

Marine Protected Areas in Scotland's Seas

Guidelines on the selection of MPAs
and development of the MPA
network

marinescotland



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



Executive Summary

Scottish Government is committed to a clean, healthy, safe, productive and biologically diverse marine and coastal environment that meets the long term needs of people and nature.

Site protection is an integral part of achieving this and is a component of the three pillar approach to marine nature conservation advocated by Marine Scotland. The three pillars are species measures, site protection measures and wider seas policies and measures and are discussed in Marine Scotland's *Strategy for Marine Nature Conservation in Scotland*.

New powers to designate Marine Protected Areas (MPAs)

The Marine (Scotland) Act and the UK Marine and Coastal Access Act include new powers and duties to designate Marine Protected Areas (MPAs) to protect features of importance to Scotland.

The Marine (Scotland) Act includes provisions to designate MPAs for the following purposes inside 12 nautical miles:

- Nature Conservation MPAs for biodiversity and geodiversity features
- Demonstration & Research MPAs
- Historic MPAs

The UK Marine and Coastal Access Act includes equivalent provisions for Scottish Ministers to designate MPAs for biodiversity and geodiversity features in offshore waters adjacent to Scotland. For the purposes of this document, MPAs for biodiversity and geodiversity (under both pieces of legislation) are collectively referred to as Nature Conservation MPAs.

Scope and timeframe of the Guidance

The guidelines apply to the marine area for which Scottish Ministers have devolved responsibility. For Nature Conservation MPAs and MPA network development, the guidelines apply to Scottish territorial waters (out to 12 nm) and offshore waters adjacent to Scotland as defined in the UK Act. The guidelines for Demonstration & Research MPAs apply inside 12 nm.

Milestones and key deliverables in the Scottish Government's commitment to clean, healthy and biologically diverse marine and coastal environment include:

- Deliver a MPA network to meet national and international commitments by 2012
- Report on progress of a MPA network by 2013 and deliver a well managed network of sites by 2016 (Marine Strategy Framework Directive)
- Define Good Environmental Status by 2012 and deliver by 2020 (Marine Strategy Framework Directive)

The *Guidelines on the Selection of MPAs and development of the MPA network* are aimed primarily at the period to 2012 i.e. the first key milestone in delivery of a MPA network. However they also include provision for longer term obligations.

As our knowledge of the marine environment improves our consideration of ecological coherence will evolve and it is anticipated that network design may be adapted to reflect this.

Nature Conservation MPAs and an ecologically coherent network

The Scottish MPA Project led by Marine Scotland in partnership with SNH, JNCC and others is taking forward work at a national level to identify Nature Conservation MPAs and establish a network of sites in Scotland's seas.

Nature Conservation MPAs will be based primarily on scientific evidence using the guidelines in Annex 1 of this document. MPA search features will be used to underpin the initial selection of possible MPA locations. MPA search features, identified by SNH and JNCC, represent species, habitats and natural features of conservation importance for which spatial measures are thought to be an appropriate conservation measure.

Marine Scotland has international commitments to deliver an ecologically coherent network of well managed MPAs. Nature Conservation MPAs designated under the new powers of the Scottish and UK Marine Acts will complement marine components of sites designated under EU Habitats and Birds Directives, SSSIs and Ramsar sites to form the main elements of a network. Other area-based protection measures may also be considered for the contribution to biodiversity/geodiversity protection that a particular area delivers, either directly or indirectly.

The network will be established in accordance with a high level vision and a set of principles. The guidelines in Annex 1 will ensure that ecological coherence is an integral component of network design. The network in Scotland's seas will contribute to wider networks at the UK and North East Atlantic level and work will be undertaken to coordinate with other UK administrations.

The key objective is to safeguard natural features in Scottish waters based on the principle of sustainable use.

Demonstration & Research MPAs

Demonstration & Research MPAs can be established for the purpose of demonstrating, or carrying out research on sustainable methods of marine management or exploitation in Scottish territorial waters. Their application is not restricted to nature conservation. Proposals will be developed and assessed according to a set of specific guidelines which will examine the scientific case for a MPA, the level of support and the reasons why a MPA is the most appropriate mechanism to use.

Third party proposals

The processes of MPA designation allow for third parties to propose Demonstration & Research or Nature Conservation MPAs. Third party proposals will be developed and assessed in accordance with a set of guidelines.

In the case of third party Nature Conservation MPA proposals this will be undertaken as an initial step prior to the application of Annex 1 guidelines. It is intended for third party proposals for Nature Conservation MPAs to be considered along with the proposals developed by SNH and JNCC as part of the national process leading to the identification of a network of sites by 2012.

Historic MPAs

Historic Scotland will be publishing guidelines about the processes for selecting, designating and managing Historic MPAs. This document summarises briefly how Historic MPAs will be used within the integrated approach to protection and enhancement of the marine environment.

Stakeholder engagement

The development of the MPA network and use of powers to designate Demonstration and Research MPAs will be undertaken in collaboration with marine stakeholders. The Marine Strategy Forum, which represents national marine interests, will be the main forum for strategic level engagement on MPA network development. Further discussions with marine sectors will provide opportunities to discuss the designation process in more detail.

Engagement will be undertaken throughout the process, although the nature, timing and those involved may vary. In early stages of network development, work will focus on data collection, awareness raising and provision of updates. Existing forums, sectoral meetings and various media will be used to reach a wide range of organisations and people and to encourage feedback. As the process progresses engagement will increasingly involve those at a local level and others with a direct interest in the proposals. Finally, all MPA proposals endorsed by Scottish Ministers will be subject to a 12 week public consultation.

A stakeholder engagement strategy is being produced to accompany this document and will provide further detail on when and how stakeholders can get involved.

Site management

Effective management will be important to ensure that MPA objectives are met. Management of activities in or affecting MPAs will be determined on a site-by-site basis. There will be a presumption of use within a MPA so long as the objectives of a site can be met. However, some activities may need to be restricted. In the case of Nature Conservation MPAs, specific activities which pose a significant risk to a protected feature may have to be managed, preferably via sectoral measures or marine planning. Marine Conservation Orders will be used where necessary.

Stakeholders will have an important role in influencing site management. Possible management measures will be explored with stakeholders and consulted upon prior to decisions being reached. Socio-economic factors will be considered and impact assessments will be used as a mechanism to help inform the decision-making process. Guidance documents on site management will be developed in consultation with stakeholders.

How to use the guidelines

The selection guidelines, along with the Statement by Scottish Ministers regarding the MPA network (Annex 4), will be used to guide the selection of Nature Conservation MPAs by Marine Scotland, SNH and JNCC to complete the network. The guidelines will also be used to guide the use of powers to designate Demonstration & Research MPAs in territorial waters. Guidelines can be used by others who have an interest in MPAs, including third parties who wish to develop a MPA proposal for consideration by Ministers.

The guidelines are made up of a number of sections and several need to be considered in combination. All relevant steps in the process for selecting and assessing a MPA proposal need to be considered in sequence, with each step viewed within the context of the process as a whole.

The guidelines for Nature Conservation MPAs and Demonstration & Research MPAs can be considered separately.

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1. INTRODUCTION

Background

1.1 Scottish Government is committed to a clean, healthy, safe, productive and biologically diverse marine and coastal environment that meets the long term needs of people and nature. Marine nature conservation is an integral component of how this can be achieved.

1.2 Marine Scotland has produced a *Strategy for Marine Nature Conservation in Scotland's Seas* which sets out aims and key objectives on how marine conservation policy can contribute. The Strategy advocates a three-pillar approach for conservation of our marine environment. The three pillars are:

- i) species measures;
- ii) site protection measures; and
- iii) wider seas policies and measures.

1.3 Site protection is an important element of marine and coastal conservation and until recently it has focused on species and habitats of European importance which are listed in the relevant annexes of the EC Birds and Habitats Directives. SNH also has powers to notify parts of the intertidal area and adjacent coastal land as Sites of Special Scientific Interest (SSSIs) to protect biodiversity and geodiversity features.

1.4 The new powers in the Marine (Scotland) Act¹ and the UK Marine and Coastal Access Act² are different – for the first time marine areas can be designated to protect features of importance to Scotland to safeguard national priorities. Further details on the powers and estimated costs are outlined in the Financial Memorandum in the explanatory notes of the Scottish Marine Bill³

New powers to designate MPAs

1.5 The Marine (Scotland) Act and the UK Marine and Coastal Access Act contain new powers to designate Marine Protected Areas (MPAs) as part of a range of measures to manage and protect our seas for current and future generations.

1.6 The **Marine (Scotland) Act** includes provisions to designate MPAs for the following purposes inside 12 nautical miles (territorial waters):

- **Nature Conservation MPAs** - to help deliver national priorities on biodiversity and geodiversity, including Scotland's contribution to European and

¹ http://www.ogps.gov.uk/legislation/acts/acts2010/asp_20100005_en_1

² <http://www.legislation.gov.uk/ukpga/2009/23/contents>

³ <http://www.scottish.parliament.uk/s3/bills/25-MarineScot/b25s3-introd-en.pdf>

international commitments on biodiversity e.g. under OSPAR⁴ and the EC Marine Strategy Framework Directive⁵.

- **Demonstration & Research MPAs** - to demonstrate, or develop research into, sustainable management approaches. They will be established within territorial waters only.
- **Historic MPAs** – to protect historic assets of national importance within territorial waters. A Historic MPA could protect important historic wrecks or prehistoric settlement remains in areas once on land, now inundated by rising sea-levels after the last Ice Age.

1.7 The **UK Marine and Coastal Access Act** includes provisions for Scottish Ministers to designate MPAs for biodiversity and geodiversity features in offshore waters adjacent to Scotland.

1.8 For the purposes of this document MPAs for biodiversity and/or geodiversity under both the Marine (Scotland) Act and UK Marine and Coastal Access Act are collectively referred to as **Nature Conservation MPAs**.

Scope

1.9 The overall geographic scope of this document covers the marine area where Scottish Ministers currently have devolved responsibility for MPAs. This includes Scottish territorial waters and the Scottish offshore region.

1.10 For Nature Conservation MPAs, the guidelines apply to territorial waters and offshore waters as defined in Section 116 of the UK Act. The guidelines for developing and assessing Demonstration & Research MPAs, including those from third parties, apply to territorial waters only.

1.11 The guidelines generally apply below Mean High Water Spring (MHWS), but may in some circumstances be applied above MHWS in line with clause 69(2) of the Marine (Scotland) Act.

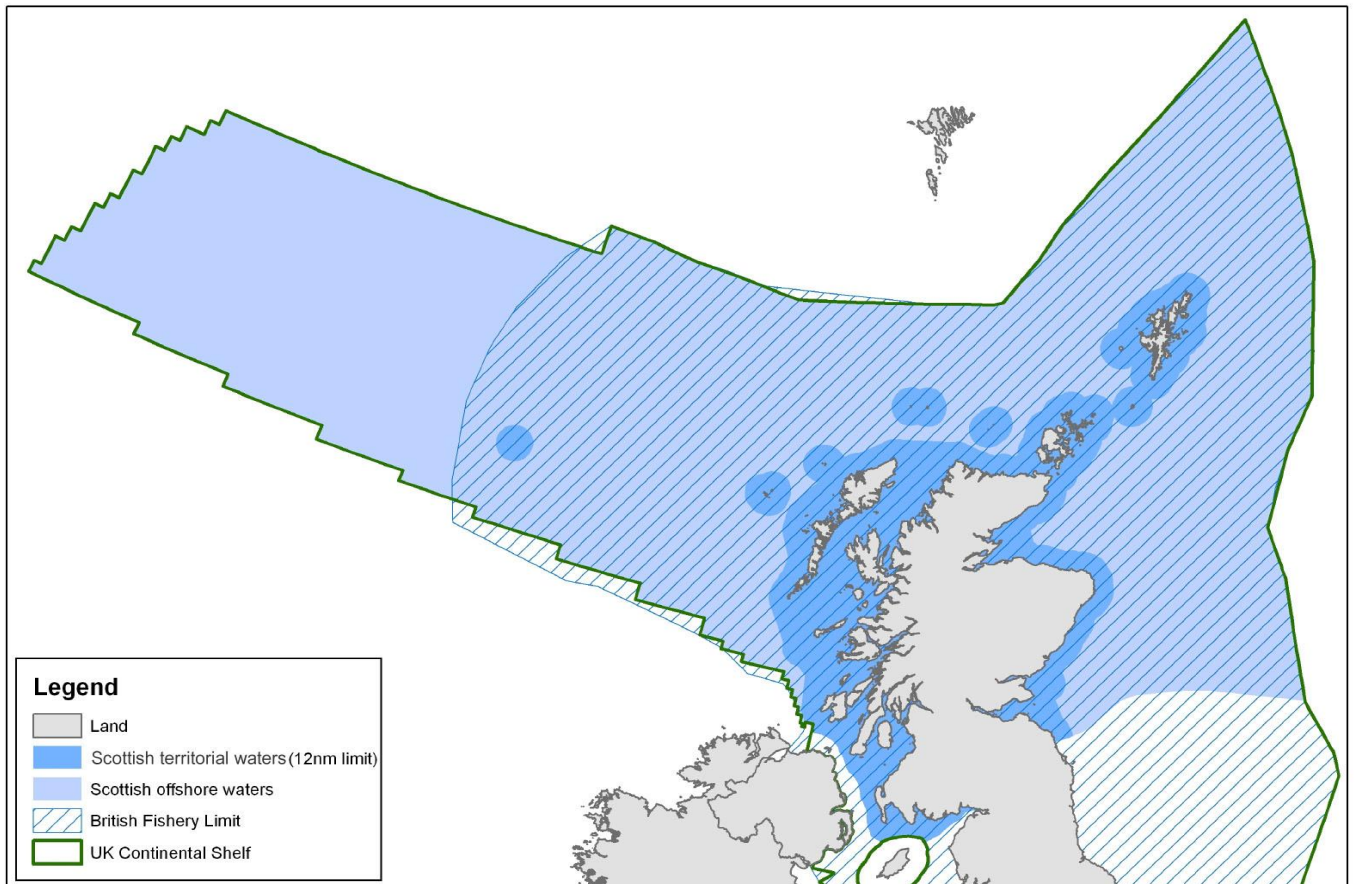
1.12 This document does not cover the marine areas adjacent to England, Wales or Northern Ireland or areas outwith UK jurisdiction adjacent to Scotland. The Scottish Government and the other UK Administrations are working together to deliver, within the context of devolution, a network of well managed MPAs. This will deliver internationally agreed commitments on the protection of biodiversity in UK waters.

1.13 In this document Scottish territorial waters and Scottish offshore region are collectively referred to as Scotland's seas, the extent of which is shown in **Figure 1**.

⁴ OSPAR is an agreement by relevant governments and the European Community, to co-operate to protect the marine environment of the North-East Atlantic. See <http://www.ospar.org/>

⁵ <http://www.scotland.gov.uk/Topics/marine/seamanagement/international/msfd>

Figure 1. Extent of Scotland' seas



The MPA network and ecological coherence

1.14 The Marine Acts place duties on UK and Scottish Ministers to create a network of marine protected areas in UK seas for the protection of biodiversity and geodiversity.

1.15 A Scottish MPA Project led by Marine Scotland in partnership with SNH, JNCC and others is taking forward work to establish the network in Scotland based on a science-led approach. We will also be working with other administrations to fulfil the duty, for example on the scope for cross-border MPA proposals and representation of features.

1.16 This will enable us to better deliver national and international commitments on MPA networks that we have agreed in co-operation with other countries - namely those under the OSPAR Convention, the World Summit on Sustainable Development (WSSD)⁶ and the Convention of Biological Diversity⁷ (CBD) and associated commitments under the Marine Strategy Framework Directive⁸ (MSFD) on measures to achieve Good Environmental Status.

1.17 The OSPAR agreement in particular involves the development of an ecologically coherent network of sites. Ecological coherence is an evolving concept in the scientific community and there is no universally accepted definition. Guidance has been developed under the OSPAR Convention on the key design features associated with ecological coherence⁹. Key elements are:

- Representation – To support the sustainable use, protection and conservation of marine biological diversity and ecosystems, areas which best represent the range of species, habitats and ecological processes (for which MPAs are a suitable measure) should be considered for inclusion.
- Replication – Replication of features in separate MPAs in each biogeographic area is desirable where it is possible in order to contribute to resilience and the aims of the network.
- Size of site – The appropriate size of a site should be determined by the purpose of the site and be sufficiently large to maintain the integrity of the feature for which it is selected.
- Adequacy – the MPA network should be of adequate size to deliver its ecological objectives.
- Connectivity – the MPA network should take into account the linkages between marine ecosystems and the dependence of species and habitats on processes that occur outside the MPA concerned.

