

The Marine Bill and Marine Protected Areas

This paper is a working document and the proposals it contains may evolve as our thinking progresses.

Executive summary

The UK is working towards the development of a network of Marine Protected Areas (MPAs) for biodiversity conservation and sustainable use to meet its international obligations. MPA designation in the UK is currently focussed at a European level i.e. the introduction of marine Natura 2000 sites. These sites are to be complemented with additional international/ regional level MPA designations under OSPAR, although legislation allowing the introduction of the latter is currently lacking. National level MPA designations, established under the Wildlife and Countryside Act (1981) remain limited with the designation of only three Marine Nature Reserves (MNRs) in the last 20 years. The Review of Marine Nature Conservation (RMNC) (1999-2004) recognised the limitations of the existing legislation used to designate and manage MNRs. Consequently there remains a need for comprehensive and robust legislation to identify, designate and manage both OSPAR MPAs and nationally important marine sites. Link believes that a representative network of MPAs to protect nationally important areas, habitats and species could significantly contribute to UK commitments under OSPAR. It is acknowledged that there will inevitably be some spatial overlap between designation types. However, the marine site protection framework must be as straightforward and streamlined as is practical.

Wildlife and Countryside Link (Link) believes that the Marine Bill provides a critical opportunity to provide for the designation of a representative network of nationally important marine sites (NIMS), which must include a suite of Highly Protected Marine Reserves (HPMRs).

Link believes that new legislation should place a duty on the conservation agencies to identify and designate MPAs and also to coordinate their protection through management plans. It will also be necessary to place duties and powers on the appropriate competent authorities to ensure the management of all MPAs. Where several agencies are responsible for enforcing legislation within MPAs co-ordination will be crucial. Therefore Link believes that there should be a legal duty for competent authorities to work together, to develop best practice and an effective MPA framework.

Regarding the management of activities within MPAs, there is the need to review and amend legislation relating to other sectoral management tools and legislation such as those concerning consents and byelaws, and incorporate activities not currently covered by these mechanisms.

Link also believes that marine legislation should provide a clear timetable for the delivery and implementation of biodiversity-based MPAs.

Background

There is increasing evidence that the populations of significant numbers of marine species are in decline and that large areas of marine habitats have been degraded or destroyed (e.g. Covey, R & Laffoley, D'A (2002) Maritime State of Nature Report for England; Defra (2005) Charting Progress – an integrated assessment of the state of UK seas). Such changes threaten to alter marine ecosystems to the extent that not only will wildlife be permanently lost, but economic wealth and social well-being may be damaged. Consequently, there is increasing interest in the conservation of the marine environment as illustrated by the development of programmes and measures within a number of global (e.g. Convention on Biological Diversity, World Summit on Sustainable Development) and regional (e.g. OSPAR, Convention for the Protection of the Marine Environment of the North East Atlantic) conventions.

Over the past 20 years, successive Government reviews have identified the need to address shortfalls in marine nature conservation legislation. More recently in 1998, the government

published a consultation paper on reforming the SSSI provisions of the Wildlife and Countryside Act 1981 (WCA 81). The consultation (which eventually led to the updating of SSSI provisions in England and Wales through the Countryside and Rights of Way Act 2000 (CRoW)) accepted that the concept of Marine Nature Reserves established under the WCA 81 had not been as successful as had been hoped, with only three having been designated. It concluded that the procedures are regarded as complex and unwieldy, and in need of administrative overhaul (paragraph B16 of SSSI – Better Protection and Management. A consultation document of DETR, September 1998). Consequently, the Review of Marine Nature Conservation (RMNC) was established “to consider the options for improving protection for marine sites and species”.

In July 2001, John Randall MP (Uxbridge) introduced the Marine Wildlife Conservation Bill (MWCB) in the House of Commons. The purpose of the Bill was to enable the establishment of a network of nationally important marine wildlife areas throughout the territorial waters of England and Wales. The MWCB received government backing and cross-party support in the House of Commons, confirming both the need and political support for nationally important marine sites, but stalled in the House of Lords and did not progress past second reading.

The Review of Marine Nature Conservation (RMNC)

The RMNC Working Group, comprising a broad range of interests, concluded that the current system of protection based on the WCA 81 is not capable of addressing marine nature conservation needs. In particular it fails to apply an ecosystem approach, which is core to the marine stewardship process. The system will not permit the Government to meet its current international obligations, including that for the creation of a cohesive network of marine protected areas (RMNC (2004), Executive Summary, paragraph 14).

