



**Foreign & Commonwealth Office:  
Whether to establish a Marine Protected Area in the  
British Indian Ocean Territory**

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# **Joint Nature Conservation Committee response to the consultation on whether to establish a marine protected area in the British Indian Ocean Territory**

## **February 2010**

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**Contact: Dr Tony Weighell  
Tony.Weighell@jncc.gov.uk**

## **1. Introduction**

1.1 The Joint Nature Conservation Committee (JNCC) is the statutory adviser to Government on UK and international nature conservation. JNCC is committed to provide advice based on best available scientific evidence and to ensure its advice is consistent with international best practice and fulfills the UK government commitments to international conventions. Of particular relevance here is the Convention on Biological Diversity where, through the ecosystem approach, human activity and biodiversity conservation have been integrated into a commitment to the sustainable use of resources and where the concept of a global network of marine protected areas as a tool for the protection of biodiversity was fully endorsed. We refer to Annex 1 for further details on JNCC work and global best practice for biodiversity management in general and the use of Marine Protected Areas in particular.

1.2 In this response we are keen to stress that the JNCC evaluation of the proposed MPAs options has been carried out exclusively in terms of how these options may benefit nature conservation in the Chagos Archipelago (BIOT). While current threats can be clearly evaluated, future threats to conservation are difficult to identify and estimate; this is not a reason to ignore them, rather we feel strongly that the most appropriate way forward is to ensure that what is put in place now is a framework that can effectively work for the conservation of the BIOT in the future, whatever the potential changes in the socio-political landscape.

1.3 JNCC feels it is unfortunate that in the consultation options, the BIOT MPA has been equated to a no-take zone. The BIOT MPA must constitute the framework where conservation objectives will be set and any human activity must be managed accordingly to achieve these objectives. No-take zones are only one of the management tools that can be used when the framework is in place but they do not constitute the framework itself. While fisheries might well constitute the major local human impact in the BIOT today, other threats such as bio-prospecting, deep-sea mining, CO2 sequestration, tourism development and additional unforeseen ones might arise in the future.

## **2. Joint Nature Conservation Committee response to the consultation questions**

### **2.1 Consultation question 1: Do you believe we should create a marine protected area in the British Indian Ocean Territory?**

Yes. The case for protection and effective management of biodiversity through a marine protected area in the BIOT is clear and unequivocal. The marine biodiversity of the archipelago is globally significant and is relatively unspoilt by human activity. The BIOT proposal is an opportunity for the UK government to establish a globally significant marine protected area, demonstrate its commitment to global biodiversity conservation and make a major contribution to the International Year of Biodiversity.

*'If yes, from consultations with scientific/environmental and fishery experts, there appear to us to be 3 broad options for a possible framework:*

*(i) Declare a full no-take marine reserve for the whole of the territorial waters and Environmental Preservation and Protection Zone (EPPZ)/Fisheries Conservation and Management Zone (FCMZ); or*

*(ii) Declare a no-take marine reserve for the whole of the territorial waters and EPPZ/FCMZ with exceptions for certain forms of pelagic fishery (e.g. tuna) in certain zones at certain times of the year.*

*(iii) Declare a no-take marine reserve for the vulnerable reef systems only.'*

## **2.2 Consultation question 2: Which do you consider the best way ahead? Can you identify other options?**

### **2.2.1 Consultation Option 1: Declare a full no-take marine reserve for the whole of the territorial waters and Environmental Preservation and Protection Zone (EPPZ)/Fisheries Conservation and Management Zone (FCMZ).**

JNCC agrees with the proposition contained in Option 1 that the BIOT MPA should cover the whole of the territorial waters and Environmental Preservation and Protection Zone (EPPZ)/Fisheries Conservation and Management Zone (FCMZ) but does not believe that this option, if implemented, would provide effective management for BIOT biodiversity.

JNCC believes that the declaration of a '*full no-take marine reserve*' in BIOT would not be consistent with UK conservation policy and practice, nor consistent with the Ecosystem Approach or IUCN guidelines, which advocate sustainable use of biodiversity, integrating conservation and human activity, and management through zoning (see Annex).