⁶ <http://www.un.org/events/wssd/>

⁷ <http://www.cbd.int/convention/>

⁸ See http://ec.europa.eu/environment/water/marine/index_en.htm

⁹ http://www.ospar.org/documents/DBASE/DECRECS/Agreements/06-03e_Guidance%20ecol%20coherence%20MPA%20network.doc

- Management – MPAs should be managed to ensure the protection of the features for which they were selected and to support the functioning of an ecologically coherent network.

1.18 Our guidelines provide further details on how these concepts will be applied in the selection/designation of Nature Conservation MPAs and the development of the network.

The MPA network in context

1.19 The focus of this document is a functioning network in Scotland's seas as a contribution to a UK and North-East Atlantic network. Ecological coherence needs to be considered not just within Scotland's seas but also at these other scales. Elements of the network design process help to focus the development of the network in our seas on the specific contribution that it can make to these wider networks. For example, the list of MPA search features is specific to Scotland's seas. It includes some of the habitats and species from the OSPAR Threatened and Declining list but only those for which Scotland has a particular responsibility in terms of their conservation.

1.20 The guidelines consider different options for potential MPAs in terms of their contribution to the Scottish network. Alongside this, work will be undertaken to consider the developing networks in adjacent areas within the rest of the UK as well as more broadly in the North-East Atlantic. For example, if features of other countries' MPAs extend into our seas we may consider whether ecological coherence of the wider MPA networks would be improved through designating those features as part of a Scottish MPA. Equally, if other countries designate a high proportion of a particular habitat within their MPA network, we may want to consider whether it is necessary for us to designate MPAs for the same features. We are expecting this broader assessment to be based on consideration of the OSPAR Principles.

Network design

1.21 The network will not be limited to Nature Conservation MPAs. Other types of protected areas (including European Marine Sites designated under EC Directives and marine components of SSSIs and Ramsar sites) will also be used as building blocks for the network.

1.22 The network design process allows relevant examples of other MPAs (Demonstration & Research and Historic MPAs) and other area-based measures to be considered as components of the network. This is discussed in more detail in section 8.

1.23 A Scottish MPA Project led by Marine Scotland in partnership with SNH, JNCC and others is taking forward work to establish the network based on a science-led approach. We are not proposing a target-based approach to MPA network development.

1.24 We do not have a pre-conceived management regime for new types of MPAs. Our key objective is to safeguard marine features of conservation importance in

Scottish waters, not to stop activities or use of an area or act as a barrier to sectoral development.

Flexibility of MPA powers

1.25 As well as allowing the protection of a wide range of features, the Scottish and UK Marine Acts also allow for flexibility to adapt boundaries of MPAs and de-designate MPAs where appropriate. This is important for a number of reasons. As our knowledge of the marine environment improves we may determine that areas out with the network are of greater importance than those already designated, or similar ecological value. We may choose to substitute sites having considered that the ecological coherence of the network will be enhanced or will remain unaffected.

1.26 Similarly the distribution of some species may change in response to climate change and the designation of new sites and de-designation of others may become necessary to ensure adequate protection. Likewise boundaries may need to be altered to accommodate species shifts.

1.27 Changes in network composition, including alterations of boundaries, designation of new sites and de-designation of others will be undertaken in consultation with all relevant marine interests.

Purpose of the Guidelines

1.28 The purpose of this document is to set out guidelines:

- for selecting possible locations as Nature Conservation MPAs for the protection of marine biodiversity and geodiversity
- on how we intend to establish a MPA network in Scotland's seas and fulfil the duties in the Marine Acts to contribute to a UK network as well as wider biodiversity commitments at European and global levels.
- for the use of the powers to designate Demonstration & Research MPAs

1.29 The document provides further information on MPA networks to complement the statement by Scottish Ministers that has been laid in the Scottish Parliament (Annex 4). It also includes a vision and principles for the development of the network. (section 3). These complement general principles that will be applied to individual Nature Conservation MPAs.

1.30 MPA search features will be used in early stages to guide the design of the network and further details on their role and purpose are provided in section 4. Further information to guide the development of a MPA network for the protection of biodiversity is given in section 5.

1.31 The document also sets out guidelines for assessing third party proposals in territorial waters in section 7.

1.32 Section 11 considers information requirements, the process to be used for boundary setting and the review of MPAs. A summary of the approach to management is included although separate guidance on MPA management will be produced.

1.33 Separate guidelines are being developed for Historic MPAs but section 9 summarises the process that will be used.

Timescales

1.34 Milestones and key deliverables in Scottish Government's commitment to a clean, healthy and biologically diverse marine and coastal environment include:

- deliver a MPA network to meet national and international commitments by 2012;
- report on progress of a MPA network by 2013 and deliver a well managed network of sites by 2016 (Marine Strategy Framework Directive); and
- define Good Environmental Status by 2012 and delivery by 2020 (Marine Strategy Framework Directive).

1.35 These guidelines are aimed primarily at the period to 2012 i.e. the first key milestone in delivery of a MPA network. However they also make provision for longer term obligations including a contribution to the delivery of Good Environmental Status.

2. NATURE CONSERVATION MPAs

The Role of Nature Conservation MPAs

2.1 The new powers under the Marine (Scotland) Act and the UK Marine and Coastal Access Act to designate Nature Conservation MPAs will be used to recognise locations of habitats or species which are important, rare, threatened and/or representative of the range of features in the UK marine area.

2.2 In Scotland's seas, Nature Conservation MPAs are considered appropriate for contributing to the protection of:

Biodiversity

- threatened and/or declining habitats and sessile benthic species at global, north-east Atlantic or UK scales¹⁰;
- significant areas for geographically restricted habitats or species at global, north-east Atlantic or UK scales;
- significant aggregations or communities of important marine species in Scottish waters;
- features representative of the range present in Scottish waters;
- essential areas for key life cycle stages of important mobile species that persist in time, including habitats known to be important for reproduction and nursery stages; and
- areas contributing to the maintenance of ecosystem functioning in Scottish waters.

Geodiversity

- areas of nationally and/or internationally important geological or geomorphological features;
- areas of exceptional and/or threatened geological or geomorphological features; and/or
- areas of geological or geomorphological features representative of key aspects of the marine geodiversity of UK waters.

2.3 MPAs are not appropriate for all features. They are, for example, only appropriate for wide-ranging species which use defined areas predictably for key life cycle stages, such as breeding or nursery areas. A question of scale arises also, for example, in relation to large expanses of habitats where, although the features may potentially benefit from protection, management of relevant activities may be more effectively secured through marine planning and/or sectoral measures.

2.4 We don't plan to identify MPAs to safeguard ecological processes, but where such processes support network features they will be taken into account in the setting of MPA boundaries.

¹⁰ This will include principally those habitats and species on the OSPAR Threatened and Declining List relevant to inshore and offshore waters adjacent to Scotland.

General principles for Nature Conservation MPAs

2.5 The following principles apply to Nature Conservation MPAs.

- a. Nature Conservation MPAs will be developed through a scientific process involving engagement with stakeholders. Science will be the primary consideration in the selection of sites with socio-economics being considered when ecological coherence of a network has been met.
- b. The presence of MPA search features will underpin the selection of Nature Conservation MPAs and areas containing multiple features will be given priority (section 4). Ecologically and geomorphologically functional units, and the processes which underpin these features, will be taken into account through boundary setting and in subsequent management.
- c. The size of a Nature Conservation MPA will depend on the rationale for identifying it, the features it is designed to protect, and the requirements for management of activities.
- d. Nature Conservation MPAs are only one of the measures available to protect Scotland's seas. They will be used where they are the most appropriate mechanism.
- e. Management of MPAs should be integrated with wider marine management. By providing the framework within which all marine management will occur, marine planning will help ensure better integration between the needs of Nature Conservation MPAs and those of surrounding areas.
- f. In most situations, existing sectoral measures (such as fishery management measures) or marine planning are expected to be sufficient. Additional powers such as Marine Conservation Orders will be available where necessary to support management of activities affecting MPAs.
- g. The best available scientific information will be used to select and manage Nature Conservation MPAs. Lack of scientific certainty should not be used as a reason for postponing MPA selection or taking action where there is a threat of damage to areas in the network.
- h. As our understanding improves, and/or the environment changes, there may be a need to select additional new Nature Conservation MPAs, alter boundaries, and/or remove designations particularly in the longer term in response to climate change.
- i. Nature Conservation MPAs will be subject to a range of protection levels, depending on the conservation objectives, management requirements of the MPA protected features for which they are designated and socio-economic factors. There will be an assumption of multiple-use of a site. However activities which are not compatible with the conservation objectives of a Nature Conservation MPA will be restricted.

Socio-economic considerations

2.6 The selection of Nature Conservation MPAs will be based primarily on scientific evidence, drawing upon the best available information on Scotland's marine biodiversity and geodiversity.

2.7 In keeping with communications to Parliament, socio-economic information will be taken into account once the ecological requirements of the MPA network have been met¹¹. Socio-economic factors may be considered in selection of sites where two or more alternative potential areas meet the scientific guidelines equally (see Annex 1 - Table 5).

2.8 While recognising the process of identifying MPAs is based on scientific evidence, consideration of socio-economics will be used to identify areas of low activity which may correspond with least damaged / more natural features. Such areas could be of scientific interest.

2.9 Socio-economic information will be used when developing management and boundaries of MPAs to minimise impacts on marine interests while ensuring conservation objectives can be met. Impact assessments and public consultation provide mechanisms by which social and economic information will be taken into account in the decision-making process.

2.10 Nature Conservation (and also Demonstration & Research) MPAs will be subject to impact assessment to estimate the costs and benefits to the public and private sectors, including marine industries. Assessments will provide valuable information towards management of any area designated as a Nature Conservation MPA. Relevant stakeholders will be consulted as part of the process. Impact assessments will accompany site proposals during the public consultation process.

¹¹ See

<http://www.scottish.parliament.uk/s3/committees/rae/bills/Marine%20bill/documents/20100201CabSecMPANetwork-formatted.pdf>

3. THE MPA NETWORK IN THE SEAS AROUND SCOTLAND

3.1 This section sets out the overall vision and principles for the MPA network for biodiversity protection in Scottish territorial waters and the Scottish region.

Vision for the MPA network principles

- To protect, prevent deterioration and, where practicable, support recovery of marine biodiversity and geodiversity of Scotland's seas;
- To contribute to delivery of our shared aims for healthy and biologically diverse seas; and
- To develop an ecologically coherent network of well managed marine protected areas.

MPA network principles

3.2 The following principles will apply to the MPA network:

- i. The MPA network should be capable of delivering Scotland's MPA commitments, including national and international priorities for marine nature conservation.
- ii. The purpose of the MPA network will be to deliver benefits for marine natural features¹² and to support wider ecosystem function within the context of a three-pillar approach. The network should safeguard marine features¹³ (relating to both biodiversity and geodiversity) in Scottish waters and, through sound management, deliver recovery where practicable.
- iii. The MPA network will include marine natural features¹³ considered as priorities for area-based protection in Scottish waters. It will include features considered to be key and threatened and/or declining, and/or representing the range of features within Scotland's seas.
- iv. Individual sites will be considered for their merit in contributing to ecological coherence of the network¹⁴, but where possible preference will be given to the selection of areas with multiple features, including those of interest for both biodiversity and geodiversity. Functional units and processes which underpin these features (for ecology, geology and geomorphology) will be taken into account through boundary setting and management.
- v. Network development will take account of the distinctive biogeographical differences of our seas. The proportion of each feature included within the

¹² Marine natural features to be interpreted as 'marine biodiversity and geodiversity' features

¹³ Marine features to be interpreted as 'MPA network features' see section 4

¹⁴ Ecological coherence as defined by OSPAR

http://www.ospar.org/documents/DBASE/DECRECS/Agreements/06-03e_Guidance%20ecol%20coherence%20MPA%20network.doc

MPA network will vary to reflect factors such as the importance of the feature and the element of risk to its survival in Scottish waters

- vi. The MPA network will consist of a range of different types of protected areas, including European Marine Sites and Nature Conservation MPAs designated under section 79(1) of the Marine (Scotland) Act and section 116 of the Marine and Coastal Access Act. Other types of area-based measures which offer protection to marine features¹⁵ may be recognised as contributing to Scotland's MPA network. The same scientific assessment process applied to Nature Conservation MPAs will be used to evaluate the contribution these areas could make to national priorities.
- vii. MPAs forming part of the network will be managed so as to deliver long-term protection to the marine natural features¹⁶ they contain. An MPA network will contribute to Government objectives on the environment, which in turn will help achieve broader objectives, including sustainable economic growth.
- viii. Significant progress towards identifying Nature Conservation MPAs to complete the network will have been made by the end of 2012.

The make-up of the MPA network

3.3 The MPA network for biodiversity protection will comprise:

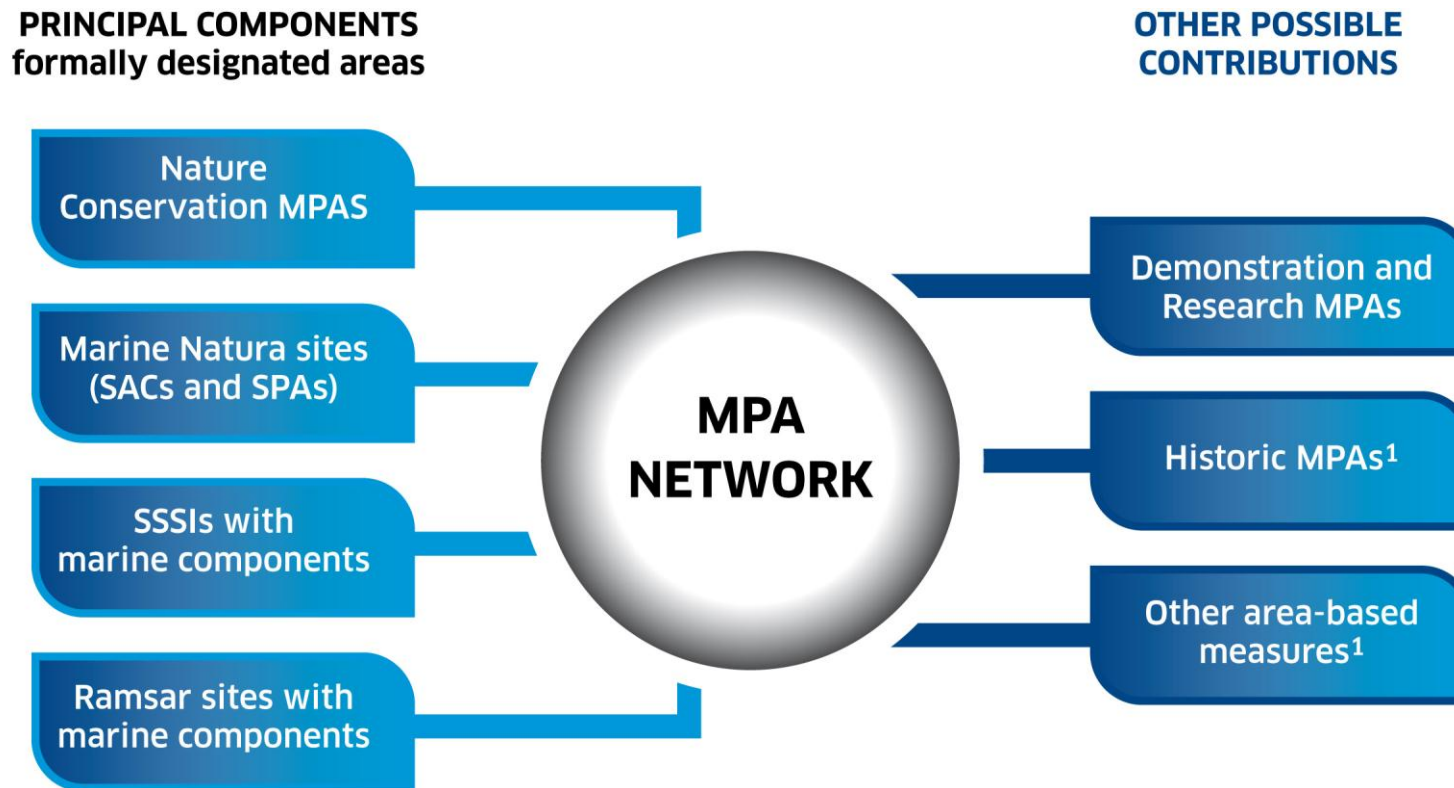
- (i) **Nature Conservation MPAs**
- (ii) **Other areas which are formally designated** as protected areas for the purpose of delivering benefits for marine nature conservation. This includes existing protected areas for marine habitats, species and geodiversity interests (SPAs and SACs designated under EU legislation and SSSIs and Ramsar sites with marine components).
- (iii) **Area-based measures** designed for purposes other than marine nature conservation or based on other legislation but which are recognised as providing direct or indirect benefits for biodiversity or geodiversity features. These may include Demonstration & Research MPAs, Historic MPAs and safety exclusion zones around wave, tidal and offshore wind energy installations. Where appropriate these areas may be **recognised** as a contribution to the network but are unlikely to be designated as new MPAs. See Figure 2. Assessment of area-based measures is discussed in section 8.