The RMNC endorsed a new framework for marine nature conservation (tested through the Irish Sea Pilot project) based on a hierarchy of spatial scales: the wider sea, the regional sea, marine landscapes, important marine areas and priority marine features. It noted that important marine areas, a fundamental component of the marine nature conservation framework, should be viewed not in isolation but as part of an ecologically coherent network. Key Recommendations 4 and 8 of the RMNC Working Group’s Report to Government relate to ‘important marine areas’:

Key recommendation 4:

Government should identify areas important for marine biodiversity and geodiversity in UK waters and those requiring priority conservation action. Management measures should be identified for important marine areas as considered appropriate.

Key recommendation 8:

The Working Group recommends that an ecologically-coherent and representative network of marine protected areas should be identified and established, and appropriate and proportionate measures applied to ensure their conservation needs are met.

New legislation for marine nature conservation – MPAs

What is needed?

In line with Key Recommendation 4 of the RMNC, Link believes that an ecologically coherent network of Nationally Important Marine Sites (NIMs) will be needed to help deliver conservation and recovery of the UK’s marine biodiversity, and significantly contribute to fulfilling the UK’s commitment under OSPAR to ensure nationally important habitats and species are protected. Link further believes that this network must be representative of the full range of habitats and species in UK waters and must include a suite of Highly Protected Marine Reserves (HPMRs). Link believes that HPMRs, in which damaging and harmful activities (notably extractive activities) are excluded, are essential to underpin biodiversity conservation, recovery, and the maintenance and/or recovery of ecosystem processes.

Geographical Application

In keeping with existing MPA policy covering Natura 2000 and OSPAR sites, NIMS and HPMRs should be designated throughout waters where the UK and devolved authorities¹ have jurisdiction and responsibility i.e.:

- (a) Extreme high water mark to 200nm (including the sea bed, subsoil to a depth of 30m, and superjacent waters including the surface of the sea)
- (b) UK Continental Shelf beyond 200nm (including the sea bed and subsoil to a depth of 30m).

Link has identified the following as necessary elements for inclusion within new UK legislation:

1. **Definitions** – the meaning of “Nationally Important Marine Sites” and “Highly Protected Marine Reserves”

2. The **purpose(s)** for which MPAs, including HPMRs, may be designated, and the purpose of the network, i.e. to protect the full range of biodiversity in the UK in an ecologically coherent way, to protect ecological processes and to promote recovery of biodiversity and ecological processes. This and other issues relating to site protection will need to be supported by UK policy and guidance on marine site protection. This should be set within the broader context of marine nature conservation policy.

3. A duty to develop, by a certain date, **site selection criteria** which should be subject to review.

4. **Duties** and extended powers upon the relevant nature conservation agency **for selecting and designating sites** e.g. for English Nature out to 12nm and for JNCC from 12-200nm. Providing these duties to the relevant nature conservation agency will ensure a more streamlined and positive process (in contrast with the MNR system in which the ability to resolve or over-ride conflicts meant that few designations were confirmed). Key to the process is that designation is tied to site selection criteria/ guidelines.

5. Duties and procedures relating to **consultation on proposed MPAs** and appropriate stakeholder dialogue.

6. **Provisions to ensure sea users are informed** of designations as appropriate.

7. A duty for the relevant nature conservation agency to provide **advice on damaging activities**.

8. A duty for the relevant nature conservation agency to identify **conservation objectives** for a site and to coordinate the production of **management plans** once sites have been designated.

9. Details of **survey and monitoring requirements** by statutory nature conservation agencies and other competent authorities.

¹ In the case of Scotland the Scottish Executive control many affairs within 12nm of Scotland's coast, including marine conservation, fisheries, aquaculture and renewable energy. Scottish Environment LINK, sister organisation of WCL, is therefore campaigning for a separate Marine (Scotland) Act to implement a legally enforceable system of marine spatial planning and a comprehensive network of Marine Protected Areas - including mechanisms for managing Marine National Parks and nationally important areas - in Scottish waters and for matters over which the Scottish Executive has jurisdiction.

The Scottish, Welsh and Northern Irish administrations all have responsibility for specific affairs out to 12nm, including marine conservation. MPA policy and legislative proposals will need to consider these arrangements individually, and are likely to require a legislative approach that reflects these arrangements. Both Northern Irish and Scottish NGOs are calling for distinct marine legislation in their respective countries.

10. **General duties** on all competent authorities to exercise their functions in a way that is compatible with the site objectives and to further the conservation and restoration of designated sites.

11. **Powers and duties** placed on competent authorities to **manage sites in an appropriate way**. Furthermore, Link believes it will be necessary to review the range of mechanisms such as consents and byelaw making powers available to competent authority to carry out their functions and duties.