Total exclusion of fishing effort from a BIOT MPA (particularly in respect of the pelagic tuna fishery) would result in redirection of this effort to other areas having a potentially negative impact on marine areas external to the BIOT and beyond the control of any management scheme applied to BIOT itself. JNCC believes this risk has not been evaluated and that negative external impacts associated with a BIOT MPA can only be avoided by allowing fishery activity within the BIOT but ensuring this activity is managed to avoid or minimise both internal and external impacts.

The BIOT marine biodiversity is regarded by experts as virtually unaffected by human activity and therefore there is no basis for eliminating the current legal fishing effort from the entire area. In order to ensure, however, that future legal fishing does not pose a threat to the integrity of the marine ecosystems of BIOT then management, rather than total exclusion of effort, is required within the context of a protected area. Illegal fishing may represent a threat to important habitats and species in BIOT but effective enforcement in the context of overall fishery management is the remedy for this rather than establishing an extensive no-take MPA.

In addition to the above reservations, JNCC believes that this option, which focuses only on a no-take approach in respect of fishing activity in the BIOT, fails to address the wider conservation issues within the BIOT. It is essential that a BIOT MPA should address all of the biodiversity issues in the area not just fishery management.

**2.2.2 Consultation Option 2:** Declare a no-take marine reserve for the whole of the territorial waters and EPPZ/FCMZ with exceptions for certain forms of pelagic fishery (e.g. tuna) in certain zones at certain times of the year.

JNCC agrees with the proposition contained in Option 2 that the BIOT MPA should cover the whole of the territorial waters and Environmental Preservation and Protection Zone (EPPZ)/Fisheries Conservation and Management Zone (FCMZ) but does not believe that this option, if implemented, would provide effective management for BIOT biodiversity.

As with Option 1, this option proposes that the management of the MPA is based on a no-take approach with limited fishing effort allowed in certain zones at certain times of the year. Although Option 2 makes concessions to the need to balance conservation efforts with human activity (in this case fishing for pelagic species) JNCC believes that given this option is also founded on the no-take principle it is also inconsistent with UK policy and practice for use of marine MPAs and with the application of Ecosystem Approach and IUCN guidelines. As proposed, this option gives undue emphasis to the no-take philosophy being applied to the entire MPA.

In addition to the above reservations, JNCC believes that this option also focuses only on fishing activity in BIOT (as does Option 1) and fails to address the wider conservation issues within BIOT.

**2.2.3 Consultation Option 3:** Declare a no-take marine reserve for the vulnerable reef systems only.

JNCC does not believe that Option 3, if implemented, would provide effective management for BIOT biodiversity.

The Ecosystem Approach advocates working to protect ecosystems at a scale that encompasses the essential structure, processes, functions and interactions among organisms and their environment. A BIOT MPA should, to be consistent with UK policy and global best practice, encompass the entire reef ecosystem extending over the whole of the territorial waters and Environmental Preservation and Protection Zone (EPPZ)/Fisheries Conservation and Management Zone (FCMZ). Protecting small and separated elements of the reef system will not provide effective management of the BIOT biodiversity.

### **2.3 Summary of JNCC position on the three presented options**

In summary, JNCC believes that the case for establishing protection and management of the BIOT through an MPA is unequivocal. JNCC does not, however, believe that any of the three options presented in the consultation would provide effective management of the BIOT for the following reasons:

- The options presented in the consultation fail to address the full range of management issues which need to be addressed throughout the BIOT area;

- JNCC wishes to draw attention to, and strongly supports, the view stated in the Chagos Islands Management Plan<sup>1</sup> that a '*comprehensive approach to ensure the long-term protection and sustainable use of this region*' is needed. The Management Plan sets out a comprehensive approach which is lacking in the Consultation document options which focus on fisheries management through 'no-take' mechanisms;
- None of the consultation options (which are all based on a 'no-take' policy) are consistent with UK marine conservation practice nor with the principles embedded in the Ecosystem Approach which underpin biodiversity conservation. Nor are these options consistent with IUCN guidelines for establishing and managing marine protected areas;
- JNCC therefore proposes a fourth option for developing an MPA within BIOT.

### **3. Joint Nature Conservation Committee recommended BIOT MPA option**

3.1 For the reasons stated above (Section 2.3) JNCC does not believe that any of the Consultation Options will provide effective, credible and enforceable management for the BIOT. JNCC proposes the following option which satisfies these concerns, is consistent with UK and international best practice, and is based on management objectives described in the 2003 Chagos Islands Management Plan.

