

**DRAFT TEN-YEAR STRATEGY TO PROMOTE  
THE DEVELOPMENT OF A GLOBAL REPRESENTATIVE  
SYSTEM OF HIGH SEAS  
MARINE PROTECTED AREA NETWORKS**

*For consideration at the Governance Session on  
Protecting Marine Biodiversity Beyond National Jurisdiction  
11 September 2003  
5<sup>th</sup> World Parks Congress, Durban South Africa  
8-17 September 2003*

Consultative Draft 1 September

# **DRAFT TEN-YEAR STRATEGY TO PROMOTE THE DEVELOPMENT OF A GLOBAL REPRESENTATIVE SYSTEM OF HIGH SEAS MARINE PROTECTED AREA NETWORKS**

Consultative Draft 1 September

## **Table of Contents**

### **EXECUTIVE SUMMARY**

1. OBJECTIVE OF STRATEGY
2. RATIONALE: HIGH SEAS AT RISK
3. THE BENEFITS OF MPAs AND MPA NETWORKS
4. THE FRAMEWORK FOR ACTION
5. TEN-YEAR HIGH SEAS MPA STRATEGY
  - I. ENDORSE AND PROMOTE the WSSD Joint Plan of Implementation and goal of HSMPA networks
  - II. TAKE immediate and urgent action to protect vulnerable ecosystems and species
  - III. UTILIZE all available mechanisms to establish by 2008 at least five High Seas MPAs
  - IV. INITIATE action to develop framework for establishing, managing and financing HSMPA networks
  - V. COOPERATE to develop global framework or “approach” to facilitate the creation of HSMPA networks
6. INVITATION

Annex 1. Threats/Activities and Major International Legal Instruments

Annex 2. Glossary of Acronyms

Annex 3. Endnotes

# **DRAFT TEN-YEAR STRATEGY TO PROMOTE THE DEVELOPMENT OF A GLOBAL REPRESENTATIVE SYSTEM OF HIGH SEAS MARINE PROTECTED AREA NETWORKS**

***For consideration at the Governance Session on  
Protecting Marine Biodiversity Beyond National Jurisdiction  
11 September 2003  
5<sup>th</sup> World Parks Congress, Durban South Africa  
8-17 September 2003***

**Consultative Draft 1 September<sup>1</sup>**

## **EXECUTIVE SUMMARY**

The past thirty years of ocean exploration have revealed an incredible diversity of life inhabiting our oceans, including deep ocean ecosystems and communities with a wealth of endemic species; however, much of the oceans remain poorly explored or understood.

Despite our lack of knowledge, or indeed because of it, the biodiversity and productivity of the high seas--the deep seabed and water column beyond national jurisdiction--are under imminent threat from fishing activities, stressed by other human endeavours, and handicapped by our sector-based, short-term and incomplete efforts to manage them. Precautionary, integrated and ecosystem based management is essential.

This draft *Ten-Year Strategy to Promote Development of a Global Representative System of High Seas Marine Protected Area Networks* (Ten-Year High Seas MPA Strategy) provides a road map, or a voyage plan, for achieving a vital step towards that goal. It provides a strategy for coordinated action over a ten-year period to develop, establish and effectively manage a representative system of marine protected areas and MPA networks for the high seas (HSMPAs).

Marine protected areas covering the full range of IUCN protected area management categories can help to ensure biodiversity conservation and sustainable use through integrated area-based management. While more is required to create a sustainable framework covering the world ocean, a system of HSMPAs is a key mechanism for securing protection from immediate threats, providing coordinated decision-making involving a range of stakeholders (i.e. fishing, shipping, marine conservation, etc.) and a cornerstone for comprehensive, integrated and ecosystem-based oceans management.

The draft Ten-Year HSMPA Strategy proposes five core components to focus action over the next ten years and elaborates strategic steps necessary to implement the five components. The draft Strategy is offered to stimulate discussion at the the Governance Session on Protecting Marine Biodiversity Beyond National Jurisdiction 11 September 2003 at the 5<sup>th</sup> World Parks Congress, Durban South Africa 8-17 September 2003. The five core Strategy components are based on those proposed for endorsement as recommendations of the World Parks Congress (as of 29 August 2003). The five core components, and key strategy steps, include:

- I. ENDORSE AND PROMOTE the WSSD Joint Plan of Implementation and the goal of establishing a global system of effectively managed, representative networks of marine protected areas by 2012 that includes within its scope the world's oceans and seas beyond national jurisdiction; including through
  - Identifying and dedicating funds to raise awareness, educate, conduct research and build capacity
  - Establishing a coalition among like-minded governments, international and regional organizations, non-governmental organizations, scientists, business and industry leaders, fishers and other ocean users, and the media to promote coordinated action and monitor and report on progress
  - Promoting high seas biodiversity conservation and the value of HSMPAs and a global representative system of HSMPA networks as tools for this purpose at relevant international organizations and meetings
- II. TAKE immediate and urgent action to protect the biodiversity and productivity of seamounts, cold water coral communities and other vulnerable marine ecosystems and to safeguard endangered species before they are irrevocably damaged or lost; including through
  - Commissioning an expedited report on seamount and cold water coral habitats and fisheries and options for international action
  - Promoting mechanisms to secure prompt action, through e.g. a possible moratorium or other emergency measure to prevent unregulated bottom trawling in these areas
  - Identifying priority candidate sites for protection through MPAs
  - Engaging the fishing and seafood industries on benefits of protection
  - Developing mechanisms to enable urgent action to protect marine species endangered by high seas fishing activities
- III. UTILIZE all available mechanisms and authority consistent with international law and based on sound science to establish and effectively manage by 2008 at least five MPAs beyond national jurisdiction (high seas MPAs or HSMPAs) to enhance the conservation of marine biodiversity, productivity and ecosystems; including through,
  - Using known opportunities under regional and global agreements to establish HSMPAs through binding and non-binding agreements
  - Considering a pilot site in each region to gain experience while plans for a representative system are under development
  - Encouraging broad-based support and endorsement of HSMPAs by any non-member states and regional and global bodies
- IV. INITIATE action to identify marine ecosystem types and areas that warrant priority attention, develop agreed criteria and guidelines for the identification, establishment, management and enforcement of HSMPAs, develop guidance for a

representative system of HSMPA networks, establish sustainable financing strategies and determine future research needs and priorities, including through

- Convening a multidisciplinary expert workshop and/or group to analyze available information to assess potential HSMPAs and a provisional representative system of MPA networks and develop criteria and guidelines within a 2 to 3 year time horizon
  - Promoting adoption of the criteria and guidelines at relevant meetings
  - Developing guidance for a representative system of HSMPA networks
  - Convening a group of key stakeholders and others, including governments, major ocean users, business and industry leaders, foundations, and finance institutions to discuss options and develop mechanisms for facilitating sustainable financing
  - Determining future research needs and priorities
- V. COOPERATE to develop and promote a global framework or “approach”, consistent with and building on UNCLOS, the CBD and the UN Fish Stocks Agreement, to facilitate the creation of a global representative system of high seas MPA networks, ensure its effective management and enforcement, and coordinate and harmonize applicable international agreements, mechanisms and authorities in accordance with modern principles of precautionary, ecosystem-based and integrated management and transparent, accountable and equitable governance; including through
- Promoting work pursuant to the CBD and UNCLOS, in cooperation with relevant international and regional bodies to identify appropriate mechanisms for the establishment and effective management of HSMPAs and a representative system of HSMPAs, consistent with international law and based on scientific information
  - Promoting work relating to regional fisheries management and the UN Fish Stocks Agreement to ensure ecosystem based management that recognizes the value of and incorporates the use of HSMPAs and HSMPA networks
  - Promoting work within regional seas conventions and other regional bodies to promote cooperation between regional bodies (including RFMOs) and to address threats at the level appropriate to conserve regional ecosystems and biodiversity (watersheds to open ocean)
  - Promoting further work within the United Nations system to improve intergovernmental coordination and cooperation
  - Supporting high-level consideration of the need for additional mechanisms, including UNCLOS implementing agreements, to facilitate the effective management of a global representative system of HSMPA networks and an effective governance system.