12. Details on **offences and penalties** in relation to marine sites.

13. Details on **enforcement** issues. Where several agencies are responsible for enforcing legislation within MPAs co-ordination will be crucial. Therefore Link believes there should be a duty for competent authorities to work together, to develop best practice and an effective framework.

14. A clear **timetable** for the identification, consultation and designation processes, that sets a deadline(s) for completion of the network, but allows for additional sites to be proposed and designated after the deadline(s).

Nationally Important Marine Sites (NIMS)

While it has been recognised that a network of MPAs is a necessary component of the marine nature conservation framework, and that such a network will enable the UK to meet various international obligations, Link is concerned that the important role of NIMS in the conservation and recovery of UK biodiversity is not fully recognised by government or other stakeholders.

Link, as outlined below, believes that marine Natura 2000 sites and OSPAR MPAs will not be sufficient to provide the necessary protection for UK biodiversity. Link also indicate how NIMS and HPMR could contribute to international commitments on MPAs:

Habitats Directive:

- One of the most obvious deficiencies of the Habitats Directive with respect to the marine environment is that the Annexes contain only eight marine habitats and ten marine species. This is partly because the Directive was originally developed with only the inshore area in mind, so application in the offshore area further limits the relevance of the list of habitats and species in the UK. These limitations have been acknowledged within Europe and there has been some recent debate on if or how to expand the Annexes to better reflect the marine environment. However, even if this were agreed as means of rectifying some of the inadequacies, the process would be lengthy and it is not guaranteed that a revised list would be representative of all UK habitats and species. Regarding the offshore area, in the UK the 2003 Draft Offshore Marine Habitats Regulations have yet to be laid before Parliament to enable offshore sites to be formally designated.
- Despite the requirement for promoting the conservation and long term maintenance of habitats and species, structure and process, the focus on a relatively restricted list of marine habitats and species provides limited opportunity for the broader objective of conserving and allowing recovery of ecosystem process and function.
- The level of designation under the Habitats Directive refers to features of European importance, again potentially excluding some sites of UK importance.
- Implementation of the Directive in UK marine waters has not fully exploited the potential powers of the Directive. There remains some uncertainty, for example, as to the reference point for defining favourable conservation status and hence a baseline against which to identify and monitor areas in need of restoration and recovery. In the UK, sustainable use has been the ethos for managing Natura 2000 sites, but Link believes that the management of sites, or zones within them, as HPMR - to allow recovery, or prevent deterioration of, or significant disturbance to species and habitats - would be consistent with the objectives of the Directive.

OSPAR process:

- Under the OSPAR process MPAs are required to (a) protect, conserve and restore species, habitats and ecological processes that have been adversely affected by human activities; (b) prevent the degradation of, and damage to, species, habitats and ecological processes, following the precautionary principle, and (c) protect and conserve areas that best represent the range of species, habitats and ecological processes in the maritime area.
- Whilst the OSPAR process represents a broader set of objectives than the Habitats Directive, the process for identifying OSPAR MPAs has only just started and will initially reflect sites already designated under the Habitats Directive. The deadline of 2010 for the implementation of a network of OSPAR MPAs reflecting the full range of OSPAR objectives therefore remains ambitious. The Marine Bill provides the opportunity and impetus to develop this work in parallel at a UK wide level.
- MPAs should represent one tool for protecting those features listed on the OSPAR Commission's list of threatened and declining species and habitats. There is still much work required to clarify the representative objective (Objective c above) and to identify lists of representative habitats and species. In contrast, work has been achieved through the development of the provisional list of Nationally Important Marine Features developed during the Irish Sea Pilot project. This list included around 250 species and habitats (Vincent *et al.*, 2003)².

Link recognises the greater compatibility of the objectives of the OSPAR process. However, Link believes that in order to fulfil these objectives there remains a need to introduce legislation for NIMS which ensures that national biodiversity is given full recognition and protection, and existing UK-wide work, such as that initially carried out through the Irish Sea Pilot project, can be further developed

Defra has suggested that the priority in terms of MPAs in UK seas will be the identification and designation of Natura 2000 sites, followed by identification and designation of OSPAR MPAs. However, Link believes that the momentum of work in relation to NIMS should continue in parallel with the above processes, as policy development and new legislation under the Marine Bill for Nationally Important Marine Sites and Highly Protected Marine Reserves will provide a real opportunity to substantially contribute to many of the needs and requirements outlined for delivering a network of MPAs under OSPAR. Link believes that much has already been done to identify marine sites which may be nationally important e.g. English Nature's Marine Natural Areas; Gubbay, 2001³.