3.2 JNCC proposes the following:

- A BIOT marine protection area should be declared for the whole of the territorial waters and Environmental Preservation and Protection Zone (EPPZ)/Fisheries Conservation and Management Zone (FCMZ);
- The BIOT MPA should be used to '*ensure that all human uses of the natural resources of BIOT are sustainable and set within the context of an ecosystem and precautionary approach*';
- Conservation objectives and management measures should be established for the BIOT MPA giving due consideration to the 2003 Chagos Islands Management Plan;
- The BIOT MPA should follow IUCN guidelines and adopt a zoning approach as the best way to manage a multiple use marine area. Each zone will have different objectives with some allowing greater use of resources than others. The identification of zones in the MPA should be based on the current best available science. JNCC believes that existing scientific data is sufficient to establish an initial zonation within BIOT. Zoning can be modified in the future

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[http://www.reefnewmedia.co.uk/cmt\\_chagos/uploads/PDF/Science/Chagos\\_Conservation\\_Management\\_Plan\\_2003.pdf](http://www.reefnewmedia.co.uk/cmt_chagos/uploads/PDF/Science/Chagos_Conservation_Management_Plan_2003.pdf)

in the light of new scientific research, or the release of data currently not publicly available;

- 'Zoning' would result in the entire BIOT MPA being covered by a series of protected area categories, each with their associated management objectives. The IUCN defines a spectrum of such categories with different levels of protection. Within BIOT, we believe, this will include four IUCN categories namely I, II, IV and VI with different management objectives (see Annex A3, page 12, for details). In this way it will be transparent what the management objectives are for each part of the MPA, and how they are to be implemented. Although complex, some consideration should be given to a stratum approach where the sea bottom in the deeper waters might be PA category I (high level of protection) while the water column to the depth of pelagic fish might be VI (sustainable management). For the most part the land surfaces should be either category I or II;
- This zoning approach is already effectively in use in the UNESCO Seaflower biosphere reserve of Colombia, and is the approach utilised by the Great Barrier Reef Marine Park Authority in Australia (See Annex A4). There may be value in considering nominating the BIOT as a UNESCO Biosphere Reserve, to give it additional international kudos, but this must be in the right management framework.

#### **4. JNCC comments on BIOT cost and benefits**

##### 4.1 Costs

Enforcement is not adequate at present. The biggest current threat is represented by illegal fishermen especially in the Northern atolls. The current vessel is ideal for offshore patrolling but its size limits its use in shallower areas. Furthermore, the sheer size of the area to be patrolled and the activities carried out by the vessel limit enforcement coverage. JNCC envisages that the cost of a new vessel and its operations should be considered as an essential part of any management proposal.

##### *4.2 Beyond marine protection, should other measures be taken to protect the environment in BIOT?*

The biggest threat to Chagos over the coming century is CO<sub>2</sub> emissions because high temperature levels induce coral bleaching and ocean acidification inhibits biogenic calcification. Conservation in Chagos would be best served by global reduction of CO<sub>2</sub> emissions.

On the local scale, some atolls would benefit from eradication of non-natives, mainly rats, and restoration of native vegetation. These actions would benefit breeding sites of birds and marine turtles.



## Annex 1

### **A1. Role of the Joint Nature Conservation Committee**

#### **A1.1 JNCC's advisory role to government<sup>2</sup>**

1.1.1 The Joint Nature Conservation Committee (JNCC) is the statutory adviser to Government on UK and international nature conservation. Its work contributes to maintaining and enriching biological diversity, conserving geological features and sustaining natural systems. JNCC delivers the UK and international responsibilities of the four country nature conservation agencies - Council for Nature Conservation and the Countryside, the Countryside Council for Wales, Natural England and Scottish Natural Heritage.

1.1.2 The JNCC provides advice on international, as well as national, nature conservation issues to a wide range of people and organisations, including Government and other statutory agencies. Much of the international work of JNCC relates to providing advice on the implementation of international Conventions (often known as Multi-lateral Environmental Agreements or MEAs) and to policies developed by the European Union and Council of Europe.