These core components and key strategy steps are complemented by a general call for action throughout the life of the Strategy for capacity building, education and awareness raising, stakeholder engagement, and scientific, socio-economic and legal research to further

understanding, awareness and the ability to protect high seas biodiversity, productivity and ecological processes.

At the World Parks Congress and thereafter, interested governments, international and regional organizations, non-governmental organizations, scientists and civil society are invited to join together through formal and informal networks to implement the Ten-Year HSMPA Strategy within their own governments and organizations and in the broader international forums and to report back on progress at the International Marine Protected Areas Congress in Geelong (near Melbourne), Australia in 2005 as well as at other relevant forums.

# TEN-YEAR STRATEGY TO PROMOTE THE DEVELOPMENT OF A GLOBAL REPRESENTATIVE SYSTEM OF HIGH SEAS MARINE PROTECTED AREA NETWORKS

## 1. OBJECTIVE OF STRATEGY

This draft *Ten-Year Strategy to Promote Development of a Global Representative System of High Seas Marine Protected Area Networks* (Ten-Year High Seas MPA Strategy) has been developed to assist in the urgent consideration of how to better address, on a scientific and precautionary basis, the threats and risks to vulnerable marine ecosystems and biodiversity (including biological productivity) beyond national jurisdiction as called for by the international community through the United Nations General Assembly and other arenas.

While recognizing that other approaches and tools may be essential, this document focuses on the advantages that a representative system of high seas marine protected area networks may provide, and how to promote its development, consistent with the UN Convention on the Law of the Seas (UNCLOS), over the next ten years<sup>2</sup>. It is recognized that this will necessarily occur in conjunction with other efforts to enhance implementation of, and build on, the current governance regimes for high seas environments, fisheries and biodiversity conservation.

### Definition of Terms Used in Strategy

The Strategy applies the following definitions:

- *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 are a part; this includes diversity within species, between species and ecosystems” (as adopted in the Convention on Biological Diversity).
- *The High Seas*: The term “high seas” is used to refer generally to areas beyond the 200-nautical mile exclusive economic zone (EEZ) or territorial sea where no EEZ or its equivalent has been declared (e.g. the Mediterranean). It includes the deep seabed “Area” as defined in UNCLOS and the water column.<sup>3</sup> It is recognized that continental shelf areas beyond 200 nautical miles may be subject to national jurisdiction in accordance with the UNCLOS, but the water column above them is high seas.
- *Marine Protected Area (MPA)*: “Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment”<sup>4</sup>. Such protection can range from areas managed mainly for science or wilderness values to areas managed mainly for the sustainable use of natural ecosystems and resources (as reflected in the six IUCN Protected Area Management Categories).
- *High Seas Marine Protected Areas (HSMPAs)*: In the context of the high seas, MPAs represent an opportunity for the global community to

cooperate to provide a higher level of protection than prevailing levels, a structure for coordinated decision-making amongst a range of stakeholders (i.e. governments, international and regional organizations, fishing, shipping, marine conservation, etc) and a basis for integrated and ecosystem-based oceans management. They should not be construed as an opportunity to assert national sovereignty or jurisdiction.

## **2. RATIONALE: HIGH SEAS AT RISK**

Remote as high seas environments may be, human activities are having a significant impact on the wildlife, habitats and ecosystems in these areas. While substantial research is essential to understand the nature and extent of high seas biodiversity and possible threats thereto, what is known is sufficient to compel urgent action.

The most obvious, widespread, and extensively documented threat is fishing in its many forms. Over the past fifty years, commercial fisheries have eliminated ninety percent of the large predatory species in our oceans. Seventy five percent of the world's fish stocks are fully exploited, overexploited, or depleted. Such levels of fishing effort threaten to perturb systems and processes upon which all macroscopic marine life, including targeted fish stocks, depend. Fishing activities can have other harmful effects: bottom trawling disrupts sediment structure and can destroy fragile benthic communities (e.g. seamount communities, deep sea corals and massive sponge aggregations); pelagic long-line fisheries catch tens of thousands of seabirds (e.g. albatrosses, northern fulmar and petrels), sea turtles, cetaceans, sharks and rays each year; the bycatch or "bykill" of associated species often exceeds the amount of saleable fish, sometimes by more than an order of magnitude; and casually discarded or lost fishing gear (e.g. ghost nets, hooks and lines) continue to ensnare, entangle and entrap victims long past their "use-by" date.

With the accelerating collapse of more conventional fisheries and the development of sophisticated deep-water fishing technology, effort is moving further offshore and ever deeper. By 2002 most shallow seamounts (less than 800 metres below the water surface) had already experienced some degree of fishing pressure. Fishers can now target orange roughy and other deep sea fish stocks that aggregate around seamounts and submarine canyons as deep as 2000 meters. These seamount communities are thought to be centers of endemism, refuges for rare species and stepping-stones for distribution. Many species populations may take hundreds and even thousands of years to develop and may take just as long to recover. However newly developing fisheries for deep sea species are now altering these habitats faster than they can be studied<sup>5</sup>.

Shipping is another activity that threatens high seas biodiversity, though generally to a lower degree, through accidental spills and the deliberate, operational discharge of garbage, oily wastes and chemical residues. Operational discharges from ships, including fishing vessels, are more strictly regulated close to shore but have generally been permitted on the high seas. As a result, marine debris has begun to accumulate in certain high seas areas and can even be found in deep sea trenches and the guts of seabirds that only feed in the open ocean. Discharges of oily wastes may further affect nearby seabirds. The potential effects of other shipping-related activities, such as noise pollution and the discharge of thousands of tons of ballast water into the open ocean are only beginning to be investigated. Nevertheless, open ocean discharge of ballast water containing potentially invasive alien species and/or polluted coastal water is now recommended as the preferred option for ballast water treatment, thus discharge levels will rise before scientists understand the possible impacts.

Pollution arising from land-based activities is pervasive in offshore areas. Heavy metals and organic pollutants carried by currents and winds may already be at hazardous levels for commercial fish species at the top of the food chain, such as sharks, tuna and swordfish that migrate into the high seas. The impacts of previous (historic) military activities such as the dumping of munitions, chemical weapons, and radioactive wastes have been poorly monitored and are little understood.

As human uses of the oceans grow more intense and move further offshore, the impacts on biodiversity of the seabed and the water column will increase. Urgent and immediate action is required to understand and reduce the threats to biodiversity, productivity and ecological processes from known risks such as those described above. At the same time, potential risks from ongoing and emerging activities that may affect high seas areas must be assessed and negative impacts prevented<sup>6</sup>.

The effects of climate change, by threatening the stability of temperature and current regimes, may cause additional irreversible changes or uncontrollable fluctuations in marine ecosystems and aggravate other human impacts on ocean biodiversity.

It is much easier to prevent serious ecological damage than to cure it. We have the opportunity to act in the high seas before catastrophic damage has been done to large areas and the living components of this domain.

### **3. THE BENEFITS OF MPAs AND MPA NETWORKS**

Marine protected areas can generate a wide range of benefits, including protecting ecosystem structure, function and beauty, improving fishery yields, reducing over-fishing and by-catch, preserving critical and sensitive habitats, allowing recovery of damaged areas, safeguarding species and genetic resources, reducing conflict between users, and generating public awareness and knowledge as well as support for conservation objectives<sup>7</sup>.

