

Based on VMS data from 2006 – 2011, there is no evidence of fishing activity by UK vessels in the Hatton-Rockall Basin MPA. From the limited VMS evidence available for non-UK fleets, it is likely that the extent of demersal activity in this deep water site (>1000m) is negligible. However, there are records of fishing vessel presence broadly overlapping the deep-sea sponge records within the MPA between 2001 and 2006, as shown in map 3.

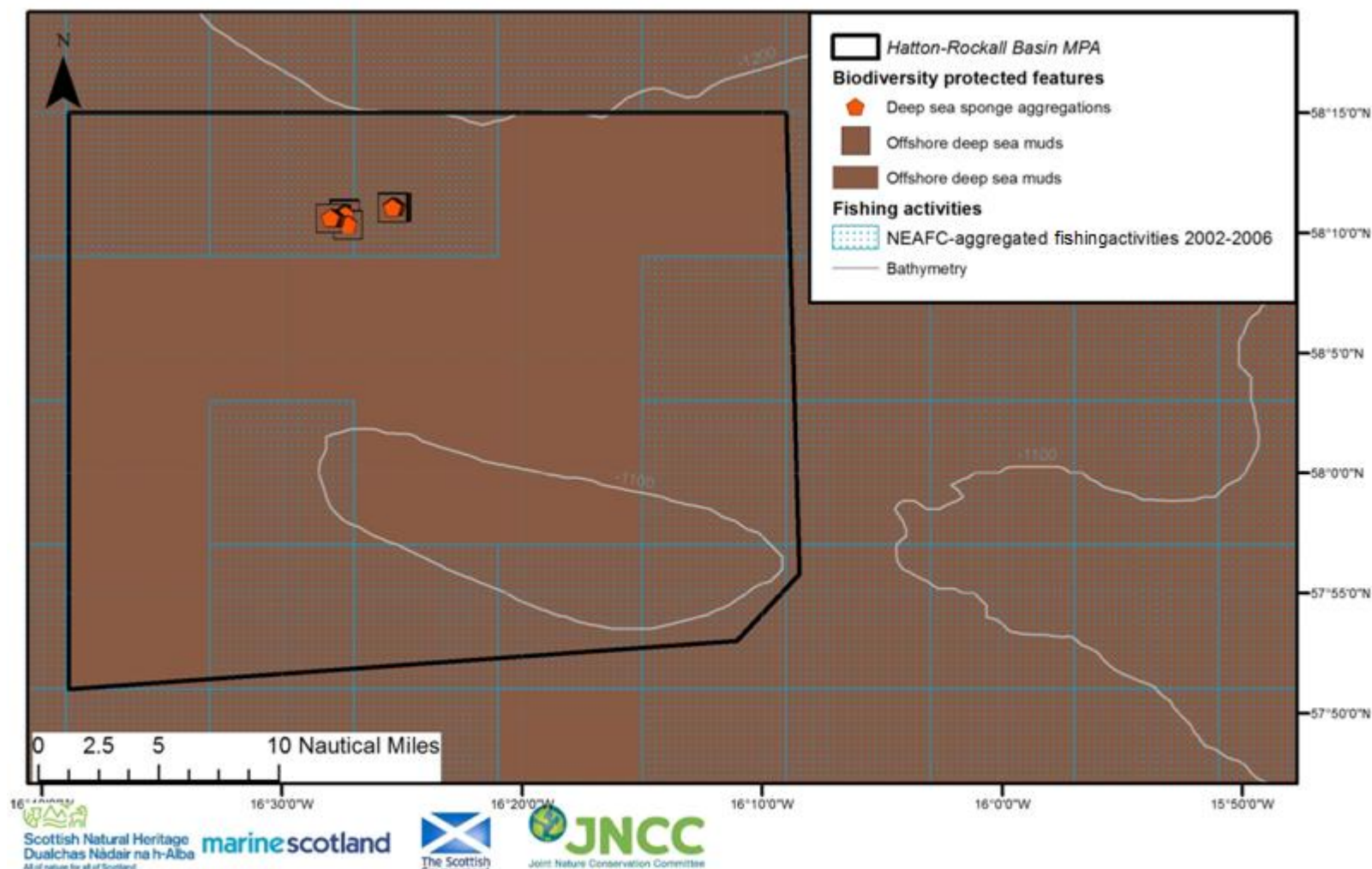
Based on historic fishing activity, the MPA lies in a region defined as a “new bottom fishing area” under current NEAFC regulations<sup>4</sup>. This means that any proposed fishing activity would require an environmental assessment and fishing would only be permitted if it can be shown that it would not cause damage to the Vulnerable Marine Ecosystems present. In addition, in March 2013, the ICES/NAFO Joint Working Group on Deep-water Ecology (WGDEC) recommended a closure to all bottom-contact fishing practices that overlap with the known extent of deep-sea sponge aggregations in the Hatton-Rockall Basin MPA<sup>5</sup>. The recommendation aims to protect the Vulnerable Marine Ecosystems, which in this case encompasses the deep-sea sponge aggregations MPA feature.