1.1.3 The principal customers for advice on MEAs are Government departments such as the Department of Environment, Food & Rural Affairs, the Foreign & Commonwealth Office and the Department of Culture, Media & Sport. JNCC input includes the provision of objective, high quality scientific advice, participating in UK delegations to Conferences of the Parties or their subsidiary committees, collating formal reports of UK activities and more specialised inputs, such as advising on CITES permits. We may also support the implementation of these agreements in the UK and abroad, either through commissioning relevant research, publishing and disseminating reports, and contributing to policy formulation

#### **A1.2 JNCC's UK marine research and advisory role<sup>3</sup>**

1.2.1 The sea areas surrounding the UK are essential to the national economy and quality of life, through its contribution to primary energy supplies, ship-borne trade, fisheries, marine aggregates, tourism and recreation. This economic and social activity can have a significant impact on our marine biodiversity. JNCC's marine work provides advice to Government on how to lessen detrimental impacts and suggests measures to achieve effective marine nature conservation. This work is supported by a programme of surveillance and monitoring that identifies trends in the biodiversity of the marine environment and assessment of the state of our marine biodiversity. As part of this work JNCC is responsible for the identification of Marine Protected Sites in UK offshore waters.

#### **A1.3 JNCC's Overseas Territories role<sup>4</sup>**

1.3.1 The UK Government has recently committed to a strategy for conserving biodiversity in the UK's Overseas Territories<sup>5</sup>. The overarching objective of this strategy is *'to enable the*

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<sup>2</sup> <http://www.jncc.gov.uk/>

<sup>3</sup> <http://www.jncc.gov.uk/page-3>

<sup>4</sup> <http://www.jncc.gov.uk/page-4079>

<sup>5</sup> <http://www.defra.gov.uk/environment/biodiversity/international/index.htm#ukotstrat>

*UK and Overseas Territory Governments to meet their international obligations for the conservation and sustainable use of biodiversity in the Overseas Territories*'. The strategy commits Defra, FCO and DFID, with support from JNCC, to work in partnership to enable the UK and Overseas Territory Governments to meet their international biodiversity obligations.

1.3.2 JNCC's own Overseas Territories and Crown Dependency Programme<sup>6</sup> provides advice and support to UK Government departments and the governments of the Overseas Territories (OTs) and Crown Dependencies (CDs) to promote understanding of biodiversity conservation in these areas and to facilitate conservation work of all types. The programme addresses strategic work, including policy development and conservation 'needs analysis', and is also directly involved in supporting a wide range of conservation projects across the OTs.

## **A2. Global best practice for biodiversity management**

### **A2.1 - The Ecosystem Approach**

2.1.1 The Convention on Biological Diversity (CBD) defines the ecosystem approach as a strategic approach to integrating human activity and biodiversity conservation. The CBD web pages<sup>7</sup> include the following basic definition of the scope and purpose of the Ecosystem Approach.

*'The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Thus, the application of the ecosystem approach will help to reach a balance of the three objectives of the Convention: conservation; sustainable use; and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.'*

*An ecosystem approach is based on the application of appropriate scientific methodologies focused on levels of biological organization, which encompass the essential structure, processes, functions and interactions among organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral component of many ecosystems.'*

2.1.2 The underlying philosophy of the Ecosystem Approach is the integration of human activity and biological conservation; absolute prescription of human activity is only advocated where necessary.

### **A2.2 IUCN guidelines on use of MPAs<sup>8</sup>**

2.2.1 Protected areas remain the fundamental 'building blocks' of both national and international conservation. A 'protected area' is defined by the IUCN as 'a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective

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<sup>6</sup> <http://www.jncc.gov.uk/page-4079>

<sup>7</sup> <http://www.cbd.int/ecosystem/description.shtml>

<sup>8</sup> [http://www.gap.uidaho.edu/Portal/Stewardship/IUCN\\_cat\\_guidelines\\_final\\_2008.pdf](http://www.gap.uidaho.edu/Portal/Stewardship/IUCN_cat_guidelines_final_2008.pdf)

*means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values*<sup>9</sup>.