As flexible tools ranging from multiple-use to non-extractive areas, MPAs can manage various immediate, cumulative and potential threats and impose a more integrated approach than current sector-based methods of ocean conservation. Even in the face of global climate change, healthy marine ecosystems have proven to be more resilient and to respond better to a variety of consequent changes.

A representative system of MPAs is essential to protect habitats or ecosystems that are unique, special or representative on a regional biogeographic basis, including benthic habitats such as shelf edges, canyons, deltaic fans, seamounts, abyssal plains, and open ocean features such as eddies, current boundaries, temperature regimes, etc.

Highly protected non-extractive MPAs (or MPAs zoned with highly protected components) can provide many additional long-term benefits not readily attained where use is allowed (e.g. protecting breeding grounds of commercially fished species).

Similarly, networks of MPAs can provide benefits beyond those of single sites. The nature of the marine environment means that a single site may not be ecologically viable, or may be vulnerable to a single catastrophe, whereas a network can link marine ecosystems and better protect habitats that depend on processes outside the MPA. An ecologically coherent network of MPAs is particularly important for highly mobile seabirds, mammals, turtles and fish, safeguarding the habitats necessary to critical stages of their life cycle and migratory routes. Most importantly, perhaps, networks can ensure that management failures outside these areas do not result in irreversible biodiversity loss.

Large, multiple-zoned MPAs that include networks of no-take zones can do all this and more. They allow areas to be set aside for human uses for which they are particularly suited. They can separate conflicting activities and provide buffer zones around highly protected zones. They are major steps towards or, if large enough, constitute in themselves integrated marine management, with all the attendant advantages<sup>3</sup>.

HSMPAs are not a replacement for sustainable ocean management but a cornerstone. At a minimum, they can protect critical ecosystems and keystone species while more effective management tools are developed. They may also serve to stimulate further research to broaden our ability to manage human activities; help raise awareness of the importance of and threats to high seas biodiversity; and provide a coordinating function among relevant institutions, industry, NGOs and communities.

#### **4. THE FRAMEWORK FOR ACTION**

The framework for action to protect high seas biodiversity, productivity and ecological processes is the United Nations Convention on the Law of the Sea (UNCLOS). UNCLOS sets forth the rights and duties of coastal states in defined offshore zones and the freedoms, rights and duties of all states using the high seas. These include duties to protect and preserve the marine environment (including taking measures necessary to protect and preserve rare or fragile ecosystems as well as habitats of depleted, threatened or endangered species and other forms of marine life), to conserve and manage marine living resources, and to cooperate with other nations for these purposes<sup>8</sup>.

Numerous agreements have been negotiated consistent with or associated with the UNCLOS framework that provide for conservation, protection and sustainable use of areas and resources beyond national jurisdiction. Annex 1 to this paper provides a chart of threats/activities and the relevant major international legal instruments that may govern them. These cover many activities and sources of pollution and can be utilized as a solid basis to develop initial protected areas and gain experience in their management<sup>9</sup>.

However, sustainable development of the high seas, including establishment of a representative system of high seas MPA networks, presents an opportunity for the international community to improve implementation of the environmental and conservation obligations of UNCLOS and to incorporate modern principles of precautionary, integrated and ecosystem-based management and transparent, accountable, participatory and equitable governance to the high seas.<sup>10</sup> For example, the principles of conservation, sustainable use and equitable benefit sharing of the Convention on Biological Diversity and the precautionary and ecosystem-based management approaches of the UN Fish Stocks Agreement (for highly migratory and straddling fish stocks) should be equally applicable throughout the world ocean.

The international community has recognized the need for additional measures to protect, maintain and conserve high seas biodiversity and productivity, making this an opportune time for promoting action. Building on 1992 commitments made at the United Nations Summit on Environment and Development, the World Summit on Sustainable Development (WSSD) (Johannesburg, September 2002) highlighted the need to promote the conservation and management of oceans, including:

- Maintaining the productivity and biodiversity of important and vulnerable marine and coastal areas, including in areas within and beyond national jurisdiction;
- Encouraging the application by 2010 of the ecosystem approach to ocean and fisheries management; and

- Developing and facilitating the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal land use; and watershed planning and the integration of marine and coastal areas management into key sectors.

Also, the 8th meeting of the Subsidiary Body for Scientific, Technical and Technological Advice (March, 2003) of the Convention on Biological Diversity (CBD) has forwarded a recommendation which will be considered at the 7th Conference of the Parties to Convention (February, 2004) that specifically recognized “an urgent need to establish in areas beyond national jurisdiction further marine protected areas consistent with international law and based on scientific information, including in relation to areas of seamounts, hydrothermal vents, cold-water corals and open ocean” and requested the Secretariat, working in conjunction with other international and regional bodies “to identify appropriate mechanisms for their establishment and effective management.”

Most recently, the 4th Meeting of the United Nations Informal Consultative Process on Oceans and Law of the Sea<sup>11</sup> (UN ICP, June, 2003) has recommended to the United Nations General Assembly, that it, inter alia, reiterate its call for urgent consideration of ways to improve the management of risks to seamounts and cold water coral reefs, and invite relevant international bodies at all levels to urgently consider how to better address, on a scientific and precautionary basis, threats and risks to vulnerable and threatened marine ecosystems and biodiversity beyond national jurisdiction consistent with international law and the principles of integrated ecosystem-based management.

These intergovernmental efforts have been complemented by a series of expert workshops designed to explore mechanisms for action, including the Expert Workshop on Managing Risks to Biodiversity and the Environment on the High Sea, Including Tools such as Marine Protected Areas--Scientific Requirements and Legal Aspects--Isle of Vilm, Germany, 27 February – 4 March 2001, organized by the German Federal Agency for Nature Conservation; the Experts Workshop on High Seas Marine Protected Areas organized by IUCN, WCPA and WWF in Malaga, Spain 15-17 January 2003; the Defying Ocean’s End Conference organized by Conservation International in Los Cabos, Mexico 29 May-3 June 2003; and the High Seas Biodiversity Conservation Governance Workshop organized by Environment Australia and partners as part of a WSSD Type II initiative, 16-20 June, 2003, Cairns, Australia<sup>12</sup>.

## **5. TEN-YEAR HIGH SEAS MPA STRATEGY**

This Ten Year High Seas MPA Strategy incorporates and builds on the results of previous intergovernmental commitments and expert workshops to provide a road map, or voyage plan, for coordinated action over a ten-year period to develop, establish and effectively manage a system of marine protected area networks for the high seas. It seeks to complement previous efforts such as the Global Marine Biological Diversity: A Strategy for Building Conservation into Decision Making (ed. Norse, E.A, 1993) and the four volume work: A Global Representative System of Marine Protected Areas (GBRMPA, World Bank and IUCN, 1995) by focusing explicitly on marine protected areas beyond national jurisdiction, It thus builds on but does not repeat the fundamental principles, issues and priorities addressed therein.