3.4 There will be value in recognising features located in Natura sites but which are not listed under the EC Birds and Habitats Directives. Recognition of these as components of the network could require double-badging of sites to make clear the additional contribution over and above the features for which a Natura site is designated.

¹⁵ Marine features to be interpreted as 'marine biodiversity and geodiversity'

¹⁶ Marine natural features to be interpreted as 'MPA network features' see section 4

Fig 2: Contribution of different types of area-based measures to the MPA network in territorial and offshore waters adjacent to Scotland



1. To be considered on a case-by-case basis and recognised as contributing to network where relevant but not formally designated as Nature Conservation MPAs.

4. FEATURES TO BE INCLUDED IN MPA NETWORK DEVELOPMENT

4.1 There are a number of conservation mechanisms which apply to Scotland's seas, some of which list features of conservation importance. Amongst these are OSPAR, Biodiversity Action Plans, the Scottish Biodiversity Strategy and the EC Habitats and Birds Directives.

4.2 To focus work in the seas around Scotland, JNCC and SNH are finalising a list of **Priority Marine Features** (PMFs) which includes features from the mechanisms mentioned above. This list represents species and habitats of conservation importance for which action will be prioritised via a three-pillar approach i.e. species measures, site-based measures and wider seas policies and measures.

4.3 A second list of **MPA search features** has been compiled¹⁷. MPA search features mostly comprise those PMFs for which MPAs are considered an appropriate conservation measure. They are considered likely to be representative of a wider range of features which would also benefit from spatial protection and inclusion in the network. MPA search features are listed in Annex 3.

4.4 MPA search features will be used in early stages of MPA network development, underpinning the initial selection of search locations. Where it is possible to do so, preference will be given to the selection of search locations with multiple features, including those of interest for both biodiversity and geodiversity. Work is ongoing to produce an equivalent list of features for marine geodiversity.

4.5 At the point of designation of a Nature Conservation MPA the term **MPA protected feature** will be used to describe all the features afforded protection within that MPA. MPA protected features will be defined in the designation order for a site. Other features which would benefit from site-based protection measures and which need to be represented within the network to deliver coherence may be included.

4.6 A list of **network features** will be developed. This will include MPA protected features as well as qualifying features of SACs, SPAs, Ramsar, SSSIs and other forms of area-based protection recognised as part of the network. The list of network features will be used for reporting on coverage of the network, monitoring and for wider management.

4.7 Work is ongoing to complete the classification of Special Protection Areas (SPAs) and assess the contribution these will make to the MPA network. With the exception of black guillemot, seabirds have not been included in the list of MPA search features in Annex 3. However seabirds are recognised as an intrinsic and valuable part of Scotland's marine ecosystem and the list of MPA search features includes features which help to support seabird life stages.

¹⁷ The list of MPA search features will be reviewed prior to the completion of the MPA network in Scottish waters.

4.8 Stage 5 of the selection guidelines (Annex 1, Table 5) will involve assessments of the coherence of the network as a whole, particularly how well the network represents the broader marine environment. This provides an opportunity for Nature Conservation MPAs to protect other habitats and species that are not MPA search features, if necessary, and where it can be demonstrated that these features are required for ecological coherence. See Box 1 for further details on terminology.

Box 1 The steps towards network features.

MPA search features	Comprising mostly of Priority Marine Features which will benefit from spatial protection and which will underpin the initial selection of Nature Conservation MPAs. Are representative of other associated features which may also benefit from spatial protection.
MPA protected features	Features which are formally protected by the designation order for a Nature Conservation MPA. May include MPA search features and other features which would also benefit from spatial measures and which are necessary for coherence.
network features	Features afforded protection by the MPA network as a whole (e.g. MPA protected features, Natura qualifying features and other features protected by other spatial measures).

5. NATURE CONSERVATION MPAS: SELECTION AND ASSESSMENT GUIDELINES

5.1 This section sets out the guidelines that will be used for selecting and assessing proposals for Nature Conservation MPAs. Nature Conservation MPAs will be established for biodiversity and geodiversity features within Scotland's seas.

Regional analysis

5.2 The proposed approach for identifying Nature Conservation MPA proposals includes a regional dimension to assessing the presence of MPA search features. This introduces a practical step in ensuring adequate representation and replication of biodiversity features within the national MPA network. Both representation and replication of features are important elements of delivering OSPAR commitments for ecological coherence (para 1.17 of section 1).

5.3 The regions illustrated in Figure 3 identify areas distinguished by biogeographic differences. They reflect our understanding of the differences in character of Scotland's seas in terms of the physical environment (e.g. currents, temperature, salinity) and the habitats and species found within them. These areas are based on the broader OSPAR biogeographic regions and are intended to support the achievement of ecological coherence through providing a finer-scale for the assessment of biodiversity.

5.4 The regional approach will be an important aspect of the early stages of the application of the MPA guidelines. This will ensure that distribution of a specific feature is reflected in network design in terms of highlighting which areas are particularly important for it. This does not mean each MPA search feature will become a protected feature of a MPA in each of the areas in which it occurs. This is because stage 5 of the guidelines (Annex 1, Table 5) prioritises between the different potential areas for MPAs in terms of their contribution to the network at a national rather than regional level. Consideration of representation will focus primarily on determining whether a feature is represented at the scale of Scotland's seas. Replication will have been met if there is more than one example of each feature within the network in the Scotland's seas.

5.5 No specific number of sites for a MPA feature has been pre-determined at a regional or national context. Instead the number of sites will be determined by the scientific process and consideration of national network design.

Initial steps

5.6 For biodiversity, the process began with development of a list of MPA search features and a review of:

- The potential contribution that existing (and proposed) Natura sites and other designations could make to the protection of MPA search features.
- What other area-based protection measures are already in place and whether they may contribute to the network by offering protection to MPA search features.

- Which locations are least damaged/more natural and whether they could contribute to the network.

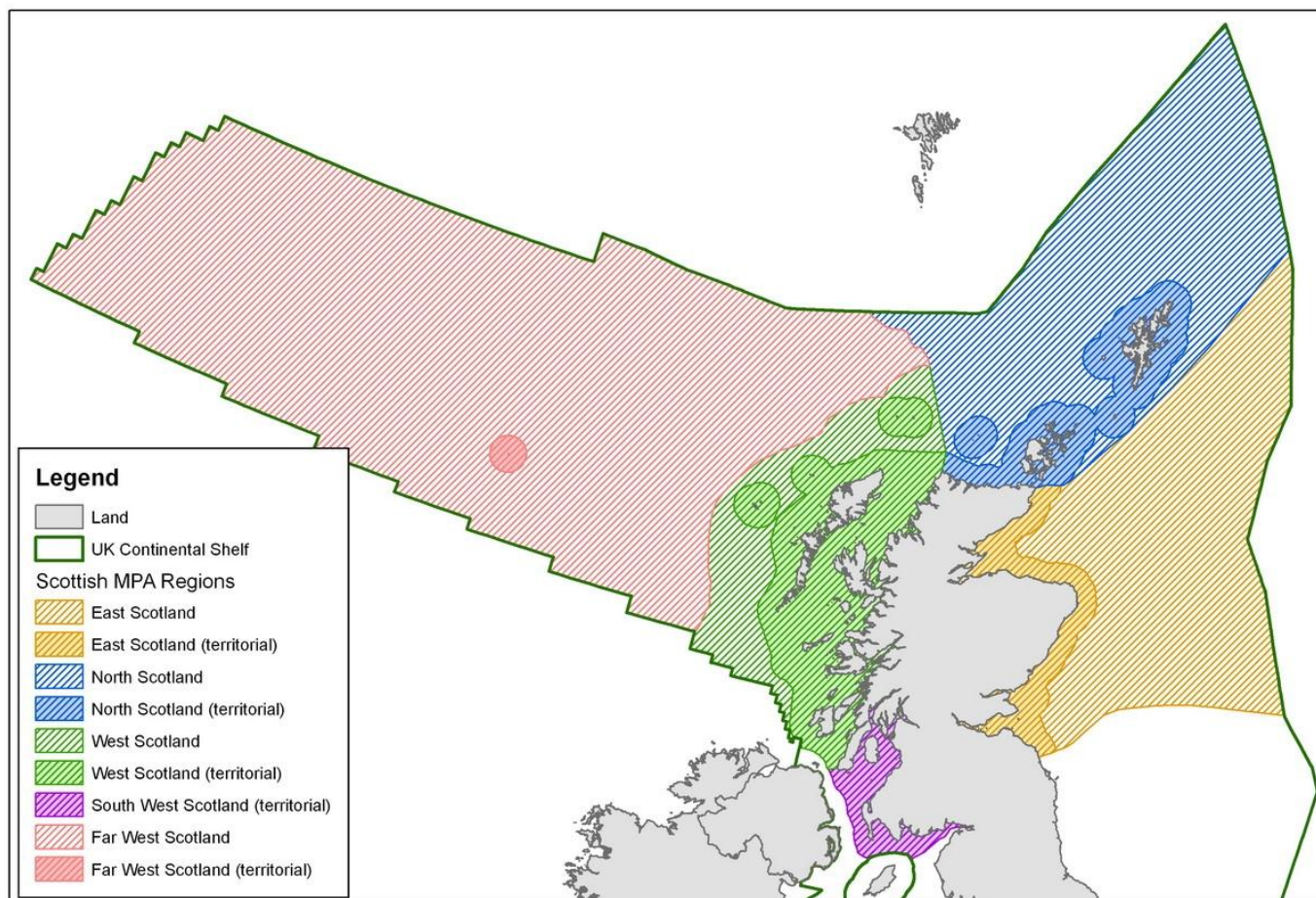
5.7 This review will be applied to each region defined in Figure 3 to ensure adequate geographic representation in terms of national network design. The selection guidelines will then be applied to MPA search features considered to be inadequately represented by existing spatial measures in each region to identify possible areas for MPAs. The process is summarised in Figure 4.

5.8 For geodiversity features, the process will begin with a review of the context of the principal 'blocks' in the Geological Conservation Review of marine geodiversity interests for which Scottish waters are important¹⁸.

5.9 The work will take account of geodiversity features which are already afforded protection and the location of least damaged/more natural areas. The aim is to consider geodiversity features alongside those for biodiversity and, where possible, select MPAs that deliver protection of both. A national approach will be applied to the identification of sites for geodiversity features with no regional aspect.

¹⁸ <http://www.jncc.gov.uk/page-2947>

Figure 3. Map showing areas providing the basis for regional analysis



Note: All regions (except for South West Scotland) cover territorial and offshore waters adjacent to Scotland i.e. they extend from the coast out to the limit of the UK Continental Shelf

Next steps

5.10 A five stage process will be applied (see tables in Annex 1).

- **Stage 1:** Identification of search locations based on presence of MPA search features.
- **Stage 2:** Prioritisation of search locations according to the qualities of the MPA search features and other features identified.
- **Stage 3:** Assessment of the scale of the search location in relation to the MPA search features.
- **Stage 4:** Assessment of the ability to manage features effectively within a search location as part of a Nature Conservation MPA.
- **Stage 5:** Prioritisation of potential areas according to their contribution to the Scottish MPA network.

5.11 Tables 1-5 in Annex 1 set out the guidelines for each stage, together with notes on how the guidelines should be applied and interpreted.

5.12 Stage 1 relates to the identification of search locations. Initially broad search areas thought to contain MPA search features will be identified. These will be larger-scale areas such as sea lochs, muddy sediment plains or coastal island groups. Stage 1 guidelines will then be applied to the broad search areas to identify smaller scale locations containing MPA search features i.e. search locations. It may transpire that some broad search locations do not contain any MPA search features. In this case search locations would not be identified within them.

5.13 Stage 2-4 guidelines will be applied to resulting search locations and will be used to prioritise between them. Some search locations may drop out of the process as a result and some search locations may change in size and shape.

5.14 In some cases it will be only part of the original search location that is recommended as a possible area for a Nature Conservation MPA. In other cases, parts of adjacent search locations may be joined to form the basis of a Nature Conservation MPA proposal. Such proposals may cover the entire area, including the sea between locations, or alternatively a composite approach may be taken i.e. the sea between the original locations will be excluded. Coordination with other countries could also lead to boundary adjustments or the value of some proposals being reassessed.

5.15 One way of prioritising suitable search locations for MPAs is to consider areas that are least damaged by activities. On the assumption that least damaged/more natural areas occur in areas of least activity, the guidelines for Nature Conservation MPAs will be applied to these areas first, before applying them more widely.

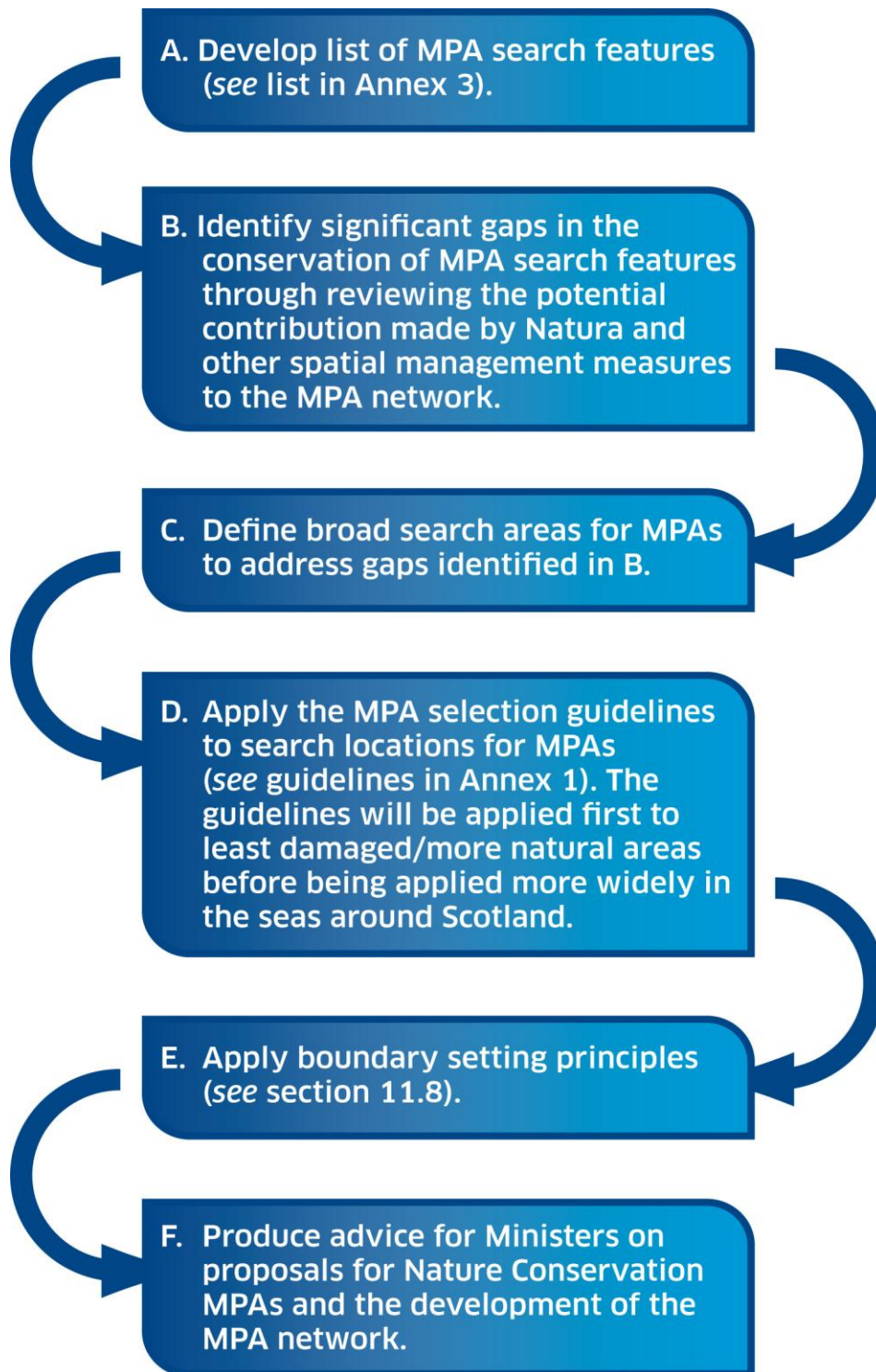
5.16 Stage 5 guidelines will be applied at a national network level to determine sites which would collectively contribute most to achieving an ecologically coherent network. This stage will include consideration of how best to contribute to the UK and North East Atlantic networks. It is also at this stage where socio-economic considerations will be applied.