2.2.2 The IUCN 'Guidelines for Applying Protected Area Management Categories' (see Ref: 8) stress that:

*'Protected areas are by no means uniform entities however; they have a wide range of management aims and are governed by many different stakeholders. At one extreme a few sites are so important and so fragile that no-one is allowed inside, whereas other protected areas encompass traditional, inhabited landscapes and seascapes...'*

2.2.3 Protected area status therefore does not automatically imply cessation of human activities. Such activities provide access to ecosystem services which need to be managed for the long term. Marine Protected Areas are therefore marine areas which have some level of restriction on these activities to protect living, non-living, cultural, and/or historic resources.

2.2.4 The IUCN Guidelines define the key characteristics of a marine MPA:

*'Marine protected areas (MPAs) by their nature present a particular suite of management challenges that may need different approaches to protected areas in terrestrial environments. Some of the particular characteristics of protected areas in the marine realm, which are often absent or relatively uncommon on land, are that:*

- *MPAs are designated in a fluid three-dimensional environment; in some instances, different management approaches may be considered at different depths;*
- *there are usually multidirectional flows (e.g. tides, currents)*
- *tenure is rarely applicable in the marine environment; more often than not, marine areas are considered to be "the commons" to which all users have a right to both use and access;*
- *full protection may only be necessary at certain times of the year, for example to protect breeding sites for fish or marine mammals;*
- *controlling entry to, and activities in, MPAs is frequently particularly difficult (and often impossible) to regulate or enforce, and boundaries or restrictions over external influences can rarely be applied;*
- *MPAs are subject to the surrounding and particularly "down-current" influences, which often occur outside the area of management control and it is even more difficult to manage marine areas as separate units than it is on land;*
- *the scales over which marine connectivity occurs can be very large.*

2.2.5 The IUCN Guidelines also stress the complexity of the marine environment, and *'This complexity often dictates the need for multiple objectives and complex management schemes. In the marine environment, this is particularly important and zoning is recommended in the IUCN best practice guidelines on MPAs as the best way of managing multiple-use marine areas'*.

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<sup>9</sup> <http://www.jncc.gov.uk/page-4524>

2.2.6 For management of biodiversity in the marine environment 'multiple use' is therefore the recommended approach: *'Multiple-use MPAs may have a spectrum of zones within them, each zone type having different objectives with some allowing greater use and removal of resources than others (e.g., no-take zones are commonly designated as one of the zones of a multiple-use MPA)'...and . 'The identification of zones in MPAs should be based on the best available science and judgement'.*

2.2.7 The IUCN Guidelines stress both the need for strict protection ('no-take') zones (Category Ia) within an MPA and the difficulties associated with identifying and managing such zones:

*'Setting aside strictly protected areas in the marine environment is of fundamental importance, particularly to protect fish breeding and spawning areas and to provide scientific baseline areas that are as undisturbed as possible. However such areas are extremely difficult to delineate.... and hence difficult to enforce. Whenever considering possible category Ia areas, the uses of the surrounding waters and particularly "up-current" influences and aspects of marine connectivity, should be part of the assessment criteria. Category Ia areas should usually be seen as "cores" surrounded by other suitably protected areas (i.e., the area surrounding the category Ia area should also be protected in such a way that complements and ensures the protection of the biodiversity of the core category Ia area).'*

## **A2.3 Marine Protected Areas in the UK**

2.3.1 Marine Protected Areas represent a significant tool for protecting biodiversity in offshore waters and are being used extensively for biodiversity conservation in UK waters. UK marine sites are being designated as a result of a variety of national and EU legislation and include Special Areas of Conservation, Special Protection Areas, OSPAR Marine Protected Areas and National Marine Protected Areas.

2.3.2 As a management tool, MPAs can provide, through zoning, 'general' protection of marine habitats and species from damaging activities and also be valuable to provide 'complete' protection for areas of high biodiversity value.

2.3.3 The UK government, through Defra<sup>10 & 11</sup>, summarises the benefits/limitations of MPAs as follows:

- they can, under the right conditions, be valuable for preserving or enhancing critical habitats and associated benthic communities and fish populations;
- MPAs may benefit mobile fish species but internal and external effects of MPA establishment must be established;
- Many of the costs and benefits remain speculative due to lack of research;
- Fish stocks are unlikely to be protected by large closed areas unless there is an overall reduction in fishing effort. Large closed areas with overall effort

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<sup>10</sup> <http://www.defra.gov.uk/environment/marine/protected/mpa/index.htm>

<sup>11</sup> Defra February 2006.