To promote the development of a global representative system of high seas marine protected area networks, this Strategy is proposed for consideration at the World Parks Congress,

Durban, South Africa, 8-17 September. The five core components of the Strategy call on governments, international and regional organizations, non-governmental organizations, scientists and civil society to take the following measures:

- I. ENDORSE AND PROMOTE the WSSD Joint Plan of Implementation and the goal of establishing a global system of effectively managed, representative networks of marine protected areas by 2012 that includes within its scope the world's oceans and seas beyond national jurisdiction;
- II. TAKE immediate and urgent action to protect the biodiversity and productivity of seamounts, cold water coral communities and other vulnerable marine ecosystems and to safeguard endangered species before they are irrevocably damaged or lost;
- III. UTILIZE all available mechanisms and authority consistent with international law and based on sound science to establish and effectively manage by 2008 at least five MPAs beyond national jurisdiction (high seas MPAs or HSMPAs) to enhance the conservation of marine biodiversity, productivity and ecosystems.
- IV. INITIATE action to identify marine ecosystem types and areas that warrant priority attention, develop agreed criteria and guidelines for the identification, establishment, management and enforcement of HSMPAs, develop guidance for a representative system of HSMPA networks, establish sustainable financing strategies and determine future research needs and priorities.
- V. COOPERATE to develop and promote a global framework or "approach", consistent with and building on UNCLOS, the CBD and the UN Fish Stocks Agreement, to facilitate the creation of a global representative system of high seas MPA networks, ensure its effective management and enforcement, and coordinate and harmonize applicable international agreements, mechanisms and authorities in accordance with modern principles of precautionary, ecosystem-based and integrated management and transparent, accountable and equitable governance.

***The following elements are recognized as being essential components throughout the life of the Strategy and are not necessarily repeated in each individual section.***

***Capacity Building***--is required across all nations with an emphasis on developing states. This includes support for ocean policy development, implementation, and enforcement and for strengthening marine scientific research. It covers financial as well as scientific, technical, legal and management support and the transfer of environmentally sound and sustainable technology.

***Education and awareness raising***—is essential to ensure broad understanding of the importance of high seas biodiversity conservation, the value of HSMPAs, and the legitimate rights and concerns of all states and other stakeholders.

***Stakeholder Engagement***--is essential to ensure that all who have an interest in the long-term health, biodiversity and productivity of our oceans are involved in decisions regarding its governance and management. This includes governments, international and regional organizations, non-governmental organizations, scientists, business and industry leaders, fishers and other ocean users, and civil society as a whole.

***Scientific and Socio-economic and Legal Research***—is essential to further understanding of high seas biodiversity, productivity and ecological processes and the potential impact of

human activities thereon, as well as the legal and socio-economic bases on which protection can be based. However, lack of complete data on various aspects of high seas biodiversity should not prevent the taking of immediate action.

The Strategy components mirror draft Recommendation 5.23 (as of 29 August 2003) to be considered together with this Strategy for adoption at the World Parks Congress. The following sections below detail steps necessary to deliver the Strategy and provide various “tool boxes” that may be used to prompt, stimulate and guide initial action. These “tool boxes” are based on the background information documents and findings of previous expert workshops.

# **I. ENDORSE AND PROMOTE the WSSD Joint Plan of Implementation and the goal of establishing a global system of effectively managed, representative networks of marine protected areas by 2012 that includes within its scope the world's oceans and seas beyond national jurisdiction**

## Strategy Steps

- 1) Identify sources of funds (through e.g. developing fund-raising strategies) and human resources and seek to have them dedicated to raise awareness, educate, conduct research and build capacity (now and in the foreseeable future),
- 2) Establish cost-effective mechanisms and provide venues to educate and raise awareness among stakeholders. Examples include:
  - a) Convene regional workshops with relevant stakeholders (including regional fisheries management organizations (RFMOs), where appropriate) to develop regional strategies/action plans/ocean policies etc. based on ecological boundaries, encouraging consideration of shared resources, straddling stocks (EEZ-high seas) and transboundary ecosystems,
  - b) Use electronic and other learning tools (e.g., virtual High Seas site developed by Australia's Commonwealth Scientific and Industrial Research Organization (CSIRO)),
  - c) Implement flagship projects to focus attention on issues and problems pertaining to high seas biodiversity conservation and the role of MPAs (e.g., marine debris, by-catch, demonstration HSMPAs, etc.),
  - d) Create a high seas website to provide a nexus for information exchange and access on high seas biodiversity and the role of MPAs,
  - e) Develop a global education network on high seas biodiversity conservation and the role of MPAs,
- 3) Promote research and action to establish the role of MPAs as a fundamental part of an ecosystem approach for all sectors and uses of the oceans beyond national jurisdiction,
- 4) Engage media as a partner in conservation efforts,
- 5) Promote development of the idea of a Global Oceans Ambassador and consideration of the benefits to high seas biodiversity conservation and management that might flow from such a position,
- 6) Establish a coalition among like-minded governments, international and regional organizations, non-governmental organizations, scientists, business and industry leaders, fishers and other ocean users, and the media to share information, avoid duplication, promote coordinated action, and monitor and report on progress
- 7) Promote high seas biodiversity conservation and protected areas at relevant international and regional organizations and meetings, including incorporation of HSMPAs (and WSSD target dates) into relevant international strategies (e.g. the CBD Programme of Work on Marine Issues, etc.) and integration into all sectoral plans and policies (Tool Box 1 provides some initial examples, a more thorough study may be warranted),

## TOOL BOX 1

### Opportunities to support high seas biodiversity conservation through MPAs using international and regional forums and agreements

#### GLOBAL

- The UN Informal Consultative Process on Oceans and the Law of the Sea (UN ICP) is a particularly useful forum to advance international action/agreement on the need for a unified policy framework for HSMPAs, to facilitate co-ordination at inter-agency and intergovernmental levels, and to promote worldwide information exchange and access. The UN ICP has identified MPAs as a possible topic for future discussion.
- The 2004 Conference of Parties to the Convention on Biological Diversity (CBD) will develop and adopt the Convention's Global Programme of Work on protected areas, including provisions on marine protected areas, as well as its Global Programme of Work on marine issues. The CBD Programmes of Work specify the objectives and priorities for action by the 189 parties to the Convention.
- The International Seabed Authority (ISA) has adopted a mining code relating to the exploration for polymetallic nodules and is currently developing rules to regulate mining for polymetallic sulphides and cobalt crusts that occur mainly at hydrothermal vents and seamounts. However, the ISA's mandate regarding the resources of the deep seabed extends well beyond mineral exploitation, and the Authority is being encouraged to more fully exercise its powers and responsibilities with regard to living resources of the seabed and to ensure that marine ecosystems are properly protected and considered in all ISA licensing decisions and activities.
- The Convention on Migratory Species (CMS) offers the opportunity to address ecosystem conservation on a regional level through the creation of "CMS-agreements" (both binding agreements and MoUs) among countries that are "range states" of particular important species or groups of species. In addition to the possibility of initiating negotiation of new agreements, the CMS process may be utilised as a tool for multi-lateral species management. Several CMS Agreements already exist relating to marine species (cetaceans and turtles and seabirds). The process of creating, implementing and reviewing the management plans and other work under these agreements may be an important tool for high-seas conservation.
- Widespread implementation of the UN Agreement on Highly Migratory Fish Stocks and Straddling Fish Stocks (UNFSA) would improve management of straddling and highly migratory fish stocks, as well as species belonging to the same ecosystem or associated with or dependent upon the target stocks. Fisheries subject to this agreement must be managed to protect marine biodiversity and to apply the precautionary approach, which requires the proponents of resource exploitation to prove the sustainability of their actions. Intended to be implemented primarily through Regional Fishery Management Organizations (RFMOs), the UNFSA is only slowly being incorporated into RFMO management. The development of incentives, best management standards, public accountability and consumer awareness might help to speed this process.
- Several instruments relevant to high seas biodiversity conservation have been developed under the auspices of the UN Food and Agriculture Organization (FAO), including, i) International Plan of Action (IPOA) on Seabird Bycatch in Longline

Fisheries, ii) IPOA on Conservation and Management of Sharks, iii) IPOA on Fishing Overcapacity, and iv) IPOA on Illegal, Unreported and Unregulated (IUU) Fishing. In addition, FAO plays an important role in convening and facilitating information exchange among Regional Fisheries Management Organizations on scientific and legal aspects of implementation of international treaty requirements and provides technical support. Another FAO forum, biennial meetings of the Committee on Fisheries (COFI) are increasingly addressing “deep seas fisheries” issues such as seamount fisheries. Deep seas fisheries will be the topic of a conference organized by New Zealand and Australia with the technical assistance of FAO from 1-5 December 2003 (Queenstown, New Zealand). These meetings provide an opportunity to encourage FAO, states and RFMOs to utilize MPAs as part of the overall objective of ecosystem-based management.