Highly Protected Marine Reserves (HPMR)

The management of designated sites in the UK – terrestrial and marine –has traditionally focused on seeking to ensure that activities do not compromise the conservation objectives of the sites, although the Countryside and Rights of Way Act 2000, the Environment (Northern Ireland) Order 2002 and the Nature Conservation (Scotland) Act 2004 changed the emphasis to one of positive management of sites. Direct habitat management by intervention, however, is generally not applicable in the marine environment, and Link believes that the traditional approach of managing individual activities, on its own, will not be sufficient to ensure maintenance and/or recovery of ecosystem integrity. In line with CBD recommendations i.e. the use of both multiple-use MPAs and highly protected MPAs, in a tiered and pragmatic approach to MPA network design (CBD Technical Series No. 13, report of the *Ad Hoc* Technical Expert Group on Marine and Coastal Protected Areas, January 2004), Link believes the UK should, as part of its MPA policy and framework, identify and designate a series of HPMR. Link advocates that HPMR, in which damaging and harmful activities (notably extractive activities) are excluded, are needed to underpin biodiversity conservation, recovery, and the maintenance and/or recovery of ecosystem processes.

² Vincent, MA, Atkins, SM, Lumb, CM, Golding, N, Lieberknecht, LM, Webster, M (2004). *Marine Nature Conservation and Sustainable Development – The Irish Sea Pilot*. Report to Defra by the Joint Nature Conservation Committee, Peterborough.

³ Gubbay, S (2001) *Examples of nationally important marine areas in the territorial waters around England and Wales*. RSPB, Sandy, Bedfordshire

In addition to biodiversity and ecosystem benefits, Link believes that a series of HPMPR will provide:

- Areas to be used as scientific reference areas, important given the inherent uncertainties in our knowledge on marine ecosystems and processes, and in light of anticipated changes in the marine environment as a result of unknown future climate change impacts;
- Areas identified for prioritising recovery, effectively serving as insurance against scientific uncertainties;
- Areas set aside for intrinsic human enjoyment.

Link recognises that this represents a departure from the established patterns of resource management and conservation in the marine environment in the UK, and welcomes a full debate with all stakeholders. Link firmly believes that this style of MPA management is both a legitimate use and a vital tool in contributing to an ecosystem-based approach to the management of activities in our seas, thereby contributing to sustainable development. Link notes this management style has been proven to increase threatened biodiversity and biomass in tropical and temperate marine habitats⁴. In particular this style of MPA management does not rely on the need for conclusive scientific information on which to base management decisions. This does not mean Link dismisses the need for a sound scientific basis for management and decision making, rather we acknowledge that given limited resources, timescales needed to identify trends, and the 'interference' of environmental factors we will never have a complete scientific understanding of the marine ecosystem. Areas not subject to extractive and other damaging practices play a functional role in offsetting these uncertainties. Such areas also facilitate enforcement activities, due to the fact that protection and management will be considerably simpler. HPMPR also represent a management tool/ style consistent with the objectives of the Habitats Directive and OSPAR.

Consideration of the value of HPMPRs is often connected to the direct benefits which may be gained from individual sectors and individual sites. In particular, internationally, marine reserves have been shown to enhance populations of commercially-fished (or harvested) species, benefiting local fishers through spill-over effects, although this is usually associated with relatively static species such as scallops⁵, lobsters and crayfish⁶. Evidence suggests that benefits to more mobile species is more likely to be associated with closures that reflect areas associated with critical life stages, such as nursery areas, recruitment grounds or spawning grounds. Link welcomes further development of work that aims to identify potential benefits for commercial fisheries; however, as outlined above believe there are compelling and legitimate reasons for introducing a series of HPMPR specifically for biodiversity and ecological protection purposes. In addition, Link urge that benefits should be considered not only at the local level, delivered by individual HPMPR, but at the ecosystem level, delivered by site networks.

In addition to the primary purpose of biodiversity conservation and ecosystem support, Link believes HPMPR will offer a number of further benefits. As such, that the Marine Bill should allow for HPMPRs to be designated for a range of purposes in addition to the primary purpose, including:

- Increasing resilience of marine biodiversity and ecosystem processes in the context of environmental change, in particular climate change
- Protection of important areas for maritime archaeology/cultural heritage

⁴ - Statement by marine scientists at *World Parks Conference in Durban, South Africa in 2003* that 20-30% of all seas should be closed off to all extractive uses. Similarly, the *Pew Fellows in Marine Research* signed a position statement in June 2005 that 20-30% of seas should be closed to extractive use.