<http://www.defra.gov.uk/environment/marine/documents/science/mpareport-defrasummary.pdf>

reduction across the ecosystem can reduce fish mortality and protect populations.

## **A2.4 Applying UK and global practice to the BIOT MPA**

2.4.1 UK marine conservation efforts contend with, and have evolved in the context of, significant human impacts on the marine environment, many of which are important to the UK economy as whole or certain sectors of the population. JNCC recognises that the BIOT area differs from UK marine waters in two important respects, namely that it is virtually free from human impacts and that in the absence of a resident population (other than military personnel) fishing and other economic activities in the area have a limited societal value.

2.4.2 Although JNCC recognises these differences, any measures proposed and adopted by the UK government to protect the biodiversity of the BIOT should be consistent with the policies and practices adopted by the UK in protecting biodiversity in its own home waters and consistent with the global best practice described above. UK use of MPAs recognises both the value and the limitations of this protected area approach in the marine environment. If the UK Government establishes an MPA in the BIOT its scope and purpose should reflect these recognised values and limitations.

2.4.3 Based on UK and global policy, practice and scientific experience (summarised above) JNCC believes that a BIOT MPA should embody the following key principles. The MPA should:

- i. Focus on the appropriate ecological scale and encompass the essential structure, processes, functions and interactions among organisms and their environment.**

*A BIOT MPA should encompass as much of the archipelago ecosystem as possible to ensure management is applied at the functional scale and not be restricted to small, separate components. The MPA should include deep water areas.*

- ii. Promote conservation and sustainable use of biodiversity in an equitable way.**

*A BIOT MPA should not be based on a complete, all encompassing, no-take policy applied to the entire MPA in respect of pelagic fisheries or 'no-activity' policy for other potentially damaging activities (such as tourism, yacht mooring, reef fisheries, exploitation of seabed fauna). Such activities should be managed through a zonation system.*

- iii. Recognise the need for multiple objectives and complex management within the BIOT area as the best way of managing a multiple-use marine area.**

*A BIOT MPA should have multiple objectives and a management scheme that recognises current and likely future human activities. Zoning is recommended as the best way of managing the BIOT MPA.*

- iv. Recognise the limitations of the MPA approach, in particular the need to understand the internal and external effects of such protected areas in respect of fisheries management.**

*A BIOT MPA will play an important role in protecting an important component of the wider Indian Ocean ecosystem. The management strategy for the MPA should avoid or minimise possible negative impacts on external areas through displacing fishing effort or other activities.*

- v. Provide complete protection (through no-activity zones) of high biodiversity value areas within the MPA to support the structure and functioning of the wider marine ecosystem.**

*A BIOT MPA should contain no-activity zones to provide absolute protection for key biodiversity elements.*

### **A3. IUCN protected area categories**

3.1 The IUCN has defined a series of seven protected area management categories based on primary management objectives<sup>12 & 13</sup>. These are:

**CATEGORY Ia: Strict Nature Reserve:** protected areas managed mainly for science.  
*Definition:* Area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.

**CATEGORY Ib: Wilderness Area:** protected areas managed mainly for wilderness protection.  
*Definition:* Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.

**CATEGORY II: National Park:** protected areas managed mainly for ecosystem protection and recreation.  
*Definition:* Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

**CATEGORY III: Natural Monument:** protected areas managed mainly for conservation of specific natural features.  
*Definition:* Area containing one, or more, specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.

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<sup>12</sup> [http://www.unep-wcmc.org/protected\\_areas/categories/index.html](http://www.unep-wcmc.org/protected_areas/categories/index.html)

<sup>13</sup> [http://www.unep-wcmc.org/protected\\_areas/categories/eng/index.html](http://www.unep-wcmc.org/protected_areas/categories/eng/index.html)

**CATEGORY IV: Habitat/Species Management Area:** protected areas managed mainly for conservation through management intervention.

*Definition:* Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.

**CATEGORY V: Protected Landscape/Seascape:** protected areas managed mainly for landscape/seascape conservation and recreation.

*Definition:* Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

**CATEGORY VI: Managed Resource Protected Area:** protected areas managed mainly for the sustainable use of natural ecosystems.

*Definition:* Area containing predominantly unmodified natural systems, managed to ensure long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.