- Under the International Convention for the Prevention of Pollution from Ships (MARPOL), members of the International Maritime Organization (IMO) may apply for the designation of Special Areas where particularly strict standards are applied to discharges from ships. Special Areas may include high seas areas (e.g. the entire Mediterranean is a special area)<sup>13</sup>. Other IMO measures may also be approved to regulate shipping activities in high seas areas. For example, under the Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas, IMO members may petition IMO for global recognition of the special significance of a defined sea area and approval of other IMO measures to address risks and threats posed by shipping.
- Under the Convention for the Regulation of Whaling the International Whaling Commission (IWC) may adopt regulations with respect to “open and closed waters, including the designation of sanctuary areas”. Sanctuaries where commercial whaling is prohibited have been established in the Indian Ocean (1979) and the Southern Ocean (1994), comprising extremely large extents of high seas waters where commercial whaling is prohibited.
- The Convention on International Trade in Endangered Species (CITES) has recently entered the field of high-seas biodiversity conservation – providing, through its mandate to control trade that impacts the status of listed species, a strong impetus for bringing governments “to the table” to discuss the tools for species management on the high seas (including HSMPAs and other ecosystem protection).
- The World Heritage Convention (WHC) provides a basis for identification and global cooperation to conserve areas of “outstanding universal value”. Though it does not extend beyond the territory of member states, the Convention’s principles and procedures may provide a useful model for identification of and agreements to protect areas of “outstanding universal value” on the high seas. Some have suggested that its territorial ambit be expanded to enable designation of areas of outstanding universal value beyond national jurisdiction.
- Through the 2001 UNESCO International Convention for Protection of Underwater Cultural Heritage underwater sites of cultural importance maybe protected. This may provide some incidental benefits to high seas biodiversity in and around the area

### **REGIONAL**

- In the Antarctic and Southern Ocean, the 1991 Antarctic Environment Protocol contains an Annex V on Area Protection and Management that envisages the development of a systematic approach to the identification and establishment of protected areas, including marine areas. Protected areas in the marine environment must be approved by the Commission on the Conservation of Antarctic Marine Living Resources

(CCAMLR), which is empowered to designate special areas for protection and scientific study. Meetings of the Committee for Environmental Protection (CEP) under the Antarctic Treaty Protocol and CCAMLR provide an opportunity to discuss development of marine protected areas in Antarctica.

- The Convention for the Protection of the Marine Environment of the North East Atlantic (OSPAR Convention) has a wide mandate to protect the marine environment and its biodiversity from all sources and activities. Over half of the “OSPAR Maritime Area” is beyond national jurisdiction. The Parties have already adopted the goal of developing a representative network of MPAs by 2010, and have specifically agreed to include areas that lie beyond national jurisdiction as “components of the OSPAR MPA Network”.
- The Mediterranean Protocol on Specially Protected Areas and Biodiversity provides a framework to adopt, by consensus, areas beyond national jurisdiction as Special Areas of Mediterranean Importance (SPAMIs). Non-Mediterranean States may also support these areas by acceding to the agreement. The first twelve SPAMIs have been approved in 2001. One of them, the Pelagos Sanctuary for marine mammals in the Ligurian Sea, established by France, Italy and Monaco, covers also areas of high seas. Parties to the Mediterranean Protocol are obligated to follow the management guidelines, and to apply pressure to recalcitrant third parties.
- Other regional seas arrangements, some of which cover high seas areas, are beginning to explore how to meet the WSSD target of representative MPA networks by 2012. These forums<sup>14</sup> can be used identify and protect important and vulnerable ecosystems and habitat for marine fisheries, associated species and other biological resources within their mandate, in cooperation with the regional fisheries management organizations.
- Regional Fisheries Management Organizations generally have a mandate to close areas to fisheries. Members of these organizations and non-governmental observers can promote use of this authority to establish MPAs to protect important and vulnerable biodiversity conservation areas as well as fish spawning or aggregating sites, and as a means to provide insurance against management failures elsewhere.

Source: Gjerde, K. and Breide, C. (eds.) (2003) *Towards a Strategy for High Seas Marine Protected Areas: Proceedings of the IUCN, WCPA and WWF Experts Workshop on High Seas Marine Protected Areas*, 15-17 January 2003, Malaga, Spain (IUCN, Gland, Switzerland) available at [www.iucn.org/theme/marine](http://www.iucn.org/theme/marine) (Malaga Workshop Proceedings)<sup>15</sup>.

This first section has described mechanisms to promote acceptance of the WSSD target and goal of establishing representative networks of marine protected areas by 2012 including oceans and seas beyond national jurisdiction through awareness raising, coordination and use of political opportunities. The next section describes immediate actions to protect ecosystems identified by the international community at the WSSD and the UN General Assembly as requiring urgent action to improve their protection, and notes the need to promote urgent action to safeguard endangered marine species on the high seas.

## **II. TAKE immediate and urgent action to protect the biodiversity and productivity of seamounts, cold water coral communities and other vulnerable marine ecosystems and to safeguard endangered species before they are irrevocably damaged or lost**

### Strategy Steps

- 1) Commission an expedited expert report to be issued by February 2004 that will review: i) existing information regarding fisheries on seamounts and cold water coral habitats; ii) what is known regarding the location and biodiversity of seamounts and cold water corals; iii) existing regional fisheries management regimes and their regulation, or lack thereof, of bottom fisheries and bycatch in deep ocean areas; and iv) relevant instruments and options for international action.
- 2) Promote mechanisms to secure prompt action:
  - a) At the global level, consider a call by the United Nations General Assembly for a moratorium on unregulated (i.e. fishing in absence of an effective and precautionary management regime) bottom trawling on seamounts, based on the example of the UN resolutions regarding large-scale pelagic drift netting on the high seas.
  - b) At the regional level, encourage RFMOs and other relevant bodies to adopt a moratorium or other emergency measure to prevent unregulated bottom trawling on seamounts and cold water coral habitats and to develop “effective management regimes” for fisheries that impact these habitats. (See Section V).
  - c) At the national level, enact strict controls on the landing and transshipment of specific high seas seamount and cold-water coral fish stocks to ensure they have been caught in conformity with conservation and management measures adopted by relevant RFMOs, other international legal commitments to conserve marine living resources (including non-target and dependent species and related habitat), and an ‘effective management regime’ (See Section V).
  - d) At the national level, encourage the protection of seamounts and cold water coral habitats within national jurisdiction.
  - e) At the national and local levels, initiate directed public education and media campaigns to inform consumers of the impacts of their seafood choices
- 3) Utilize and assess existing information (e.g. ongoing initiatives such as Census of Marine Life and related databases) and where necessary stimulate further research to identify priority candidate sites for protection where MPAs will improve or enhance fisheries management and protect marine biodiversity,
- 4) Commission a controlled study of seamount fishing to determine whether and how it can be undertaken sustainably, including possible impacts on non-target and dependent species and related habitat,
- 5) Engage the fishing and seafood industries on the benefits of protecting these vulnerable deep sea ecosystems,
- 6) Work with the fishing industry and through RFMOs to establish gear restrictions in certain sensitive areas that eliminate damage from fishing (e.g. skipper certification, bottom troll designs, incentives for non-destructive fishing),

- 7) Support the work within the IUCN Species Survival Commission to assess rare and vulnerable marine species, including those found on the deep seabed such as cold water corals and the fauna of seamount ecosystems,
- 8) Consider establishment of a mechanism similar to the International Coral Reef Initiative (ICRI) to pursue protection of seamounts and cold water corals.
- 9) Develop similar mechanisms to promote urgent and immediate action to protect other “vulnerable marine ecosystems” and high seas, transboundary or migratory species threatened or endangered by high seas fishing activities such as through gear restrictions and establishment of protected areas.