5.17 Only areas which pass Stages 1-5 will be considered for inclusion in the network. Not all may need to be included, reflecting that Stages 2 and 3 in particular involve prioritisation. Likewise, Stage 5 analyses may mean that additional sites or features need to be included.

5.18 Only those areas that are formally consulted on and designated will be recognised as Nature Conservation MPAs.

5.19 Map-based information presented on a Geographic Information System (GIS) will be used in the selection of Nature Conservation MPAs. This will assist with assessments and will allow information to be presented in a clear way to key stakeholders.

**Figure 4. Technical process for identifying Nature Conservation MPAs:
How MPA search features will be used to complete the MPA network**



Note: the process for identifying Nature Conservation MPAs is likely to be iterative

6. DEMONSTRATION & RESEARCH MPAS: GUIDELINES FOR DEVELOPMENT AND ASSESSMENT

6.1 Demonstration & Research MPAs can be developed for the purpose of demonstrating, or carrying out research on sustainable methods of marine management or exploitation in territorial waters (Section 67 Marine (Scotland) Act).

6.2 Their application is not restricted to having a nature conservation focus and they do not have to be based on the presence of MPA search features or protected features of Nature Conservation MPAs. For example they may be an appropriate tool to develop new approaches to marine management, address issues through original research or consider the applicability of a management approach in a new area. We have not identified a list of circumstances to which the use of Demonstration and Research MPAs apply. However the extent to which the approach is novel will be important as will the likely benefits and the reasons why a Demonstration & Research MPA is considered the most appropriate approach. Assessment of proposals will include consideration of the scientific case for research or demonstration and whether there is support from stakeholders, in particular those who may be most affected by the proposal.

6.3 The guidelines in Tables 6 and 7 of Annex 2 outline factors which Scottish Ministers will consider when the case for a Demonstration & Research MPA proposal is being prepared or assessed and whether the use of the new MPA power is appropriate. These apply to Marine Scotland proposals as well as to third parties.

6.4 Demonstration & Research MPAs will not automatically form a component of the MPA network. They will be included where their designation is considered to contribute added value to the network, and then only for the duration of the designation.

6.5 It is not the intention for Demonstration & Research MPAs to introduce restrictions on existing or normally sustainable activities. However restrictions may be introduced if they are necessary to support the demonstration or the research objectives of the site. All proposals should consider if the objectives can be achieved through arrangements such as voluntary agreements and stakeholder agreement.

6.6 The expectation is that Demonstration & Research MPAs will be time-limited, but the approaches being trialled may be implemented on a longer-term basis in that area or elsewhere. A designation should only remain in place for the length of time necessary to achieve the aims and objectives of the MPA and a review period will normally be defined.

6.7 Demonstration & Research MPAs may overlap with other (existing or new) MPAs or be at a distance from them. For example, although Demonstration & Research MPAs that aim to understand the likely impacts of new technology on Priority Marine Features might be better placed outwith Nature Conservation MPAs, this may not always be possible.

7. THIRD PARTY PROPOSALS GUIDELINES FOR DEVELOPMENT AND ASSESSMENT

7.1 The processes for MPA selection and designation allow for third parties to propose either Nature Conservation MPAs or Demonstration & Research MPAs. This recognises that third parties may wish to develop proposals for a range of different reasons: to recognise the biodiversity importance of an area, to underpin sustainable resource use or to facilitate conflict resolution.

7.2 There may be different interest groups, either situated in the vicinity of the proposal or elsewhere. Third parties could be a community living adjacent to a section of coast, an industry sector, a group of recreational users or other interests that work in an area but live elsewhere.

Third party Nature Conservation MPA proposals

7.3 The work led by Marine Scotland to identify proposals for Nature Conservation MPAs will be the main initiative to develop the MPA network. However, the process outlined in these guidelines enables third parties to propose Nature Conservation MPA for inclusion in the network which will be considered along side those proposed by SNH and JNCC.

7.4 Third party proposals will be considered in the context of national priorities for network design and the vision and principles for the network. They will be assessed for the contribution they make to the overall network in accordance with the selection guidelines in Annex 1 and therefore will be subject to the same assessment procedures as those proposed by JNCC and SNH.

7.5 Guidance on the factors third parties should address in their initial submission of a proposal and the criteria against which a proposal will be assessed prior to application of Annex 1 guidelines is outlined in tables 8 and 9 of Annex 2. The initial assessment will allow the validity and quality of a proposal to be considered prior to application of the Annex 1 guidelines. The information that should be submitted (Table 8) includes a description of the biodiversity and/or geodiversity features to be protected and the clear scientific case for doing so. The information requirements take account of the likelihood that third parties will not have access to the same level of detail as statutory organisations.

7.6 Our aim is to consider any proposals within the network design process as early as possible. A stakeholder engagement plan is being developed which will provide further information on how third party proposals can be contributed. Following establishment of the network, proposals will be considered if they address a gap in the ecological coherence of the network e.g. identify a feature of particular importance or significance, such as species or habitats not found elsewhere in Scotland's seas.

7.7 All proposals that Scottish Ministers wish to include in the network will be subject to public consultation, including those that originated from third parties.

Third party Demonstration & Research MPA proposals

7.8 It will also be possible for third parties to develop proposals for Demonstration & Research MPAs. It is expected that Demonstration & Research MPA proposals will result from a desire to improve sustainable resource use within an area or to test possible management solutions in practice.

7.9 The guidelines in Tables 6 and 7 of Annex 2 outline factors to be considered when a proposal for a Demonstration & Research MPA is being prepared and how they will be assessed. These apply to Marine Scotland and third party proposals and therefore the fuller discussion of Demonstration & Research MPAs provided in Section 6 applies.

Third party proposal processes

7.10 Guidance is provided in Annex 2 on the factors it would be useful for third parties to consider when developing MPA proposals. This will ensure that all the relevant information is available for initial assessments.

7.11 As a minimum, third party proposals must include sufficient information to address all the factors set out in tables 6 and 8 in Annex 2. While Nature Conservation MPA proposals will ultimately be assessed against the Annex 1 guidelines, initial proposals should address the requirements in Table 8 in the first instance. This will allow an assessment of a proposal to be undertaken (using criteria of Table 9) prior to application of the more technical Annex 1 guidelines.

7.12 Proposals should clearly identify who is making the proposal, the clear scientific case and supporting evidence and the level of support amongst wider stakeholders, taking into account the potential impacts on other users that may arise from site management. Assessment of proposals will include the practicalities of establishing the proposed MPA, the likely success of any proposed management and the contribution to national priorities.

7.13 There is a firm expectation that proposals will be submitted via Marine Planning Partnerships once they are established. While it remains an option to submit proposals directly to Scottish Ministers in circumstances such as the absence of a Partnership, demonstration of consultation with marine interests including those which may be affected will be expected.

7.14 Assessment of third party proposals will be undertaken by (any combination of) SNH/JNCC, Marine Scotland or other parties as requested by Marine Scotland. This will depend on the nature of the proposals.

7.15 In the event that Ministers wish to proceed with a proposal in the absence of demonstrated consensus amongst stakeholders, people will be given the opportunity to submit comment in accordance with Section 78 of the Marine (Scotland) Act.

All proposals endorsed by Scottish Ministers will be subject to public consultation.

8. ASSESSING THE CONTRIBUTION OF OTHER AREA-BASED MEASURES TO THE MPA NETWORK

8.1 For an area to be considered as part of the network, a scientific assessment of the biodiversity or geodiversity protection that an individual area delivers – either directly or indirectly – will be undertaken by SNH and JNCC. An area could be recognised on an informal basis (i.e. these locations would not necessarily be designated as Nature Conservation MPAs) provided that the management of the area was sufficient to secure its conservation objectives.

8.2 There may be situations where areas that are considered to be part of the network (but which are not formally designated as Nature Conservation MPAs) are de-classified i.e. their previous status and associated management no longer applies. Should this happen, SNH and JNCC will review options for maintaining representation of the feature(s). This will be a science-based assessment against the relevant MPA selection guidelines to evaluate if the area still merits inclusion within the network and whether it should therefore be put forward for consultation as a Nature Conservation MPA.

9. HISTORIC MPAS

9.1 Historic Scotland will be publishing guidelines about the processes for selecting, designating and managing Historic MPAs. However, this section summarises briefly how Historic MPAs will be used within the integrated approach to protection and enhancement of the marine environment.

9.2 The objective of designating Historic MPAs will be to help preserve our most important marine historic assets and to celebrate and communicate their heritage value so that everyone can appreciate these assets and act responsibly. Historic MPAs will allow for the protection inside 12 nautical miles of the wide range of historic assets that may be found on the seabed, including built structures and the remains of wrecks and aircraft, but also artefact scatters and other material evidence of past human activity.

9.3 The intention is that Historic MPAs will normally be the preferred mechanism for protection of marine historic assets under water, with scheduling and listing normally preferred for monuments and buildings at the foreshore and coast edge. This policy will be subject to periodic review. Section 1 of the Protection of Wrecks Act 1973 ('the 1973 Act') is to be repealed in Scotland in due course with Scotland's existing designated wrecks eligible for prior consideration as candidate Historic MPAs.

9.4 As is the case under the 1973 Act, third parties will continue to be able to request to Historic Scotland that a particular asset or group of assets be considered for designation and Historic Scotland may also carry out their own assessments. Historic Scotland will assess all candidates against the criterion of national importance in order to allow for archaeological sites and monuments on land and at sea in Scotland to be considered against equivalent criterion. Provisional guidance on the determination of national importance for marine historic assets has been

published¹⁹ following public consultation.²⁰ The final version will be integrated alongside similar information for other historic environment designations within the Scottish Historic Environment Policy.²¹

9.5 While marine historic assets have intrinsic, associative and contextual significance in relation to cultural and social values, there is a recognition that these assets and the seabed that surrounds them can also be of value from a Nature Conservation perspective. Where historic assets have protected status, this can deliver secondary benefits for Nature Conservation. As such, it is considered that Historic MPAs have the potential to contribute to biodiversity and geodiversity policy aims. Historic Scotland will therefore work closely with Marine Scotland and SNH where appropriate so that they may make a scientific assessment of the biodiversity or geodiversity value of the seabed comprising a Historic MPA, including the extent to which these areas have the potential to contribute to the network. In turn, there is also recognition that Nature Conservation MPAs may have the potential to deliver incidental benefits for assets of historical or archaeological interest within their boundaries.

10. STAKEHOLDER ENGAGEMENT

10.1 The development of the MPA network will be undertaken in collaboration with marine stakeholders.

10.2 As well as marine interests and organisations, stakeholders will include local authorities, communities nearby to proposed sites and users from a wider geographic area, such as recreational interests.

10.3 In Scotland, MPA designation is being undertaken at a national level. The Marine Strategy Forum, which represents national marine interests, will be the main forum for strategic level engagement on MPA identification. Further discussions with marine sectors will provide opportunities to discuss the designation process in more detail.

10.4 Engagement will be undertaken throughout the process, although the nature, timing and those involved may vary as the process progresses. In early stages, work will focus on data collection, and identification of conservation features and locations. This will be achieved mainly through discussions with representatives of organisations which may hold relevant data. As the process continues, engagement will increasingly involve those at a local level.

10.5 Awareness raising and provision of updates will be important throughout the process. Existing forums, sectoral meetings and various media will be used to reach a wide range of organisations and people and to encourage feedback. All proposals endorsed by Scottish Ministers will be subject to a 12 week public consultation.

¹⁹ <http://www.scottish.parliament.uk/s3/committees/rae/bills/Marine%20bill/documents/20100110CabSecSGS2C%20ommittments-ProvisionalpoliciesforHistoricMPAs-circulationtoparliament.pdf>

²⁰ http://www.historic-scotland.gov.uk/shep_marine.pdf

²¹ <http://www.historic-scotland.gov.uk/shep-july-2009.pdf>

10.6 Figure 5 highlights the process for Nature Conservation MPAs and the key stages where stakeholders can engage in the process.

10.7 A stakeholder engagement strategy will be produced to accompany this document and will provide further detail on when and how stakeholders can get involved, including their participation in workshops. It is anticipated that any third party proposals for Nature Conservation MPAs will be raised at these workshops so they can be considered as part of the general process of network design.

10.8 The process for development and assessment of third party proposals for MPAs is outlined in Figure 6 and discussed in more detail in section 6.

Figure 5. Development of a MPA network in seas around Scotland: key opportunities for stakeholder engagement and the roles of other organisations

Note: It is possible that proposals will be progressed at different times as data relating to different sites is collated. The process from the point of SNH/JNCC discussion of proposals with Marine Scotland) onwards is likely to be iterative.