## **A4. Examples of global best practice**

### **A.4.1 Great Barrier Reef Marine Park (GBRMP) and the adjacent proposed Coral Sea Marine Park (CSMP), Australia**

4.1.1 Australia's Great Barrier Reef Marine Park (GBRMP) and the adjacent proposed Coral Sea Marine Park (CSMP) together constitute a large marine region that has comparable biodiversity interests with the BIOT encompassing large scale coral reef systems and pelagic fisheries including important shark and tuna populations as is the case with BIOT. The GBRMP is commonly regarded as the world's best example of a protected and managed reef system. Multiple use of the reef is managed through zoning which ensures the necessary high degree of protection for some areas to protect the reef ecosystem (including fish populations) whilst managing activities in others to allow ecosystem benefits to be shared<sup>14</sup>.

4.1.2 The WWF<sup>15</sup> is aggressively promoting the creation of a large Coral Sea MPA covering a million square kilometres of sea area but, in putting forward ten criteria upon which the MPA should be based, does not advocate total exclusion of economic activity (including fishing) from the entire MPA. The WWF criteria can be summarised as:

- The CSMPA should encompass waters from the Great Barrier Reef to the limit of Australia's Economic Exclusion Zone – that is it should be as extensive as possible.
- The CSMP should not only physically extend the protection of the GBRMPA but should adopt the same principles adopted by the GBRMPA which the world's best example of a protected and managed reef system. In WWF's

<sup>14</sup> [http://www.gbrmpa.gov.au/corp\\_site/management/zoning](http://www.gbrmpa.gov.au/corp_site/management/zoning)

<sup>15</sup> <http://www.wwf.org.au/publications/wwfcoralseacampaignfactsheet/>

words, the CSMP *'would be a natural extension of current roles and responsibilities of the Great Barrier Reef Marine Park'* which *'is widely recognised as 'the best in the business' with a proven history of delivering world-class outcomes in terms of the design and management of a large tropical marine park.'*

- Adequate funding should be allocated to cover management costs associated with the successful running of the Coral Sea Marine Park. This is estimated at \$10 million per year.
- No mineral, oil and gas exploration and extraction should be allowed within a Coral Sea Marine Park.
- A Coral Sea Marine Park should be declared as soon as possible with zonation established as early as possible thereafter.
- Sufficiently large areas of the Coral Sea Marine Park should be contained within highly protected 'no take' areas to *'ensure adequate protection for large pelagic and migratory species'* and *'maintain the robust and intact marine ecosystems presently in the Coral Sea'*.
- The Coral Sea Marine Park should be part of a network of 'no take' areas across the South West Pacific designed to confer resilience, support connectivity and maintain ecological processes.
- All places that are special and unique in the Coral Sea should be highly protected.
- All threatened, endangered protected and at-risk species should be protected.
- Additional conservation and management measures should be in place to ensure the protection and persistence of these species both within the Coral Sea Marine Park and throughout their range.
- All marine ecosystems, habitat types, communities, populations, species and genetic diversity should be represented in no-take areas within a Coral Sea Marine Park.

### **A.3.2 Seaflower Biosphere Reserve, Colombia**

MPAs are a precautionary approach that can reduce over-exploitation of marine species and they represent an ecosystems approach to management by allowing ecosystems to function within their natural boundaries. There is still scientific discussion as to how to effectively design MPAs but it is accepted that they should protect representative habitats and species as a matter of routine and provide greater protection for rare or vulnerable examples.

Scientific analysis of the Seaflower Biosphere Reserve in Colombia<sup>16</sup> provides a detailed assessment of how zoning can be applied in a MPA when based on proper ecological evaluation. Key messages from this analysis are:

- The Seaflower reserve is similar to BIOT in that the main pressure on the area comes from outsiders coming into the area to fish on an industrial scale;
- A scientific approach is advocated to establish a network of no-take marine zones across reef system;
- Scientific and enforcement criteria should be used to define zones. *'Arbitrary declaration of MPAs based on poor ecological knowledge can prevent biodiversity objectives from being met'.*
- Once established, it is essential that long term monitoring is implemented to determine the effectiveness of the zoning scheme.

**End of document**

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<sup>16</sup> [http://www.branchingnature.org/coral/Cons\\_biol\\_paper.pdf](http://www.branchingnature.org/coral/Cons_biol_paper.pdf)