This section has described mechanisms to enable urgent action to protect seamounts, cold water corals and other marine ecosystems and to safeguard marine species vulnerable to irrevocable damage from fishing activities. The next section provides a “tool box” for establishing MPAs beyond national jurisdiction using existing instruments and authorities, including formal and informal agreements and measures.

**III. UTILIZE all available mechanisms and authority consistent with international law and based on sound science to establish and effectively manage by 2008 at least five MPAs beyond national jurisdiction to enhance the conservation of marine biodiversity, productivity and ecosystems.**

Strategy Steps

- 1) Use known opportunities under regional and global agreements to establish HSMPAs through binding legal agreements as noted in Tool Box 1 and non-binding agreements of the type noted in Tool Box 2, to protect and conserve marine biodiversity, productivity and ecosystems while gaining experience essential to developing a global system of representative MPA networks.
- 2) Pursue potential candidate sites for priority MPAs that will improve or enhance fishery management and/or protect marine biodiversity<sup>16</sup>
  - a. Start with known hotspots of biodiversity such as seamounts, cold water coral communities, hydrothermal vents, canyons, marine species aggregations and assemblages (e.g. marine important seabird areas, "large predator" concentrations<sup>17</sup>).
  - b. Prioritise sites based on ecological criteria/considerations (see Tool Box 3 for possible preliminary criteria)
  - c. Prioritise sites based on practical criteria/considerations
  - d. Encourage multinational, multi-stakeholder and transboundary (linking EEZ and high seas) initiatives
  - e. **Complete designation process for at least 5 HSMPAs by 2008 (See Tool Box 4 for an indication of steps to designating initial HSMPAs, as developed at the Malaga High Seas MPA Workshop).**
- 3) Consider a pilot site in each region to pick up ecological, geopolitical, cultural, sectoral considerations and interests.
- 4) Encourage non-member states and relevant regional and global bodies to recognize/endorse/adopt HSMPAs and support any associated conservation management measures in a manner consistent with international law
- 5) Promote widespread ratification, implementation and enforcement of existing international conventions (global and regional) that enable establishment and effective management of HSMPAs (including agreements governing sector-based activities that may impact HSMPAs) (See Tool Box 1).

## **TOOL BOX 2**

### **Informal mechanisms for designating HSMPAs**

- Collective action by like-minded states, e.g. through an agreement to enact special management measures or to voluntarily refrain from certain activities in order to protect an area of common concern. (Such an agreement could be binding among the like-minded states but would not have binding effect on non-participating states.),
- Non-binding soft law instruments including best efforts agreements, voluntary codes of conduct, and certification, such as
  - A non-binding Memorandum of Understanding (MOU) amongst “range states” for certain migratory species pursuant to the Convention on Migratory Species (as opposed to a binding CMS Agreement - see Tool Box 1),
  - Establishment of a Biosphere Reserve pursuant to the UNESCO Man and the Biosphere Programme (MAB),
  - Voluntary Code of Conduct amongst different professional or industry groups to assist in identifying and protecting the values of important and vulnerable biodiversity areas of the high seas and seabed beyond national jurisdiction:
    - Scientists, including within identified sites maintained as “reference” or preservation sites,
    - Bioprospectors,
    - Submarine cables industry,
    - Oil and gas industry, covering also the laying of submarine pipelines,
    - Open-ocean mariculture operators,
    - Open-ocean renewable energy,
    - Marine archaeologists, including the development of management plans for archaeological sites that promote biodiversity conservation.
- Innovative approaches including
  - Public/private partnerships (e.g. contractual agreements),
  - Declarations and mandates from Conferences of the Parties (e.g. the Jakarta Mandate to the CBD),
  - Programmes for coordination and sustainable use (such as those developed at the regional level for regional seas),
  - Joint work plans or programmes (e.g. between the CBD and Convention on Migratory Species or between global and regional agreements),
  - Intergovernmental coordinating groups (may be formal or informal),
  - Environmental impact assessment procedures and/or standards by international and regional bodies that call for identification and protection of critical and vulnerable areas/habitat (may be binding or non-binding).

Source: Young, TR., (2003). “Developing a Legal Strategy for High Seas Marine Protected Areas”, Legal Background Paper for the IUCN, WCPA and WWF High Seas Marine Protected Areas Workshop, *Malaga Workshop Proceedings* (Annex 4).

## **TOOL BOX 3**

### **Possible Preliminary Criteria for HSMPAs**

- 1) Areas that would benefit from site specific management, such as locations which are:

- a. Representative of the range of habitats/ecosystems in a region
- b. Functionally critical (e.g. nursery grounds, spawning sites)
- c. Support rare species/habitats/ecosystems
- d. Support unique species or areas exhibiting high endemism
- e. Support a high diversity of species/habitats

2) Practical considerations:

- a. Site integrity
- b. Degree and nature of threat(s) to species/habitats/ecosystems in the area
- c. Geo-political circumstances
- d. Feasibility of management, compliance and enforcement

Source: Gubbay, S, (2003) "Protecting the Natural Resources of the High Seas" Scientific Background Paper for the IUCN, WCPA and WWF High Seas Marine Protected Areas Workshop, in *Malaga Workshop Proceedings*, Annex 3.

## **TOOL BOX 4**

### **Possible Steps to Designating Initial High Seas MPAs**

- 1) Selection of candidate sites
  - a) Collection and assessment of data on habitats, species, usage and threats
  - b) Definition of criteria
  - c) Selection of sites
  - d) Production of supporting documentation
- 2) Promotion, consultation and funding
  - a) Required throughout the process
  - b) Many different levels
  - c) Funding strategy needed early
- 3) Identify relevant authorities and interested stakeholders, including those with customary rights (Steps 1-3 need to occur from the beginning)
- 4) Gather relevant background technical, scientific and legal information, including on feasibility of management and enforcement
- 5) Prepare interest-generating proposal to generate discussion and support
- 6) Examine available legal mechanisms that might be used to protect area
- 7) Consider socio-economic and political realities that exist for achieving success
- 8) Develop and finalize the proposal for MPA designation
  - a) Detailed technical, socioeconomic and legal analysis
  - b) Special focus on legal mechanisms or framework to make it legally binding
  - c) Conservation Report
- 9) Prepare a management plan for the protected area pursuant to the legal mechanism/framework
- 10) Implement the designation process
  - a) Could involve several iterative steps
- 11) Designate, implement and enforce the management plan pursuant to the legal mechanism/framework
- 12) Monitor and evaluate the success

Source: *Malaga Workshop Proceedings: "Steps to Designation"*, page 21-22

The two previous sections have addressed short-term actions to 1) protect vulnerable marine ecosystems and species from high seas fishing activities and 2) establish individual MPAs on the high seas through currently available tools. The next section describes longer-term action necessary to establish a consistent and transparent process and framework for the identification, establishment and management of MPAs and MPA networks, including future research needs and priorities and development of sustainable financing.