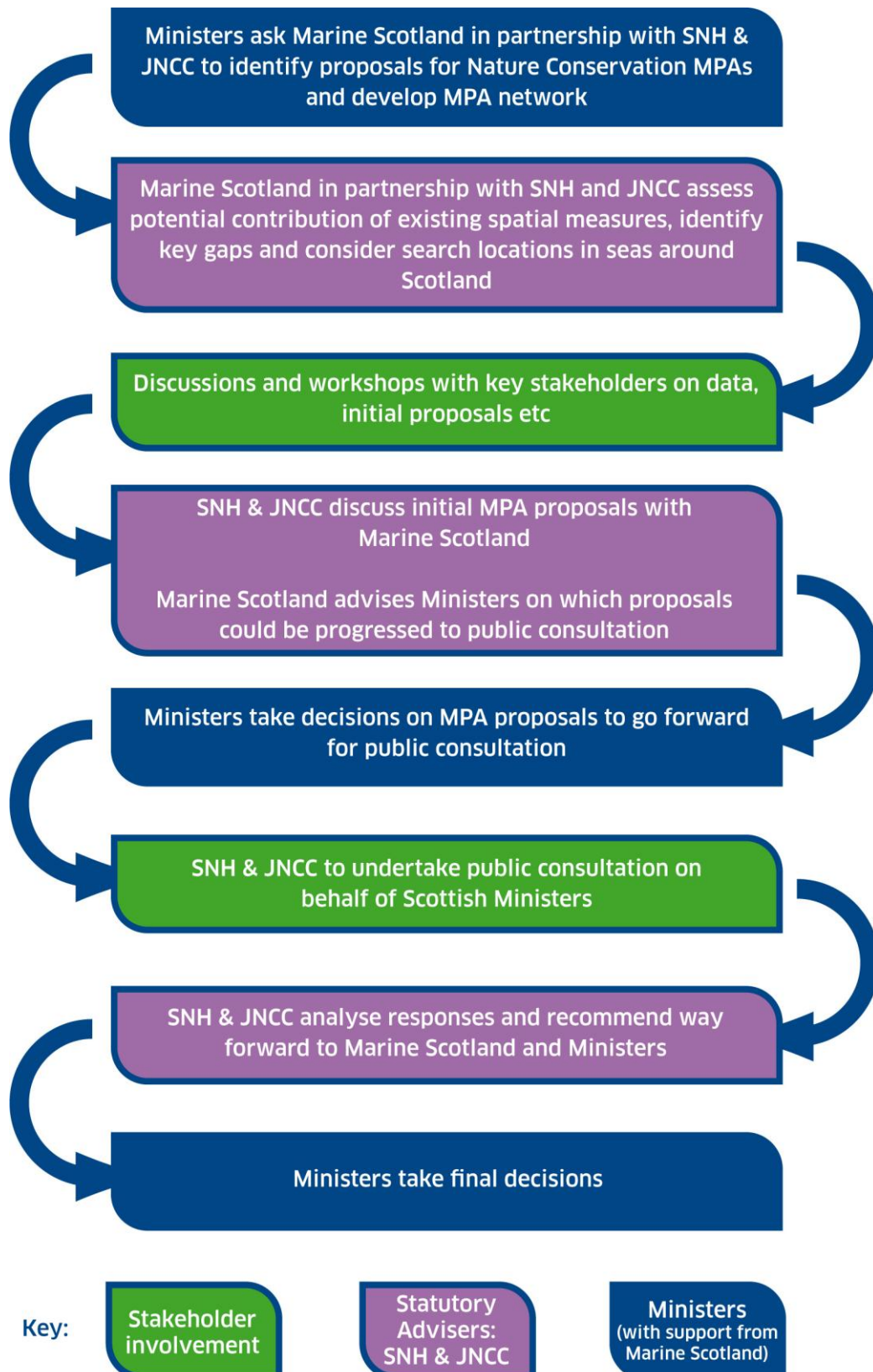
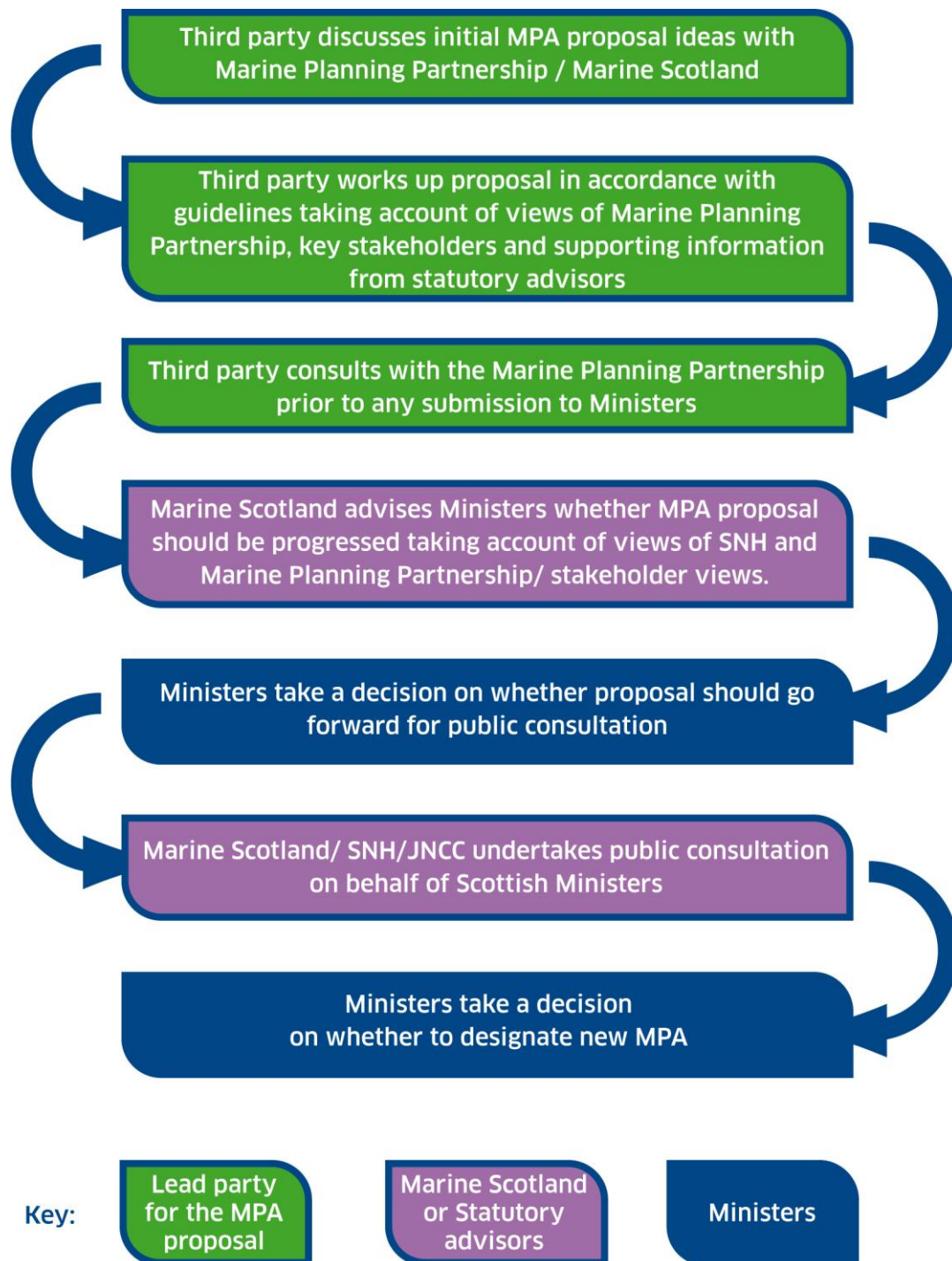


Figure 6. Roles of key interests in the development and assessment of Nature Conservation²² or Demonstration & Research MPA proposals by third parties in inshore waters.



²² Nature Conservation MPA proposals also need to be assessed via the network design process outlined in figure 1.

11. DEVELOPMENT AND REVIEW OF NEW MPAS

Information requirements

11.1 The information that will be required to inform the selection of new MPAs is likely to vary according to the type of MPA and the specific stage in the process:

- For Nature Conservation MPAs the focus will be on gathering information on MPA search features and other relevant marine biodiversity and geodiversity features. Supporting information on activities taking place in the search locations, proposed developments and potential management issues will also be required.
- For Demonstration & Research MPAs information is required on the characteristics of the area as well as on the purpose, value and appropriateness of the MPA proposal.

11.2 The identification and prioritisation of search locations for Nature Conservation MPAs (Stages 1 and 2 in Annex 1) require information to be collated on a regional basis. This should enable comparisons between different search locations, for example relating to feature diversity and extent. Information will largely be gathered from national/regional organisations. For stages 3 and 4, more detailed local information will be needed including on potential size, relevant socio-economic information, and potential management measures/issues. This is likely to involve relevant national, regional and local stakeholders. Coordination will also be undertaken with other countries.

11.3 The type of information required to complete the assessments is also likely to vary with feature. For example, for search locations relating to mobile species it is likely that information will be required from different times of year to assess seasonal presence. Information will also be required over a number of years to assess any trends in distribution and abundance.

Use of best available scientific information

11.4 MPA designation will be based upon the use of best available scientific data. This could include information from a variety of national or local sources such as conservation organisations, recreational bodies, industry, academic studies or individuals. At a UK level a range of research has been undertaken to develop ecological and socio-economic information to inform site designation, and within Scotland this is being supplemented by analysis of further data sets, collation of additional data and marine surveys.

11.5 The principle of using best available science without entailing excessive cost will be followed. There will be a preference for relying upon existing data and planned surveys wherever possible to identify locations and qualities of MPA search features. This includes identification and analyses of relevant data sets and planned marine surveys where necessary to address knowledge gaps.

11.6 Data has been requested from national organisations thought to hold relevant data and workshops will provide further opportunities for stakeholders to contribute to the evidence base and comment on current knowledge and how it is being used.

11.7 The type and quality of data available is likely to vary and therefore different data will be interpreted in different ways with varying levels of confidence. Decisions will take account of the quality of, and confidence that is attached to, relevant data.

11.8 Importantly, stakeholder comment has been integral to the development of MPA policy to date in terms of detailed discussion through various stakeholder opportunities e.g. the Scottish Marine Bill process, parliamentary debate and consultation exercises. Evidence collated and analysed to support the establishment of MPAs will be subject to peer review at specific stages of the designation process. For example, ICES supported the case for the species and habitats listed by OSPAR as Threatened and/or Declining species and habitats, several of which are included in the list of MPA search features where they have relevance to Scotland's seas. All MPA search features have been peer reviewed by a wide range of interests, and data sets will be available to stakeholders for formal and informal comment. Evidence used in developing MPA proposals will also be identified at the time of public consultation on MPA proposals. This will allow transparency of decision-making and an opportunity for comment by a wide range of interests.

Boundary setting

11.9 The approach to setting boundaries for Nature Conservation MPAs will be based upon the following principles:

- Draw boundaries as closely as possible around the feature(s) to support the MPA acting as a functional whole for the conservation of the features concerned. Consideration should be given as to whether to combine adjacent features into a single MPA (see 'multiple features' below).
- For mobile species, take account of places within the natural range of the species which provide the physical or biological factors essential to their life and reproduction.
- The footprint of individual protected features should be delineated and then if appropriate combined into one MPA boundary (in this event, management measures may vary throughout the site depending on the sensitivities of the features present).
- Ensure that activities occurring near sites do not compromise site integrity and restrict activity from an appropriate distance from the site boundary if necessary.
- Identify key stakeholders and management issues and ensure that the boundary is relevant to the issues identified as well as to the features per se.
- Use the best available scientific methodology. This is likely to involve the use of statistical analysis, and potentially also modelling techniques, particularly for mobile species.

11.10 These guidelines should be put into practice by:

- Drawing boundaries away from the coast as straight lines, to ensure ease of identification on charts and at sea;
- Using complex site shapes, rather than simple square/rectangular boundaries to ensure that the boundary relates closely to the feature(s) of interest;
- Locating co-ordinate points so that they are relevant to the feature of interest, rather than at the nearest whole degree or minute point;
- Using 'mosaic' sites, in which MPAs may be made up of more than one discrete area where this is appropriate to ensure the boundary closely reflects the distribution of a feature.

11.11 Boundaries should generally be considered to be fixed at the time of designation, although there may be circumstances when it is appropriate to review them. For example, the distribution of habitats and species may change in response to changing climate. The boundary of a new MPA should reflect current knowledge on the distribution of a feature so that it is relevant to planning, management and use of a specific area. If the distribution of a particular feature is expected to alter as a result of climate change, this may be taken into account when the boundary of a new MPA is initially being set.

11.12 More detailed guidance will be produced in a separate document.

Conservation Objectives

11.13 Conservation objectives will be determined which will describe the purpose and aim of the designation.

11.14 For Nature Conservation MPAs, conservation objectives will reflect the purpose of the MPA, namely to protect, prevent deterioration or contribute to the recovery of the feature(s). Conservation objectives for a site will be specific to the species, habitats or geological features designated as MPA protected features. They will make clear if maintenance or recovery will be sought and provide a description of what should be achieved. They will provide a starting point for developing management and monitoring progress. For example, a conservation objective may state that a habitat or species population should be restored.

11.15 Similarly, objectives for Demonstration and Research MPAs will reflect whether the purpose is to demonstrate or develop research into sustainable marine management or exploitation and the specific aims of the designation. Demonstration and Research MPAs objectives can be expected to be descriptive, reflecting the nature of the research and measurable aims which the research or demonstration will achieve.

Content of proposals for new MPAs

11.16 Proposals for new MPAs will be developed by SNH and/or JNCC and following discussion with stakeholders. Stakeholders will include other Government Departments, Local Authorities, industry, environmental NGOs, recreational users and others who have an interest in the Scottish marine environment.

11.17 Consultation on Nature Conservation MPA proposals will include sufficient information to enable stakeholders to understand what features are considered to be important in each, and what the implications of designation might be. Any proposals will therefore include:

- Background information on the development of the Scottish MPA network.
- A general introduction to the proposed new MPA and the area within which it is located.
- The expected contribution of the MPA to an ecologically coherent network, its conservation objectives and how these are expected to be achieved.
- A description of the guidelines and information sources that have been used in developing the proposal.
- A summary of the assessment of the new MPA proposal against the relevant selection guidelines (Annex 1).
- A summary of current understanding of the state of the relevant features to be included in the new MPA proposal. This should include information on threats to the features (present or future), including damaging activities where known, and an assessment of the potential for maintenance and/or recovery of the features concerned.
- Expected arrangements for management of the proposed new MPA where available, including management of activities inside the site and outside where relevant.
- Possible arrangements for monitoring and reporting purposes.
- A map of the proposed boundary, which will include information on the distribution and extent of relevant features.
- Annexes with background information on the ecology, geology or geomorphology of the relevant features for which the new MPA is proposed.

11.18 Information on the formal consultation and designation processes will also be provided with any proposals, so that the opportunity to have a say is clear to all relevant stakeholders.

Management of MPAs

11.19 Effective management of a site will be important to ensure that conservation objectives of a MPA are met and that a site continues to contribute to an ecologically coherent network. Management of activities in or affecting MPAs will be determined on a site-by-site basis depending on the conservation objectives of the protected features for which a Nature Conservation MPA is designated or the aims for which a Demonstration & Research MPA is designated. The objectives of a site and knowledge of how activities could impact on a feature will provide the starting point for assessing whether there is a need for management measures to be established.

11.20 There will be a presumption of use within a MPA so long as the conservation objectives of a site can be met. However, specific activities which pose a significant risk to a protected feature may have to be managed, preferably via sectoral or voluntary measures, or marine planning. Marine Conservation Orders will only be used where no alternative mechanisms exist and control is necessary. Marine Conservation Orders may be applied outwith the boundary of a MPA if necessary to protect a feature. Control of diffuse pollution or migration of silt which may impact on a specific feature are examples of when this may occur. Some activities may also have to be restricted inside Demonstration & Research MPAs for the lifetime of the designation.

11.21 Management schemes, if required, will set out the way in which activities may be carried out. For many activities, existing mechanisms including licensing will enable conservation objectives to be achieved. Possible re-distribution of anthropogenic impacts, such as fishing effort, may also need to be considered to minimise the risk of unintended consequences on the wider environment.

11.22 Stakeholders will have an important role in influencing site management. A range of management measures, including the use of voluntary options, may be available. These will be explored with stakeholders and consulted upon prior to decisions being reached. Socio-economic factors will be considered and Impact assessments will be used as a mechanism to help inform the decision-making process.

11.23 Guidance documents providing further detail on site management will be developed in consultation with stakeholders.

Review of new MPAs

11.24 MPAs will be reviewed periodically to ensure that they are meeting, or are capable of meeting, the agreed conservation objectives and whether any additional management is likely to be required.

11.25 Progress on the designation, status, and progress towards achieving conservation objectives of MPAs will be subject to a six-yearly reporting cycle to the Scottish Parliament. This is of importance for all types of new MPA, but particularly for Nature Conservation MPAs in considering the ecological coherence of the MPA network. Monitoring of Nature Conservation MPA protected features will be undertaken as part of a wider programme of biodiversity monitoring and surveillance.

11.26 Appropriate management of Nature Conservation MPAs will be influenced by the relevant conservation objectives and results from our programme of monitoring for MPAs in Scottish waters.

11.27 There are two situations in which a new MPA is expected to be reviewed:

- if the results of monitoring work show that the conservation objectives for a new MPA are unlikely to be met; and/or

- if new data become available which indicate that there may be search locations which could contribute more in terms of protection of a relevant feature.

11.28 Following review of individual MPAs, a decision may need to be taken on whether to de-select a specific MPA. If this applies to a Nature Conservation MPA then one or more new MPAs may need to be selected to ensure the ecological coherence of the network is maintained.

11.29 Review of the status of protected features within a MPA will be led by SNH for sites inside 12nm and JNCC for offshore sites. The final decision will be taken by Scottish Ministers, with advice from Marine Scotland. Similarly, if there is a need to identify one or more additional Nature Conservation MPAs to ensure the ecological coherence of the network, the review of data would be led by SNH/JNCC, with the final decisions being taken by Scottish Ministers advised by Marine Scotland.