⁵ - Grand Banks closures in the Atlantic of around 17,000km² since 1996 have seen scallop abundances increase between 8 and 14 fold. In Gell, FR and Roberts CM (2003). Benefits beyond boundaries: the fishery effects of marine reserves. *Trends in ecology and evolution* 18(9): 448-455

⁶ - Lundy lobsters are bouncing back. 'Fishing News', August 5th 2005

- Scientific research and reference to assist in improving our understanding of naturally functioning marine ecosystems and biodiversity, and how they respond to human impacts (e.g. HPMR could act as controls or baselines for monitoring of the impacts of consented operations at sea)
- Public awareness, and enjoyment
- Education
- Potential benefits to fisheries management including:
 - A set of sites with increasing biomass of commercially and ecologically important species to such an extent that the carrying capacity of the area is reached for target species and habitats, and natural spill over of adults occurs through competitive exclusion to surrounding areas.
 - A set of sites which allows species to grow to larger size, which for many species increases their fecundity. This inevitably leads to these areas becoming sources of larvae for fish, shellfish and non-commercial species.)

In some cases site selection may have synergy with fisheries monitoring measures and those related to other sectors.

As well as being designated as stand alone sites, HPMR could provide a useful spatial tool or zone set within other MPA designations such as NIMS, OSPAR MPAs and Natura 2000 sites, to underpin their conservation and recovery objectives.

Networks

Much recent work on the benefits of MPAs points to the need for ecologically coherent networks of areas (e.g. Irish Sea Pilot, OSPAR Recommendation on MPAs). Within such networks, MPAs should be mutually supporting – that is, populations of species in one area should be capable of supporting, and be supported by, populations in other areas. For a network looking to protect representative features in addition to rare, threatened or declining features or exceptional areas, replication of all features at a number of sites will also be a prerequisite. Networks should be large enough (in terms of total area covered) and have sufficient connectivity to sustain species and habitats in perpetuity.

The Irish Sea Pilot report defines an ecologically coherent network as having the following elements⁷:

- i. Representative examples of all the broad marine habitat types;
- ii. Areas of exceptional habitat or species biodiversity;
- iii. Important areas for aggregations of mobile species (e.g. important spawning, nursery, calving, feeding or resting areas and migration bottlenecks).

The Irish Sea Pilot report suggests that a network with these elements should be identified for each Regional Sea, because the biological characteristics of each area will be significantly different from the others. The report also notes that in the creation of a network it may be possible to consider a number of areas before selecting representative examples of habitat types. This allows for the involvement of sectoral interests and local stakeholders in MPA selection. Link supports this, but notes that such flexibility may not be appropriate for exceptional areas, or those identified for features which are rare, threatened and/or declining.

Conclusions

The Marine Bill provides a unique opportunity to put in place systems to protect marine biodiversity, in the context of an ecosystem-based approach to the management of activities at sea. MPAs are a key component of the toolkit for marine nature conservation, as recognised through the RMNC. It is acknowledged that much work will also be required through the development of policy and guidance on MPAs in the UK, set within the context of broader marine nature conservation.

⁷ Vincent, MA, Atkins, SM, Lumb, CM, Golding, N, Lieberknecht, LM, Webster, M (2004). *Marine Nature Conservation and Sustainable Development – The Irish Sea Pilot*. Report to Defra by the Joint Nature Conservation Committee, Peterborough, paragraphs 243-245.

In particular the Marine Bill provides a key opportunity to provide the legislative basis for building on the role of marine Natura 2000 sites by providing the necessary provision to introduce OSPAR MPAs and NIMS. Critically Link believes that new legislation must provide for a range of management styles, not just multiple use. Such measures could include the management of activities within MPAs through zoning. However, Link strongly advocates that a network of NIMS include a suite of HPMR. Further, the role of existing mechanisms such as consent and byelaws in relation to nature conservation also needs to be considered, to ensure that powers available to competent authorities are effective and easily applicable for the objectives of MPAs, thus ensuring that deterioration to sites from activities such as fisheries are avoided.

In order to meet conservation and recovery needs of the UK's marine biodiversity and the ecosystem processes on which it depends, Link, therefore, believes that the Marine Bill must provide for the identification, designation and management of a **representative network of Nationally Important Marine Sites, which must include a suite of Highly Protected Marine Reserves**. HPMR could confer a number of benefits in addition to biodiversity protection and recovery; benefits should be sought at the level of the network, as well as from individual sites.

Supported by the following organisations:

- Buglife – The Invertebrate Conservation Trust
- Council for British Archaeology
- Marine Connection
- Marine Conservation Society
- Royal Society for Protection of Birds (RSPB)
- Shark Trust
- Whale & Dolphin Conservation Society
- Wildfowl & Wetlands Trust
- The Wildlife Trusts
- WWF-UK
- Zoological Society of London