**IV. INITIATE action to identify marine ecosystem types and areas that warrant priority attention, develop agreed criteria and guidelines for the identification, establishment, management and enforcement of HSMPAs, develop guidance for a representative system of HSMPA networks, establish sustainable financing strategies and determine future research needs and priorities.**

Strategy Steps

- 1) Identify marine ecosystem types and areas that warrant priority attention
  - a) Convene a multidisciplinary expert workshop and/or group to bring together and analyze all available relevant information to assess the biogeography and biodiversity of the high seas as a basis for HSMPAs and a provisional representative system of MPA networks
    - i) Identify rare or unique species/habitats/ecosystems
    - ii) Identify threatened or declining species, habitats, biotopes and ecological process that appear to be under immediate threat or subject to rapid decline;
    - iii) Identify areas important for other species, habitats/biotopes and ecological processes
    - iv) Identify areas of known ecological significance, natural biological diversity, representativeness, endemism, sensitivity and/or naturalness
    - v) Identify and define areas of importance for migratory species such as seabirds, cetaceans, sea turtles, sharks, rays and billfish
    - vi) Identify and define areas of importance for propagation of commercial fish stocks (e.g. spawning and breeding grounds)
    - vii) Identify relatively intact marine areas that are not yet significantly degraded by direct or indirect human impacts and represent important biodiversity (including representativeness) values
    - viii) Identify key biological, oceanographic and physiographic factors that contribute to forming hotspots of marine biodiversity and productivity
    - ix) Identify threatening processes and activities vis-à-vis priority areas
  - b) Expand or develop Geographic Information Systems to enable mapping of priority areas and overlays of threatening processes and activities, jurisdictional boundaries and coverage of relevant instruments and organizations
  - c) Investigate assessment methods and criteria for determining suitability of potential HSMPA sites
- 2) Develop agreed criteria and guidelines for the identification, establishment, management and enforcement of HSMPAs

- a) Establish research and information collection program relevant to identification criteria and guidelines based on best available information within a defined short time horizon, e.g. 2 – 3 years.
  - b) Establish multidisciplinary group to develop guidelines for management and enforcement of HSMPAs (include all sectors of society, all scientific, socio economic, legal and management disciplines).
  - c) Develop a data bank (e.g. through WCMC) to build an information base that is useful to the management of high seas MPAs.
  - d) Promote adoption of the criteria and guidelines at all relevant national, regional and international governmental, scientific, industry and other meetings.
- 3) Develop guidance for a representative system of HSMPA networks (See Tool Box 5)
- a) Establish multidisciplinary group to develop guidance for development of a system of HSMPAs representative of all main ecosystems and habitats (benthic and pelagic); major oceanic regions, topographic features, oceanographic and biogeographic characteristics, etc.
- 4) Establish sustainable financing strategy
- a) Convene a group of major stakeholders and others, including governments, major ocean users, business and industry leaders, foundations, finance institutions, to discuss options and develop mechanisms for facilitating sustainable financing for HSMPAs.
- 5) Determine future research needs and priorities (See Tool Box 5)
- a) Request that a multidisciplinary workshop/committee of experts undertake comprehensive assessment of available data to determine future research needs and priorities to fill major data gaps and to undertake adaptive management.
  - b) At the same time, support research, monitoring and reporting mechanisms relevant to the protection, conservation and sustainable use of biodiversity and ecosystem processes on the high seas to ensure ongoing information collection.

## TOOL BOX 5

### Research relevant to development and management of a global representative system of high sea marine protected area networks

#### ***Ecological research relevant to development of a global system could include:***

- *Representativeness* -- identification of the main ecosystems and habitats (benthic and pelagic), decisions about scale on which MPAs are needed, biogeographic zones and habitat classifications
- *Functionally critical* – identification of areas such as nursery grounds, migration routes and spawning sites for species; sources (habitats that generate larvae that are transmitted to other habitats) and sinks (habitats that receive larvae from other habitats) of larvae; and areas where functionally critical ocean processes operate such as upwellings, frontal systems etc.
- *Rarity* – which habitats, species or ecosystems of the High Seas are truly rare as opposed to being an artefact of the extent and location of sampling programmes.
- *Unique/high levels of endemism* – locations where there are concentrations of endemic species or unique habitats, distinguished from areas highlighted as such because of an artefact of sampling programmes.
- *Site Integrity* – the size and make up of potential MPAs and particularly the processes that drive marine systems and therefore which need to be understood if sites are to be kept in favourable condition
- *Level of threat* – current and future activities that are likely to pose a threat to High Seas species, habitats and ecosystems.

#### ***Ecological research relevant to management of a global system could include:***

- *Sensitivity* – the sensitivity of high sea species, habitats and ecosystems to the range of likely human activities both at a generic level and in and around particular MPA locations
- *Vulnerability* -- the vulnerability of high sea species, habitats and ecosystems to the range of activities at present taking place in and around proposed MPAs
- *Resilience* – the resilience of particular species, habitats and ecosystems to disturbance and damage, including recovery times
- *Natural variability* -- natural variability in the status of species, habitats and ecosystems of the High Seas
- *Quality objectives* -- ecological and environmental quality objectives for MPAs and their applicability in particular circumstances.

Source: Gubbay, S. (2003). *Malaga Workshop Proceedings*, Annex 3

This fourth section has addressed the need to develop common criteria and guidelines for identification, establishment, management and enforcement of high seas MPAs, and to determine future research needs to support development and management of the representative system of HSMPA networks. The fifth and final section suggests ways forward to build on existing mechanisms, improve coordination and cooperation at all levels, and develop a sound framework for establishment of a global representative system of high seas MPA networks and an effective oceans governance system.

**V. COOPERATE to develop and promote a global framework or “approach”, consistent with and building on UNCLOS, the CBD and the UN Fish Stocks Agreement, to facilitate the creation of a global representative system of high seas MPA networks, ensure its effective management and enforcement, and coordinate and harmonize applicable international agreements, mechanisms and authorities in accordance with modern principles of precautionary, ecosystem-based and integrated management and transparent, accountable and equitable governance.**

Strategy Steps

- 1) Promote work pursuant to the CBD and UNCLOS, in cooperation with relevant international and regional bodies, to:
  - a) Identify appropriate mechanisms for the establishment and effective management of HSMPAs and a representative system of HSMPA networks, consistent with international law and based on scientific information;
  - b) Develop an ecosystems-based policy framework for sustainable ocean management for all sectors and uses of the oceans beyond national jurisdiction, incorporating HSMPAs, by the WSSD 2010 target for applying an ecosystem-based approach;
  - c) Compare and assess experience at the regional level in developing representative MPA networks to learn from these experiences
- 2) Promote work relating to regional fisheries management and the UN Fish Stocks Agreement to:
  - a) Call for all high seas fishing activities to be subject to “an effective management regime” of principles, governance mechanisms, and conservation and management practices, including:
    - i) Upgrade all regional fisheries agreements and organizations to require application of precautionary and ecosystem based management approaches that take account of environmental factors and the interdependence of stocks, minimize the impacts of fishing on non-target species, protect biodiversity in the marine environment and ensure the long-term sustainability of targeted species; in this context, encourage the evaluation and use of strictly managed areas and networks of MPAs to protect habitats and species of special concern and ensure the conservation of high seas fish stocks .
    - ii) Improve governance of RFMOs to ensure a better balance between the interests of commercial exploitation and maintaining environmental stability and diversity (e.g. transparent, accountable, participatory and equitable decision-making)
    - iii) Modify geographic and species coverage of RFMOs or establish new arrangements for all unregulated high seas fisheries, including demersal fisheries
    - iv) Encourage inter-RFMO consultations on effective management, including basin-wide consultations for the Atlantic, Pacific and Indian Oceans to ensure that ecosystem linkages are taken into account.