Availability of new data and revision of the MPA network

11.30 It is likely that the MPA network will evolve over time as our knowledge and understanding of the marine environment improves and as new data become available. In some cases this may mean that our assessment of the qualities of MPA search features in a particular location may change. This could lead to new MPAs being selected for inclusion within the network, and/or other areas being de-selected. The ability to adapt the network in the light of improved understanding and changing circumstances may become particularly important as the effects of climate change become increasingly evident.

12. FURTHER INFORMATION

12.1 This guidance should be read in conjunction with 'A Strategy for Marine Nature Conservation in Scotland's Seas' which outlines the policy framework for implementing a suite of measures in Scotland's marine environment.

12.2 Further information on new MPAs can be obtained from Marine Scotland, Marine Planning and Policy team at:

Marine Planning and Policy
Marine Scotland
1A South
Victoria Quay
Edinburgh
EH6 6QQ

12.3 Information about existing MPAs within territorial waters can be accessed via the SNH web-based information service SNH (www.snh.gov.uk/snhi) which includes information on all protected areas in Scotland (out to 12nm).

12.4 Information about existing MPAs within offshore waters can be accessed through JNCC's website (www.jncc.gov.uk/marineprotectedareas) which includes information on all MPAs in UK offshore (and territorial) waters.

13. GLOSSARY

Biodiversity – the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they form part; this includes diversity within species, between species and of ecosystems.

Broad search area - these are areas that reflect larger physiographic features such as sea lochs or muddy sediment plains. They are being used to define areas of an appropriate scale for applying the Stage 1 guidelines to identify search locations for Nature Conservation MPAs.

Demonstration & Research MPA - used to refer to MPAs established using the provisions in sections 58, 61 and 62 of the Marine (Scotland) Act.

Coherent – In the context of Scottish waters, this will refer to:

- **Ecological coherence** refers to the representation and replication of biodiversity features, and the linkages between those features. It also refers to the resilience of the network as a whole, and how well the range and geographic variation of the biodiversity features are covered within the network.
- **Geological/geomorphological coherence** refers to the contribution made by the MPA network to the principal networks of marine geodiversity interest for which Scottish waters are important (e.g. Quaternary ice sheet and environmental history). There should be minimum duplication of geodiversity features within the network. See later definition of Quaternary.

Guidance has been developed under the OSPAR Convention on the key design features associated with ecological coherence. The OSPAR agreement can be found at http://www.ospar.org/documents/DBASE/DECRECS/Agreements/06-03e_Guidance%20ecol%20coherence%20MPA%20network.doc.

Ecosystem services – provide the benefits to people of the resources and processes supplied by natural ecosystems.

European Marine Site – is used to refer jointly to SACs and SPAs in the marine environment.

Geodiversity – is the variety of rocks, minerals, fossils, landforms, sediments and soils, together with the natural processes which form and alter them.

Geological Conservation Review – the process which identified those sites of national and international importance needed to show all the key scientific elements of the Earth heritage of Britain. The sites display sediments, rocks, fossils, and features of the landscape that make a special contribution to our understanding and appreciation of Earth science and the geological history of Britain.

Geomorphology – the study of landforms and the processes that shape them.

Historic MPA - used to refer to MPAs established using the provisions proposed in the Marine (Scotland) Act for Scottish territorial waters

Priority Marine Features - a collective term for those features which are considered to be of conservation importance in Scotland's seas across Marine Scotland's three-pillar approach to marine nature conservation strategy i.e. measures i.e. site species measures, site measures and wider seas policies.

JNCC – Joint Nature Conservation Committee, the statutory Nature Conservation adviser to the Scottish Government and the UK Government outside 12nm.

Landforms – a feature on the surface of the land or seabed. Marine and coastal examples include sand-dunes, firths and offshore banks.

Least damaged / more natural area – a marine area in which there has been little activity and which may therefore be in a relatively natural state.

Mean High Water Springs: the mean high water spring is the highest level to which spring tides reach on average over a period.

MPA Protected Feature - used to refer to the marine biodiversity and geodiversity interests which are protected features of a Nature Conservation MPA once designated.

MPA - Marine Protected Area is used specifically to refer to the provisions in the Marine (Scotland) Act and UK Marine and Coastal Access Act. It may also be used in the generic sense as 'marine protected areas' to refer to any area that contributes to the MPA network in Scotland's seas.

MPA Network – the network of MPAs in Scotland's seas comprising (i) new Nature Conservation MPAs (designated using the powers in the Marine (Scotland) Act and UK Marine and Coastal Act), (ii) relevant examples of existing protected areas (sites protected under EC Directives and marine components of SSSIs and Ramsar sites). Consideration will be given to recognising the contribution of other area-based measures whose management is delivered by other measures but which also contribute to the aims of the network.

MPA protected features - Features which are formally protected by the designation order for a Nature Conservation MPA. May include MPA search features and other features which would also benefit from spatial measures and which are necessary for coherence.

MPA search features - Mostly Priority Marine Features which will benefit from spatial protection with and which will underpin the initial selection of Nature Conservation MPAs. Are representative of other associated features which may also benefit from spatial protection.

Natura sites – EU wide network of nature conservation sites (SACs and SPAs) established under the EC Habitats and Birds Directives.

nm – Nautical miles

Nature Conservation MPA – used to refer to MPAs established using the provisions in sections 58, 59 and 60 of the Marine (Scotland) Act in Scottish territorial waters and in section 116 of the UK Marine and Coastal Access Act in offshore waters adjacent to Scotland.

Network features - features afforded protection by the MPA network as a whole (e.g. MPA protected features, Natura qualifying features and other features protected by other spatial measures).

OSPAR – used to refer to the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic. It is an agreement by relevant governments and the European Community, to co-operate to protect the marine environment of the North-East Atlantic. See <http://www.ospar.org/>

OSPAR Region – Scotland's seas fall within three OSPAR Regions: Region II - Greater North Sea and Region III - Celtic Seas and Region V – wider Atlantic

Quaternary – is the geological time period between 1.8 million years ago and the present.

Ramsar – sites designated as internationally important wetlands following the adoption of the Convention of Wetlands of International Importance in 1971.

Recognition – used to refer to areas that make a contribution to the MPA network but which are not designated as MPAs under the Marine (Scotland) Act or UK Marine and Coastal Access Act or other Nature Conservation legislation. The management of these areas should be supported by measures, including sectoral measures, to ensure that the relevant features are safeguarded.

SAC – Special Areas of Conservation under the EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna.

Scotland's Seas– a term used in this document to describe the area covered by Scottish territorial waters and the Scottish offshore region. See also references to territorial waters and Scottish offshore region.

Scottish MPA project – the project led by Marine Scotland in partnership with SNH, JNCC and Historic Scotland to advise Ministers on MPA proposals and establishment of a MPA network.

Scottish offshore region – term used generally to refer to waters more than 12 nm from baselines (i.e. the area stretching from 12 nm out to limits of UK jurisdiction)

Scottish territorial waters – Defined under the Territorial Sea Act 1987 as the waters stretching from baseline out to a maximum of 12nm, or the median line between adjacent countries.

Search location – an area that is identified as a result of the application of the Stage 1 guidelines. If the search location meets the guidelines in stages 2-4 it will be refined and put forward as a potential area for a MPA.

Sectoral measures - used in this guidance to refer to measures that can be put in place to support management of different sectors. For example, using orders under the Fisheries (Scotland) Act 1984 and safety exclusion zones around wave, tidal and offshore wind installations.

Selection – is used to describe the process of applying guidelines to develop proposals for new MPAs and the Scottish MPA network.

SNH – Scottish Natural Heritage the statutory Nature Conservation adviser to Government on land and sea out to 12nm i.e. within Scottish territorial waters.

SPA – Special Protection Areas under EC Directive 79/409/EEC on the Conservation of Birds..

SSSI – Sites of Special Scientific Interest are notified under the Nature Conservation (Scotland) Act 2004 or under the Wildlife and Countryside Act 1981 and carried forward by the 2004 Act.

Three pillar approach – Marine Scotland’s approach to marine nature conservation. The pillars are 1) species measures 2) site protection measures 3) wider seas policies and measures such as marine planning and sectoral measures.

ANNEXES

ANNEX 1 - SELECTION GUIDELINES FOR NATURE CONSERVATION MPAS

In Tables 1-5, where clarification of a specific term used in the guideline description is required, numbered notes have been included in the right hand column (i, ii, iii, etc). Notes that are not numbered apply to the guideline more generally. The term 'feature' is used in this and subsequent tables as a short-hand for marine habitats, species, geology and geomorphology, and areas contributing to marine ecosystem functioning.

Only areas that pass assessments against the guidelines in stages 1-5 will be considered for inclusion in the network. Not all may need to be included, reflecting that stages 2 and 5 in particular involve a prioritisation process. Stage 5 analyses may mean that additional sites or features need to be considered. Only those areas that are formally consulted on and designated will be recognised as Nature Conservation MPAs. Following the application of stages 1-5 we will consider if there is a need to run further iterations to refine the initial design to achieve ecological coherence. The guidelines are focused upon the establishment of the network. Stage 2 - 5 in particular will be relevant when reviewing the network.

Table 1. Stage 1 guidelines for the identification of search locations containing MPA search features.

The focus of Stage 1 is to identify search locations that would address any significant gaps in the conservation of MPA search features that have been recognised following steps A-B in figure 4.

Stage 1 guidelines will be applied to broad search areas (e.g. sea lochs, coastal islands group, muddy sediments plains) to identify search locations containing MPA search features. For an area to be identified as a search location (and pass through to consideration at Stage 2) at least one of the Stage 1 guidelines must be met. Search locations should only be identified using the guidelines under Stage 1 in areas containing one or more MPA search features. Information on the presence and distribution of features in each search location as part of Stage 1 will be recorded. This will be updated as necessary following assessment in subsequent stages. Greater weight will be given to biodiversity features when identifying search locations but geodiversity features will also be assessed.

Table 1

Guideline		Notes
<i>Summary</i>	<i>More detailed description</i>	
1a. Presence of key features	<p>The area contains features considered to be of conservation value at a national or international level. This is likely to comprise principally:</p> <ul style="list-style-type: none"> • features for which Scotland is considered to be a stronghold ⁱ, • features considered to be of exceptional scientific importance; and/or • features which are characteristic ⁱⁱ of Scotland's marine environment. 	<p>For biodiversity, a list of marine habitats and species (based on the OSPAR list of threatened and/or declining features, the UKBAP Priority List and the Scottish Biodiversity List) has been developed i.e. MPA search features. These features will provide the basis for biodiversity assessment. MPA search features are presented in Annex 2.</p> <p>For geodiversity, areas should make a direct contribution to the principal networks of marine geodiversity interests (e.g. Quaternary ice sheet and environmental history). A list of geomorphological search features is being compiled.</p> <p>Rarity by itself is not being used as a separate guideline. Rarity in the marine environment is often an artefact of under-recording and/or of features being at the edge of their range. Where rarity is a consequence of threat and/or decline, it will be picked up under 1b.</p> <p>i. This involves consideration at different scales (Scotland, UK, North-East Atlantic and global).</p> <p>ii. The term 'characteristic' is used to identify features considered to comprise a distinctive and/or representative part of Scotland's marine environment. This may include features considered to be characteristic of a particular region within Scottish waters.</p>

Table 1 continued

Guideline		Notes
<i>Summary</i>	<i>More detailed description</i>	
1b. Presence of features considered to be under threat and/or subject to rapid decline.	<p>Biodiversity features should include those habitats and species on the OSPAR Threatened and Declining list ⁱⁱⁱ which occur in and are considered to be threatened and/or declining in Scottish waters. Consideration should also be given to those MPA search features which are threatened and/or declining within Scottish waters.</p> <p>Geodiversity features considered to be threatened will principally include the following categories:</p> <ul style="list-style-type: none"> • active marine landforms and the geomorphological processes that maintain them; • relict geological and geomorphological features (principally Quaternary landforms and sediments); • seaward extensions of existing terrestrial features of national importance (principally for coastal geomorphology), where the site integrity is dependent on the uninterrupted operation of near-shore processes. 	<p>Sensitivity is not being used a separate guideline. Features which are sensitive may or may not require protection. Features that are sensitive and vulnerable will be considered as threatened, under this guideline. Features that are sensitive <i>and</i> representative will be considered as representative under guideline 1a.</p> <p>See comment on rarity under 1a. Where rarity is a consequence of threat and decline, or there is evidence that the rarity is not an artefact of under recording, it will be picked up here.</p>

Table 1 continued

Guideline		Notes
<i>Summary</i>	<i>More detailed description</i>	
1c. Functional significance for the overall health and diversity of Scottish seas.	The area does not necessarily contain key and/or threatened/declining features, but provides ecological resources or geomorphological processes considered to be critical to the functioning of wider marine ecosystems, e.g. places for feeding, breeding, resting, nurseries, juveniles and/or spawning, or sediment supply.	<p>This guideline enables connectivity to be considered in the design of the network by identifying areas which may not qualify solely on the basis of the MPA search features, but which nevertheless play a key supporting role in terms of ecological function. See guideline 5, note vii for more detail of the way in which linkages between potential areas may be considered. Connectivity will also be taken into account in the way that MPAs are managed, in a similar way that connectivity is considered in the management of European Marine Sites.</p> <p>This guideline should include consideration of features or locations providing ecosystem services which underpin key human activities/use of the marine environment.</p> <p>Function is also incorporated within other guidelines (see particularly 2a and 2c), and the boundary setting principles. These involve consideration of interdependence between biodiversity and geodiversity features, the scale and coherence of an area, and whether it makes sense as a functional unit.</p>

Table 2. Stage 2 guidelines for the prioritisation of search locations according to the qualities of the MPA search features they contain.

Stage 2 guidelines will be used to prioritise between the search locations identified in Stage 1 according to the qualities of the MPA Search features within them. The comparisons will have a regional dimension for biodiversity features (see section 5). More weight should be given to search locations meeting a greater number of the guidelines under stage 2. Note that search locations considered to contain unique or rare features may still pass through this stage because of the potentially valuable contribution that they could make to a MPA network.

Guideline	Notes
2a. The search location contains combinations of features, rather than single isolated features, especially if those features are functionally linked.	Consideration should be given not only to known linkages between different biodiversity features, and between different geodiversity features, but also to linkages between biodiversity and geodiversity features. As far as possible, areas with geodiversity features should include assemblages of linked geological and geomorphological features. Consideration should be given to whether areas holding a small number of features include examples of unique/rare habitats or species.
2b. The search location contains example(s) of features with a high natural biological diversity.	The network as a whole should include some MPAs with a naturally high biodiversity. Comparisons of diversity under this guideline should only be made between features of the same type. This guideline is not relevant to geodiversity features.
2c. The search location contains coherent examples of features, rather than smaller, potentially more fragmented ones.	Use of the word 'coherent' should not preclude search locations which contain features that are geographically separated but which together make up a coherent example of that feature from passing this guideline. Application of this guideline should take account of current understanding of the functioning of individual features within the search location. Consideration should be given to whether areas holding a small number of features include examples of unique/rare habitats or species.

Table 2 continued

Guideline	Notes
2d. The search location contains features considered least damaged/ more natural, rather than those heavily modified by human activity.	Although the process for identifying search locations initially focuses on least damaged/more natural examples of features, the network is expected to contain some features that have been modified by human activity and which therefore require restoration/recovery. This may not apply to all types of features. For example, features may be considered to have suffered irreparable damage from which recovery is not realistic or possible, or may be relict examples for which restoration/recovery is not relevant.
2e. The search location contains features considered to be at risk of significant damage by human activity.	The emphasis should be on identifying risk to features rather than risk to individual search locations. For biodiversity the focus should be on the presence of features considered to be at risk of damage at a regional level. For geodiversity the focus will be on features considered to be at risk at a national level.

Table 3. Stage 3 guideline to assess the appropriate scale of the search location in relation to search features it contains.

Review of search locations against the Stage 3 guideline will be carried out to refine the area under consideration and will require information about the features contained, possible conservation objectives, relevant activities, and likely management issues and approaches. This guideline must apply for a search location to pass through to consideration at Stage 4.