---

<sup>4</sup> NEAFC Permanent Committee on Management and Science (2011). Consolidated text of all NEAFC recommendations on regulation bottom fishing.  
[http://www.neafc.org/system/files/Consolidated\\_bottomfishing\\_regs\\_as\\_ammended\\_by\\_rec\\_12\\_2013.pdf](http://www.neafc.org/system/files/Consolidated_bottomfishing_regs_as_ammended_by_rec_12_2013.pdf)

<sup>5</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

Map 3: Location of NEAFC aggregated fishing activities 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 © GEBCO, 2011. Biological data from Geodatabase of Marine features in Scotland (GeMSv4) © Crown copyright. MPA and geodiversity features © JNCC and SNH 2014. All rights reserved.

<b>Management options</b> <b>Fishing activity</b> (e.g. all bottom contact fishing gear)	<p><b>No additional management:</b>          There is a risk of not achieving the conservation objective for <b>offshore deep-sea muds</b>.          The conservation objective would not be achieved for <b>deep-sea sponge aggregations</b>. JNCC recommend this option is not applied in areas where deep-sea sponge aggregations occur.</p> <p><b>Reduce/limit pressures:</b>          This option would reduce, but not entirely eliminate, the risk of not achieving the conservation objective for <b>offshore deep-sea muds</b>. Appropriate management could include closure of a proportion of the site to damaging gears. The location of areas to be covered by management restrictions would be decided in consultation with fishers. Restrictions could be permanent in some cases or temporary/adaptive in others.          The conservation objective would not be achieved for <b>deep-sea sponge aggregations</b>. JNCC recommend this option is not applied in areas where deep-sea sponge aggregations occur.</p> <p><b>Remove/avoid pressures:</b>          This option would reduce the risk of not achieving the conservation objective for <b>offshore deep-sea muds</b> to the lowest possible levels.          This is the only option that would allow the conservation objective to be met for <b>deep-sea sponge aggregations</b> and JNCC recommend this option is applied to known areas of sponge aggregations.</p>
--	---