Note that this stage is different to the detailed work to refine MPA boundaries which will be done only for those sites which pass the stage 5 assessment (see *Boundary setting* in section 11).

Guideline	Notes
<p>3. The size of the search location should be adapted where necessary to ensure it is suitable for maintaining the integrity of the features for which the MPA is being considered. Account should also be taken where relevant of the need for effective management of relevant activities ^{iv}.</p>	<p>This is to ensure that the search location is relevant to the MPA search features and also meaningful to stakeholders likely to be involved in management of activities affecting the MPA. The dependence of some features on wider marine ecosystems, including processes occurring outwith the search location, will be taken into account through management of the MPA in a similar way that it is currently for European Marine Sites.</p> <p>iv. This should take account of experience of setting boundaries for marine Natura sites in Scottish territorial waters bearing in mind there are differences in the legal requirements.</p>

Table 4. Stage 4 guideline to assess the potential effectiveness of managing features within a search location as part of a Nature Conservation MPA.

Assessment of search locations against the Stage 4 guideline will require information about the features contained, possible conservation objectives, relevant activities, and likely management issues and approaches. This guideline must apply for a search location to pass through to consideration at Stage 5. Not all features within MPAs will need changes to existing management to achieve their conservation objectives. Our approach is to ensure that no unnecessary restrictions will be put on activities/developments.

All search locations that pass the assessment against the Stage 4 guideline will pass through to consideration at Stage 5 as potential areas for MPAs.

Guideline	Notes
4. There is a high probability that management measures, and the ability to implement them, will deliver the objectives of the MPA.	<p>This guideline involves an assessment of:</p> <ul style="list-style-type: none"> • the potential for features to be maintained; • the potential for features to recover/be restored (not relevant to all features, particularly to areas identified through guideline 2d as being least damaged); and • the potential for management measures to be implemented successfully. This should include consideration of whether a MPA is the most effective mechanism to deliver the required management (and achieve the relevant conservation objectives).

Table 5. Stage 5 guidelines to assess ecological coherence to prioritise between different areas according to their contribution to the MPA network.

Stage 5 should be undertaken at a network level. This stage is not simply about assessing the contribution that a potential area might make to the network. It involves weighing up the relative contributions of different potential areas and selecting those which collectively make the best contribution to achieving an ecologically coherent network. Where two or more areas could make an equivalent contribution to the network then socio-economics can be considered in deciding which to take forward.

It is at this stage that the inclusion of features which are representative of Scotland's seas more generally will be considered. This will be achieved through an assessment of the presence of representative marine habitats and species within potential areas. Consideration will be given to which MPA search features are represented and the case for including other features, the potential to do so within the areas identified (reassessing stage 3 and 4 as necessary) and whether there would be any significant gaps in terms of the coverage or representation. If existing locations are not sufficient further assessment of additional search locations to address these gaps would be required.

Several iterations, followed by re-assessments of elements of the process, may be necessary before the MPA network in waters adjacent to Scotland is considered complete. A limited number of iterations are likely to be done in the first cycle for identifying the network by 2012 to ensure that the first set of MPA proposals form a functioning and substantially complete network. The six-yearly reports to Parliament on the status of the network provide an opportunity to review experience and knowledge over time.

The importance of connectivity in supporting functioning marine ecosystems is recognised. In developing the network the focus is on linkages that are well understood and conserving features which would benefit from the protection afforded by a MPA, for example important life stages of highly mobile species.

Table 5 contd.

Guideline		Notes
<i>Summary</i>	<i>More detailed definition</i>	
5. The potential area contributes significantly to the coherence of the MPA network in the seas around Scotland	<p>The area makes a direct contribution to the MPA network in terms of its overall coherence. This may include:</p> <ul style="list-style-type: none"> • contributing to the representation ^v of features within the network; • providing replication of features within the network ^{vi} • providing key linkages between relevant features within the network ^{vii}; • reflecting the range and geographic variation of features within the seas around Scotland, and/or 	<p>All parts of this guideline will take account of the contribution made by existing area-based management, including Natura sites.</p> <p>v. The representation of features within the MPA network will be assessed primarily at the scale of Scotland's seas with consideration of the contribution made to wider MPA networks e.g. at the UK level.</p> <p>For biodiversity, the contribution made by the potential areas in a region is expected to take account of the importance of the region for that feature. For geodiversity, it will be based on the contribution of the potential areas to the principal 'networks' of marine geodiversity interests present in Scottish waters. An assessment will also be made of other marine habitats and species which may be present within the potential areas in terms of the contribution that could be made to the broader representivity of the network.</p> <p>vi. For biodiversity, OSPAR MPA Guidelines recommend that there should be replication of features within MPAs in each biogeographic area. These areas extend across the seas around Scotland and into adjacent waters and are therefore not being used directly for the assessment of replication. This part of the guideline will be considered to have been met if there is more than one example of each feature within the network in Scottish waters. For geodiversity there should be minimal duplication of features at a national level.</p>

Table 5 contd.

<p>5. The potential area contributes significantly to the coherence of the MPA network in Scottish waters (contd.)</p>	<ul style="list-style-type: none"> • contributing to the resilience of the network ^{viii} • Socio-economic considerations will be assessed when 2 or more sites of equal ecological value have been identified ^{ix} 	<p>vii. Linkages will be assessed only in those situations where there is a good understanding of the relationship between the features within different areas. It is expected that this will result in a focus on important locations in the life stages of highly mobile species. For example, this might include considering the relationship between areas used for courtship and those used for feeding by a particular species. The assessment must be undertaken within the wider management context i.e. not simply be restricted to considering linkages between MPAs but also taking account of initiatives that form part of the other pillars (e.g. species protection) and other area-based management.</p> <p>viii. It may in some cases be appropriate to include a greater proportion of some particularly threatened and/or declining features within the overall network.</p> <p>ix. Socio - economic evidence, advice and knowledge will be used to select the most appropriate area for designation as a Nature Conservation MPA, where more than one of the potential areas identified makes an equivalent contribution. Cultural and economic factors within areas will be identified in consultation with marine interests.</p>
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ANNEX 2 – SELECTION GUIDELINES FOR DEMONSTRATION & RESEARCH MPAS AND THIRD PARTY PROPOSALS

Demonstration and Research MPAs – Tables 6 and 7

These guidelines should be read in conjunction with Section 6 which provides general information on the consideration of proposals for Demonstration & Research MPAs and Section 7 which provides information on the procedures for third party proposals.

Table 6. Factors to be addressed by Marine Scotland and/or third parties when preparing Demonstration & Research MPA proposals.

<i>Factor</i>	<i>Description</i>
1. What is the purpose of the proposed MPA?	The proposal must clearly define what the purpose of the proposed MPA is. Proposals must relate to the demonstration of sustainable methods of marine management or exploitation, or carrying out research into such matters. They do not have to relate to MPA search features. The purpose should be specific to the proposed MPA in terms of its location, size and the features it contains. The aims and objectives of the proposed MPA should be specific and realistic in terms of what the MPA is likely to achieve and the outcome must be measurable.
2. What is novel about the proposed MPA?	Novelty will be an important consideration and therefore proposals should demonstrate what is novel about the proposed MPA. ‘Novelty’ can refer to either a new approach or technique, or a new application of an established process. For example this could include developing new ways of working/management approaches, and/or addressing issues through original research. Some Demonstration MPAs may involve trialling approaches that have been developed elsewhere to determine their applicability in new situations in Scotland.
3. What are the benefits of the proposed MPA?	The proposal should describe: <ul style="list-style-type: none"> • the potential benefits likely to arise directly from the proposed MPA, e.g. to the marine environment within the MPA, to people living and working within or close to the MPA; and • the potential indirect benefits, e.g. how the lessons learnt from this demonstration project might be applied more widely. • the potential contribution that the proposed MPA will make to Scotland’s national marine objectives.
4. Why is a Demonstration MPA the right approach?	The proposal should explain what other measures have been considered that could be put in place to achieve the proposed purpose. Alternatives should be evaluated critically so that it is clear why a

	Demonstration MPA is considered to be the most appropriate approach. Other measures which might have been considered as options include sectoral measures (e.g. fisheries measures), and voluntary agreements. A proposal should also explain why the demonstration or research could not be undertaken in a MPA designated for Nature Conservation purposes.
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Table 7. Assessment guidelines for Marine Scotland or third party proposals for Demonstration & Research MPAs

<i>Guidelines</i>	<i>Description</i>
1. The aims and objectives proposed for the MPA are feasible.	To include assessment of whether the size and location of the proposed MPA are appropriate for achievement of the proposed aims and objectives.
2. The proposed MPA is the best means of carrying out the proposed demonstration.	Assessment to include consideration of the application of research and the potential for any proposed management measures to be successfully implemented.
3. Research proposed is scientifically sound.	Assessment of scientific rigour undertaken by Marine Scotland Science or statutory advisors.
3. There is a good level of support from stakeholders.	Support would be expected from those most directly involved/affected by the proposal.
4. The proposed demonstration is feasible and fits with in the wider set of government priorities at the national level.	This could include contributing to achieving one or more of Scotland's National Marine Objectives. The proposal should be able to demonstrate a good fit with the wider set of government priorities at the national level.
5. The proposed demonstration has a high value in terms of helping to improve our knowledge and understanding.	This may be in terms of the interaction between new technology and marine features or the trialling of novel approaches to management.

Third party Nature Conservation MPAs – Tables 8 and 9

Nature Conservation MPAs will ultimately be assessed against the guidelines in Annex 1 to ensure they are considered within the context of national priorities and contribute to ecological coherence of the network. It is the intention for third party proposals to be considered within the main process of establishing the MPA network prior to 2012. Proposals made following establishment of the network will be required to demonstrate the added value they contribute and will be required to address this in the strong and clear scientific case provided.

All proposals will be assessed against Annex 1 guidelines in line with those proposals put forward by SNH and JNCC. Provision of the information required in Table 8 in proposals will allow an initial assessment to be undertaken (Table 9) which will consider the validity and quality of a proposal prior to application of the Annex 1 guidelines.

Tables 8 and 9 should be read in conjunction with Section 7.

Table 8. Third Party proposals for Nature Conservation MPAs should address the following:

<i>Factor</i>	<i>Description:</i>
1. Aims and objectives of the MPA proposal	The proposal should address as specifically as possible what the aims and objectives of the proposed MPA are, its location and size and what the key management issues are. For Nature Conservation MPAs, the MPA search features and other relevant features present must also be discussed. The proposal should be able to demonstrate a good fit with the wider set of government priorities at the national level. The proposal should be realistic about what the MPA is likely to achieve, based on an understanding of existing measures which could be used to support implementation.
2. For Nature Conservation MPAs, the	The proposal should provide a description of the features and their scientific value

conservation importance of the MPA search feature and other relevant features recommended for inclusion in the MPA proposal	including; <ul style="list-style-type: none"> an assessment of importance, e.g. is each feature being put forward as a reason for designation, are the features considered to be key, threatened and/or declining or of functional importance²³;
<i>Factor</i>	<i>Description:</i>
2. Contd.	<ul style="list-style-type: none"> a description of the diversity, extent and naturalness of the features, where this is known; the contribution to the wider MPA network in waters adjacent to Scotland that the MPA will make. <p>The bulleted list above is equivalent to the identification guidelines used for Nature Conservation MPAs. It is recognised that communities drawing up proposals may not have access to the same level of information as statutory organisations and this will be taken into account during the assessment process. However, clear scientific evidence will be required in order for a proposal to be progressed according to the guidelines.</p>
3. Benefits of the features and the proposed new MPA.	<p>The proposal should highlight the wider value of the features to relevant bodies, and include:</p> <ul style="list-style-type: none"> a description of existing uses of the area and the socio-economic value of these, and an assessment of the way in which the proposed MPA is expected to affect this value, including any possible negative impacts on existing users. A discussion of consultation with other stakeholders including those whose activities will be affected.
4. Why a MPA is considered to be the most appropriate approach	The proposal should explain what other options (for example, sectoral measures - e.g. fisheries measures, and voluntary agreements) have been considered that might support the proposed purpose. These options should be critically evaluated so that it is clear why a MPA is considered to be the most appropriate approach.
5. Key management issues	The proposal should include a summary of the key management issues relating to the

²³ For further explanation of the application of terms such as diversity and naturalness as see Tables 1 and 2 which provide details of the guidelines for Nature Conservation MPAs.

	<p>proposed MPA and proposed solutions. This should include:</p> <ul style="list-style-type: none"> • a description of current activities/developments within the proposed MPA, and any management measures currently in place; • a description of the main interactions between these activities/developments and the marine natural features within the proposed MPA; • a summary of the key management issues, and options for addressing them. • An outline of other possible new economic or social uses that may be affected if the proposal is accepted or which may need to be managed.
6. Involvement of others	<p>The proposal should give an indication of those who have been involved in discussions relating to the MPA proposal and whether they support the proposal. This may include discussions with organisations, for example with SNH over the marine natural features within the proposed MPA. It should highlight stakeholders or stakeholder groups who have been involved, particularly those of most relevance to the proposed MPA in terms of having an interest/involvement with the key management issues or who may be affected by designation.</p>

Table 9. Assessment guidelines for third party proposals for Nature Conservation MPAs

<i>Guideline</i>	<i>Notes</i>
1. The aims and objectives developed by the third party for the proposed MPA are feasible and fit within the wider set of government priorities at the national level.	To include assessment of whether the size and location of the MPA are relevant for the features for which the MPA has been proposed, and appropriate for effective management of issues identified by the community.
2. The biodiversity and/or geodiversity features within the proposed MPA are considered to be important.	Will the proposed MPA make a significant contribution to the overall network of MPAs in Scottish waters e.g. does it fill a geographic gap.
3. An MPA is the best means of addressing the management issues which have been identified by the third party.	To include assessment of the potential for any proposed management measures to be successfully implemented.
4. Where relevant features have been modified by human activity, there is potential for them to recover.	Not relevant to areas considered to be more natural or geodiversity features.
5. There is a good level of support from communities and other stakeholders.	The degree of support would be expected to be greater from those most directly involved/affected by the proposal.
6. The area has a high value in terms of helping to raise public awareness and understanding of the features of the proposed MPA and Scotland's marine environment more generally.	

ANNEX 3 - LIST OF MPA SEARCH FEATURES IN SCOTLAND'S SEAS

This annex includes four tables covering seabed habitats, low or limited mobility species, highly mobile species and large-scale features of functional importance to Scotland's seas. The tables highlight whether the features are of particular interest in territorial or offshore waters (or both). Marine habitats and species for which area-based protection is appropriate but that have a direct Natura 2000 parallel (e.g. intertidal mudflats and sandflats or coastal lagoons) have been excluded from these tables.

MPA search features are those that are being used to underpin the selection of Nature Conservation MPAs but they are not the only interests which can be designated as protected features of MPAs. This list reflects our current knowledge and understanding at the time of publication. It is likely to be subject to periodic review to take account of the best available evidence. (T&D) denotes an OSPAR Threatened and / or Declining habitat or species.

Table 10. Seabed habitats being used to underpin the selection of Nature Conservation MPAs

MPA search feature	Component habitats / species	Scottish marine area
T&D Blue mussel beds	<i>Mytilus edulis</i> beds on littoral sediments	Territorial waters
	<i>Mytilus edulis</i> and <i>Fabricia sabella</i> in littoral mixed sediment	Territorial waters
	<i>Mytilus edulis</i> beds on sublittoral sediment	Territorial waters
	<i>Mytilus edulis</i> beds on reduced salinity infralittoral rock	Territorial waters
T&D Burrowed mud	Seapens and burrowing megafauna in circalittoral fine mud	Both
	Burrowing megafauna and <i>Maxmuelleria lankesteri</i> in circalittoral mud	Both
	Tall seapen <i>Funiculina quadrangularis</i>	Both
	Fireworks anemone <i>Pachycerianthus multiplicatus</i>	Both
	Mud burrowing amphipod <i>Maera loveni</i>	Offshore waters
T&D Carbonate mound communities	Carbonate mound communities	Offshore waters
T&D Coral gardens	Coral gardens	Offshore waters
T&D Deep sea sponge aggregations	Deep sea sponge aggregations	Offshore waters
Flame shell beds	<i>Limaria hians</i> beds in tide-swept sublittoral muddy mixed sediment	Territorial waters

MPA search feature	Component habitats / species	Scottish marine area
T&D Horse mussel beds	<i>Modiolus modiolus</i> beds with hydroids and red seaweeds on tide-swept circalittoral mixed substrata	Territorial waters
	<i>Modiolus modiolus</i> beds on open coast circalittoral mixed sediment	Territorial waters
T&D Horse mussel beds <i>cont.</i>	<i>Modiolus modiolus</i> beds with fine hydroids and large solitary ascidians on very sheltered circalittoral mixed substrata	Territorial waters
	<i>Modiolus modiolus</i> beds with <i>Chlamys varia</i> , sponges, hydroids and bryozoans on slightly tide-swept very sheltered circalittoral mixed substrata	Territorial waters
Inshore deep mud with burrowing heart urchins	<i>Brissopsis lyrifera</i> and <i>Amphiura chiajei</i> in circalittoral mud	Territorial waters
Kelp and seaweed communities on sublittoral sediment	Kelp and seaweed communities on sublittoral sediment	Territorial waters
Low or variable salinity habitats	Faunal communities on variable or reduced salinity infralittoral rock	Territorial waters
	Kelp in variable or reduced salinity	Territorial waters
T&D Maerl beds	Maerl beds	Territorial waters
Maerl or coarse shell gravel with burrowing sea cucumbers	<i>Neopentadactyla mixta</i> in circalittoral shell gravel or coarse sand	Territorial waters
T&D Native oysters	<i>Ostrea edulis</i> beds on shallow sublittoral muddy mixed sediment	Territorial waters
	Native oyster <i>Ostrea edulis</i>	Territorial waters
Northern sea fan and sponge communities	<i>Caryophyllia smithii</i> and <i>Swiftia pallida</i> on circalittoral rock	Territorial waters
	Mixed turf of hydroids and large ascidians with <i>Swiftia pallida</i> and <i>Caryophyllia smithii</i> on weakly tide-swept circalittoral rock	Territorial waters
	Deep sponge communities (circalittoral)	Territorial waters
	Northern sea fan <i>Swiftia pallida</i>	Both
Offshore deep sea muds	<i>Ampharete falcata</i> turf with <i>Parvicardium ovale</i> on cohesive muddy sediment near margins of deep stratified seas	Offshore waters
	Foraminiferans and <i>Thyasira</i> sp. in deep circalittoral fine mud	Offshore waters

MPA search feature	Component habitats / species	Scottish marine area
	<i>Levinsenia gracilis</i> and <i>Heteromastus filiformis</i> in offshore circalittoral mud and sandy mud	Offshore waters
	<i>Paramphinome jeffreysii</i> , <i>Thyasira</i> spp. and <i>Amphiura filiformis</i> in offshore circalittoral sandy mud	Offshore waters
	<i>Myrtea spinifera</i> and polychaetes in offshore circalittoral sandy mud	Offshore waters
Offshore subtidal sands and gravels	<i>Glycera lapidum</i> , <i>Thyasira</i> spp. and <i>Amythasides macroglossus</i> in offshore gravelly sand	Offshore waters
	<i>Hesionura elongata</i> and <i>Protodorvillea kefersteini</i> in offshore coarse sand	Offshore waters
Offshore subtidal sands and gravels cont.	<i>Echinocyamus pusillus</i> , <i>Ophelia borealis</i> and <i>Abra prismatica</i> in circalittoral fine sand	Offshore waters
	<i>Abra prismatica</i> , <i>Bathyporeia elegans</i> and polychaetes in circalittoral fine sand	Offshore waters
	Maldanid polychaetes and <i>Eudorellopsis deformis</i> in offshore circalittoral sand or muddy sand	Offshore waters
	<i>Owenia fusiformis</i> and <i>Amphiura filiformis</i> in offshore circalittoral sand or muddy sand	Offshore waters
^{T&D} Seagrass beds	<i>Zostera noltii</i> beds in littoral muddy sand	Territorial waters
	<i>Zostera marina/angustifolia</i> beds on lower shore or infralittoral clean or muddy sand	Territorial waters
	<i>Ruppia maritima</i> in reduced salinity infralittoral muddy sand	Territorial waters
Sea loch egg wrack beds	<i>Ascophyllum nodosum</i> ecad <i>mackaii</i> beds on extremely sheltered mid eulittoral mixed substrata	Territorial waters
Seamount communities	Seamount communities	Offshore waters
Shallow tide-swept coarse sands with burrowing bivalves	<i>Moerella</i> spp. with venerid bivalves in infralittoral gravelly sand	Territorial waters
Tide-swept algal communities	Fucoids in tide-swept conditions	Territorial waters
	<i>Halidrys siliquosa</i> and mixed kelps on tide-swept infralittoral rock with	Territorial waters

MPA search feature	Component habitats / species	Scottish marine area
	coarse sediment	
	Kelp and seaweed communities in tide-swept sheltered conditions	Territorial waters
	<i>Laminaria hyperborea</i> on tide-swept infralittoral mixed substrata	Territorial waters

Table 11. Low or limited mobility species being used to underpin the selection of Nature Conservation MPAs

MPA search feature	Species name	Taxon group	Scottish marine area
Burrowing sea anemone aggregations	<i>Arachnanthus sarsi</i>	Sea anemones, sea fans and seapens	Territorial waters
Northern feather star aggregations on mixed substrata	<i>Leptometra celtica</i>	Starfish and feather stars	Both
Fan mussel aggregations	<i>Atrina pectinata</i>	Snails, clams, mussels and oysters	Both
Heart cockle aggregations	<i>Glossus humanus</i>	Snails, clams, mussels and oysters	Territorial waters
^{T&D} Ocean quahog aggregations	<i>Arctica islandica</i>	Snails, clams, mussels and oysters	Both

Table 12. Mobile species being used to underpin the selection of Nature Conservation MPAs

MPA search feature	Species name	Taxon group	Scottish marine area
European spiny lobster [#]	<i>Palinurus elephas</i>	Lobsters and sand hoppers	Territorial waters
Blue ling [#]	<i>Molva dypterygia</i>	Bony fish	Offshore waters
^{T&D} Orange roughy	<i>Hoplostethus atlanticus</i>	Bony fish	Offshore waters
Sandeels [#]	<i>Ammodytes marinus</i> & <i>A. tobianus</i>	Bony fish	Both (<i>A. marinus</i> only offshore)
^{T&D} Basking shark	<i>Cetorhinus maximus</i>	Sharks, skates and rays	Territorial waters
^{T&D} Common skate	<i>Dipturus batis</i> complex	Sharks, skates and rays	Territorial waters
Minke whale	<i>Balaenoptera acutorostrata</i>	Whales, dolphins and porpoises	Territorial waters
Risso's dolphin	<i>Grampus griseus</i>	Whales, dolphins and porpoises	Territorial waters
White-beaked dolphin	<i>Lagenorhynchus albirostris</i>	Whales, dolphins and porpoises	Territorial waters
Black guillemot	<i>Cephus grylle</i>	Birds	Territorial waters

[#] These species are commercially fished in the seas around Scotland and Marine Scotland is the lead organisation responsible for their wider management. However, these species are also of conservation importance and could benefit from the protection afforded by a MPA (it is recognised that spatial measures other than MPA designation may also be effective). Nature Conservation MPAs are not intended to be used for fisheries management purposes. So, for example, MPAs could be used to protect sandeel populations in locations where sandeels play a key functional role in supporting top predators such as seabirds and cetaceans but would not be used for the purpose of managing a sandeel fishery.

Table 13 Large-scale features of functional significance being used to underpin the selection of Nature Conservation MPAs

The large-scale features represent areas of functional significance for the overall health and diversity of Scottish seas. They are intended to complement the habitats and species in Tables 10-13 by identifying areas which, whilst not necessarily containing other MPA search features, have a benefit by supporting wider ecosystem function. Specific examples of these features may contribute to the network through supporting features at a range of trophic levels for example areas of high primary productivity through to possible aggregations of mobile top predators.

MPA search feature	Scottish marine area
Continental slope	Offshore
Fronts	Both
^{T&D} Seamounts	Offshore
Shelf banks and mounds	Both
Shelf deeps	Both

ANNEX 4 - MINISTERIAL STATEMENT ON THE CREATION OF A NETWORK OF MARINE PROTECTED AREAS (LAID IN THE SCOTTISH PARLIAMENT ON 1 SEPTEMBER 2010).

The Marine (Scotland) Act 2010 (“the Act”) created new powers for Scottish Ministers to designate Marine Protected Areas (MPAs) in Scottish territorial waters in order to protect marine biodiversity and geodiversity and contribute to a UK and international network of MPAs. Section 79(6) of the Act places a duty on Scottish Ministers to make a statement about the principles that they intend to follow when designating MPAs under section 79(1).

The MPA powers in the Act complement the powers in the Marine and Coastal Access Act 2009 to designate MPAs in offshore waters adjacent to Scotland to protect marine biodiversity and geodiversity. Section 123(6) of the Marine and Coastal Access Act 2009 includes an equivalent duty for Scottish Ministers to make a statement about the principles that they intend to follow when designating MPAs. Section 123(8) includes a power to revise the statement.

This statement fulfils the duty in section 79(6) of the Act and revises the statement for offshore waters adjacent to Scotland that was laid in March 2010. The statement therefore applies to Scottish inshore and offshore waters.

The powers in both Acts will be used in an integrated way to develop a MPA network that delivers our priorities at the Scottish, UK and international level

A network of MPAs in Scotland’s seas, which contributes to a wider MPA network in co-operation with other countries, is a key part of the Scottish Government’s strategy for marine Nature Conservation. The strategy will be delivered through a 3 pillar approach, recognising the value of (i) protected sites, (ii) protected species and (iii) wider policies and initiatives that contribute to our conservation aims. The MPA network, in combination with the new marine planning framework, is also an important part of our wider strategy for managing Scotland’s seas, which aims to integrate conservation and other marine activities in pursuing a vision for ‘clean healthy, safe, productive and biologically diverse oceans and seas’.

The Scottish Government anticipates that the new Nature Conservation MPAs, along with existing protected sites in our marine environment, will contribute to achieving Good Environmental Status (GES) under the Marine Strategy Framework Directive (MSFD) and deliver our contribution to the ecologically coherent network of MPAs under the OSPAR convention on the protection of the marine environment in the North East Atlantic

The Scottish Government is committed to ensuring that the network, which will include Natura 2000, Ramsar, SSSIs and the new MPAs, is ecologically coherent and will be substantially in place by the end of 2012. We will also consider on a case by case basis whether other area-based measures should be recognised as contributing to the aims of the network.

Guidance has been developed under the OSPAR Convention on the key design features associated with ecological coherence. The OSPAR agreement can be found at

http://www.ospar.org/documents/DBASE/DECRECS/Agreements/06-03e_Guidance%20ecol%20coherence%20MPA%20network.doc. and the key elements are listed below:

- Representation – To support the sustainable use, protection and conservation of marine biological diversity and ecosystems, areas which best represent the range of species, habitats and ecological processes (for which MPAs are a suitable measure) should be considered for inclusion.
- Replication – Replication of features in separate MPAs in each biogeographic area is desirable where it is possible in order to contribute to resilience and the aims of the network.
- Size of site – The appropriate size of a site should be determined by the purpose of the site and be sufficiently large to maintain the integrity of the feature for which it is selected.
- Adequacy – the MPA network should be of adequate size to deliver its ecological objectives.
- Connectivity – the MPA network should take into account the linkages between marine ecosystems and the dependence of some species and habitats on processes that occur outside the MPA concerned.
- Management – MPAs should be managed to ensure the protection of the features for which they were selected and to support the functioning of an ecologically coherent network.

The Scottish Government intends to consider these principles in the context of the seas around Scotland. In partnership with our statutory Nature Conservation advisers (Scottish Natural Heritage (SNH) and the Joint Nature Conservation Committee (JNCC)) we will consider this guidance and guidelines on the use of the MPA powers in Scotland's seas in order to contribute to the development of a MPA network. The guidelines are still under development but include 8 principles on MPA networks which we intend to follow:

- i. The MPA network should be capable of delivering Scotland's MPA commitments, including national and international priorities for the conservation of priority marine features.
- ii. The purpose of the MPA network will be to deliver benefits for marine features and to support wider ecosystem function within the context of a 3 pillar approach. The network should safeguard marine features (relating to both biodiversity and geodiversity) in Scottish waters and, through sound management, deliver recovery where practicable.
- iii. The MPA network will include features considered as priorities for area-based protection in Scottish waters, including features considered to be threatened

and/or declining, and/or representing the range of features within Scotland's seas.

- iv. Individual sites will be considered for their merit in contributing to ecological coherence of the network²⁴, but where possible preference will be given to the selection of areas with multiple features, including those of interest for both biodiversity and geodiversity. Functional units and processes which underpin these features (for ecology, geology and geomorphology) will be taken into account through boundary setting and management.
- v. Network development will take account of the distinctive biogeographical differences of our seas. The proportion of each feature included within the MPA network will vary to reflect factors such as the importance of the feature and the element of risk to its survival in Scottish waters.
- vi. The MPA network will consist of a range of different types of protected areas, including European Marine Sites and Nature Conservation MPAs designated under section 79(1) of the Marine (Scotland) Act and section 116 of the Marine and Coastal Access Act. Other types of area-based measures which offer protection to marine features may be recognised as contributing to Scotland's MPA network. These areas will follow the same scientific assessment process as Nature Conservation MPAs to evaluate the contribution to national priorities these areas could offer.
- vii. MPAs forming part of the network will be managed so as to deliver long-term protection to the features they contain. An MPA network will contribute to Government objectives on the environment, which in turn will help achieve broader objectives, including sustainable economic growth.
- viii. Significant progress towards identifying Nature Conservation MPAs to complete the network will have been made by the end of 2012.

In basing our decisions on the best available scientific evidence we will draw on the expertise of our statutory Nature Conservation advisers (SNH and JNCC) together with other evidence from Marine Scotland Science, the wider scientific community and sea-user communities.

A fundamental principle of our approach to marine Nature Conservation is that conservation should be integrated with productive and sustainable use of the seas. It is important therefore that users of the seas should be actively involved in our conservation policy and that the MPA network and its sites are well understood and supported. In ensuring we create an ecologically coherent network, the Scottish Government wants to minimise any adverse social and economic impacts and wherever possible to work with the grain of sustainable economic use of the seas. We believe that we should encourage the co-existence of MPAs and social and economic activities where they are mutually compatible as this exemplifies the key

²⁴Ecological coherence as defined by OSPAR
http://www.ospar.org/documents/DBASE/DECRECS/Agreements/06-03e_Guidance%20ecol%20coherence%20MPA%20network.doc

spirit of sustainable development. This should be reflected in marine planning. Information on the socio-economic importance of our seas is important to the development and management of the MPA network and marine planning.

Management of the network of sites should be proportionate and ensure its long term value. A presumption of use by all marine users is the default with additional management of an activity only required if it is known or likely to damage the site's protected features, thus conflicting with the conservation objectives of the site and therefore endangering the site's contribution to the MPA network. We expect evidence to result in differing conservation objectives for sites, ranging from maintenance of existing habitats to recovery of damaged or diminished features. Similarly we expect for some sites there will be a choice about the management measures that are felt likely to deliver those objectives. We wish to be clear about the implications of those choices, e.g. feasibility of recovery of existing habitats in the relevant location. Co-existence of activities will be encouraged where possible but we recognise that some activities in some areas may need to be controlled or excluded, meaning that the nature and intensity of human activities is likely to vary between sites.

As part of this management process, and to account for a marine environment which varies both naturally and under external pressures such as climate change, MPAs can be moved or decommissioned to secure the network's long term aims and ensure it is still protecting the features it was designated to protect. The Scottish Government also recognises the contribution of certain types of habitats to mitigating against climate change. We will work to maximise where possible links between MPAs and protecting habitats that provide this service.

Designation and management of Marine Protected Areas and the ecologically coherent network will significantly contribute to the Scottish Government's efforts to integrate policies to achieve our vision for clean healthy, safe, productive and biologically diverse oceans and seas.

This statement of principles will be kept under review, and the Scottish Government will continue to keep Parliament informed of developments. The marine conservation strategy and MPA guidelines will also be placed in SPICE once finalised.