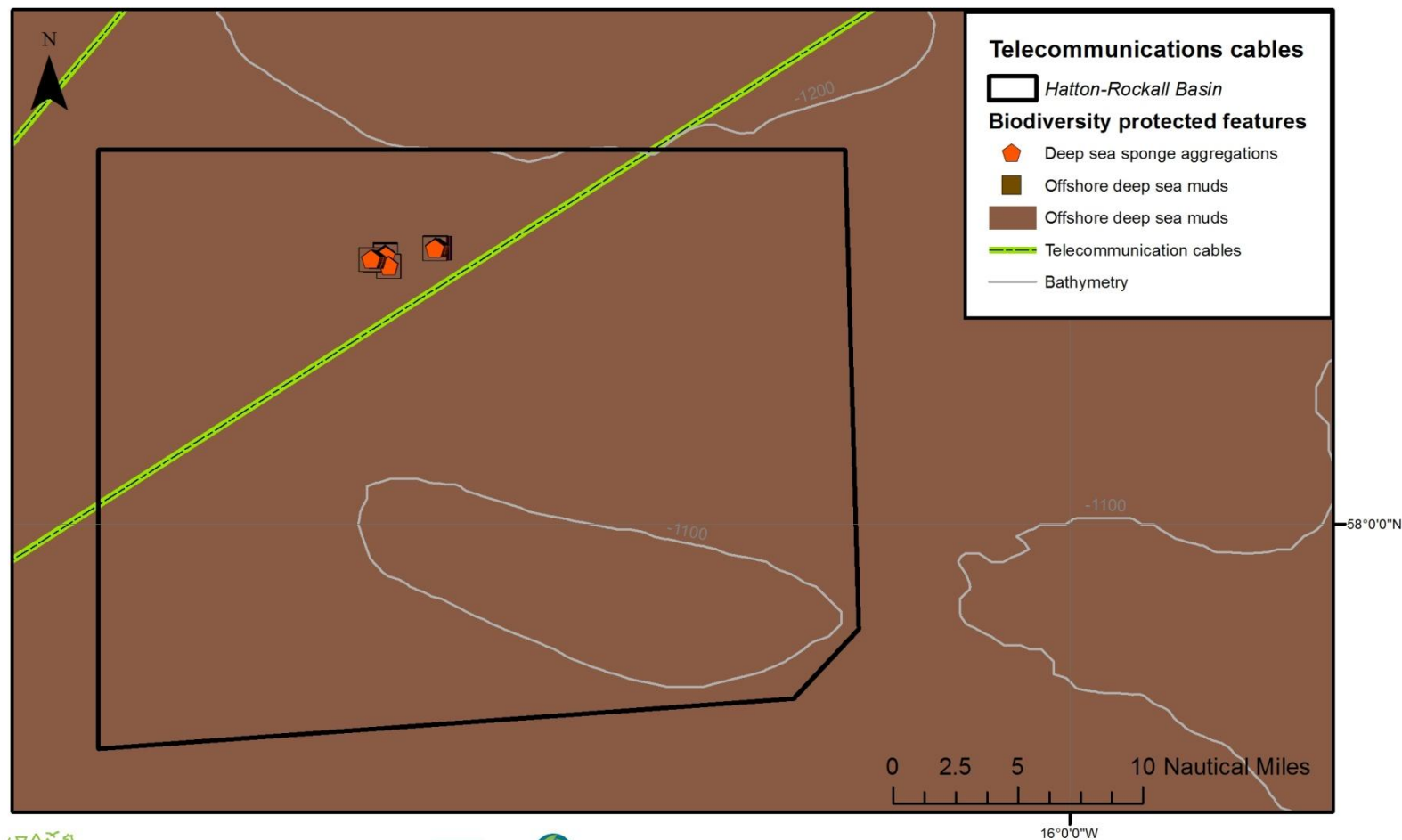
## 7.2. Telecommunication cables

Telecommunications cables are not subject to assessment under UK or EU legislation 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, JNCC welcomes early discussions with operators regarding their plans for new cable installations, and/or the maintenance or removal of existing cables.

The possibility of licensed activities taking place within the MPA in the near future is thought to be low due to the far offshore location of the MPA. However, the MPA falls within a claimed area of the UK continental shelf. Should interest be expressed, either in relation to cable associated works, or other developments in the future, a legal framework for consenting licensed activities would need to be developed.

<b>Management options</b> <b>Telecommunication cables</b>	JNCC welcome early discussions with the operator for all plans relating to cables within the MPA, including installation, maintenance and removal. JNCC recommend 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.
--	--

Map 4: Location of telecommunication cables in relation to protected features



Scottish Natural Heritage  
Dualchas Nàdair na h-Alba  
All of nature for all of Scotland  
Nàdar air fad airson Alba air fad

marinescotland

The Scottish  
Government

JNCC  
Joint Nature Conservation Committee

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 (GeMSv4) © Crown copyright. MPA and geodiversity features © JNCC and SNH 2014. All rights reserved. Licensed activities © UKCPC 2011.

abi



## 8 Conclusions and further recommendations

Marine Scotland will be responsible for making recommendations to Scottish Ministers on any management measures that may be required. Scottish Ministers will be responsible for deciding whether to make a request via the European Union to NEAFC for the introduction of fisheries management measures in this MPA.

## 9 Further information

The following documents are available for background information:

- SNH and JNCC MPA network advice (December 2012) – [www.jncc.defra.gov.uk/page-5510](http://www.jncc.defra.gov.uk/page-5510)
- The MPA Management Handbook - [www.scotland.gov.uk/Topics/marine/marine-environment/mpanetwork/engagement/ManagementHandbook](http://www.scotland.gov.uk/Topics/marine/marine-environment/mpanetwork/engagement/ManagementHandbook)
- FEatures Activities Sensitivity Tool (FeAST) - [www.marine.scotland.gov.uk/FEAST/Index.aspx](http://www.marine.scotland.gov.uk/FEAST/Index.aspx)
- JNCC and SNH Fisheries Management Guidance – [www.jncc.defra.gov.uk/page-6498](http://www.jncc.defra.gov.uk/page-6498)

The following documents about the Hatton Rockall Basin MPA are also available at [www.jncc.defra.gov.uk/page-6482](http://www.jncc.defra.gov.uk/page-6482):

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