- v) Establish consistent minimum standards for determining an “effective management regime” with respect to management principles, practices and governance
  - vi) Establish mechanisms for certifying RFMOs for compliance with minimum standards for an “effective management regime”
- b) Call for improved surveillance, monitoring and enforcement to eliminate illegal, unreported and unregulated (IUU) fishing and ensure the application of effective management regimes to high seas fisheries. Possible mechanisms for improving implementation of flag state responsibilities and port state controls include: incentives such as white lists and black lists; application of catch documentation and verification schemes; real time reporting and vessel location to verify catch reporting and documentation; widespread use of automatic identification and vessel monitoring systems; clarifying the requirements for a genuine link between flag states and fishing vessels to eliminate ‘flags of convenience’; strengthening the systematic and transparent application of all available measures through regional and global bodies and effective coordination and cooperation among them.
  - c) Develop appropriate national, regional and international systems for detecting, tracking and bringing to justice those who engage in IUU fishing.
  - d) Establish a legal basis for additional mechanisms if necessary to ensure effective surveillance, monitoring and enforcement measures
- 3) Promote work within regional seas conventions and other regional bodies to:
- a) Adjust mandates and area of application where necessary to ensure development of an ecologically coherent and representative MPA network and to address threats at the level appropriate to conserve regional ecosystems and biodiversity (watersheds to high seas).
  - b) Encourage establishment of stakeholder coordination mechanisms to identify special locations and or/ecosystem processes beyond national jurisdiction requiring inter-stakeholder consultation to conserve special values of interest to the region.
  - c) Establish mechanisms to promote cooperation among regional seas organizations, fishing states, RFMOs, and other relevant bodies (e.g. IMO/PSSAs) to protect threatened and or migratory non-target species throughout their migratory corridors (e.g. for CMS-identified species).
- 4) Promote further work within the United Nations system to improve intergovernmental coordination and cooperation in protecting vulnerable ecosystems, biodiversity and productivity beyond national jurisdiction
- a) Through the UN General Assembly, request the UN Informal Consultative Process to focus specifically at a future session on progress made under international agreements towards establishing marine protected networks and a representative global system of networks together with the role played by existing instruments governing different types of ocean activities (e.g., fishing, mining, shipping) in protecting vulnerable ecosystems and biodiversity;
  - b) Through the UN General Assembly, promote an adequately funded UN inter-agency coordinating mechanism including all relevant regional and global bodies, focused on

high seas biodiversity conservation to support the UN ICP in its discussions and ensure regular reporting by the UN Secretary General in his report on Oceans and the Law of the Sea;

- c) Through the UN General Assembly and other relevant regional and global bodies, promote the development of a Global Oceans Policy, supported by national and regional ocean policies, to provide a unifying policy framework to strengthen, focus, and improve cooperation and coordination for ecosystem-based ocean and fisheries management.
- 5) Support high-level consideration of the need for additional mechanisms, including UNCLOS implementing agreement/s, to facilitate the effective management of a global representative system of high seas MPA networks and an effective ocean governance system.
- a) Through the UN General Assembly and other relevant regional and global bodies, request an international/UN GA consultation to consider the possible need to develop further implementation agreements under UNCLOS to improve the governance of high seas biodiversity conservation and/or facilitate the establishment at the global level of a representative system of HSMPA networks
  - b) Through the UN General Assembly and other relevant regional and global bodies request an international/UNGA consultation on high seas fishing to advance application of the principles of the UN Fish Stocks Agreement, including the evaluation and use of strictly managed areas, and to upgrade mechanisms to promote compliance, monitoring and enforcement of international legal obligations.
  - c) Through the UN General Assembly and other relevant regional and global bodies, consider the need for a formal process to negotiate an international agreement on the conservation, sustainable use and equitable benefit-sharing of high seas biodiversity and productivity, including the role of MPAs, drawing on UNCLOS, the CBD and the UN Fish Stocks Agreement *inter alia*.

## 6. INVITATION

The World Parks Congress draft Recommendation 5.23 on *Protecting Marine Biodiversity and Ecosystem Processes through Marine Protected Areas Beyond National Jurisdiction* complements this Ten-Year HSMPA Strategy by expressing the commitment of participants at the 5<sup>th</sup> World Parks Congress, in Durban, South Africa (5-17 September 2003) to recommend to governments, international and regional organizations, non-governmental organizations, scientists and civil society to take the suggested actions.

We hope you will join us in sharing the commitment to:

- I. ENDORSE AND PROMOTE the WSSD Joint Plan of Implementation and the goal of establishing a global system of effectively managed, representative networks of marine protected areas by 2012 that includes within its scope the world's oceans and seas beyond national jurisdiction;
- II. TAKE immediate and urgent action to protect the biodiversity and productivity of seamounts, cold water coral communities and other vulnerable marine ecosystems and to safeguard endangered species before they are irrevocably damaged or lost;
- III. UTILIZE all available mechanisms and authority consistent with international law and based on sound science to establish and effectively manage by 2008 at least five MPAs beyond national jurisdiction (high seas MPAs or HSMPAs) to enhance the conservation of marine biodiversity, productivity and ecosystems.
- IV. INITIATE action to identify marine ecosystem types and areas that warrant priority attention, develop agreed criteria and guidelines for the identification, establishment, management and enforcement of HSMPAs, develop guidance for a representative system of HSMPA networks, establish sustainable financing strategies and determine future research needs and priorities.
- V. COOPERATE to develop and promote a global framework or "approach", consistent with and building on UNCLOS, the CBD and the UN Fish Stocks Agreement, to facilitate the creation of a global representative system of high seas MPA networks, ensure its effective management and enforcement, and coordinate and harmonize applicable international agreements, mechanisms and authorities in accordance with modern principles of precautionary, ecosystem-based and integrated management and transparent, accountable and equitable governance.

In addition, we hope you will take this opportunity to join together through formal and informal networks to implement the Ten-Year HSMPA Strategy within your own governments and organizations and in the broader international forums and to report back on progress at the International Marine Protected Areas Congress in Geelong (Melbourne), Australia in 2005 as well as at other relevant forums.

## Annex 1. Threats/Activities and Major International Legal Instruments <sup>18</sup>

THREATS/ACTIVITIES	MAJOR INTERNATIONAL LEGAL INSTRUMENTS
Fishing Overharvesting Bycatch Physical destruction	UNCLOS International Whaling Convention UN Fish Stocks Agreement (FSA) FAO Code of Conduct for Responsible Fisheries FAO Compliance Agreement FAO International Plans of Action: Seabirds, Sharks, Capacity, IUU CMS CITES Regional Fishery Management Organizations (RFMOs) <b>Areas:</b> closed areas CBD (activities and processes of member states on high seas)
Minerals Development Physical destruction Pollution Sediment plumes & turbidity Noise	UNCLOS International Seabed Authority Rules and Regulations <b>Areas:</b> off limits to exploitation impact and preservation reference areas (manganese nodules) Continental Shelf/Oil & Gas Activities >200 mile EEZ Regional Seas Protocols/Annexes MARPOL 73/78 London Convention
Shipping Pollution Invasive species Noise Physical impact (whales)	UNCLOS Numerous IMO Conventions <b>Areas:</b> MARPOL 73/78 Special Areas re operational discharges PSSAs SOLAS 74 (Ships Routeing, including areas to be avoided, Vessel Traffic Services, Ships Reporting) COLREG 72 (traffic separation schemes) Compulsory pilotage
Bioprospecting Physical destruction	UNCLOS CBD
Marine Scientific Research Physical destruction	UNCLOS
Submarine Cables Physical destruction	UNCLOS
Dumping Pollution Physical (smothering)	UNCLOS London Convention Regional Seas Protocols/Annexes
Renewable Energy (e.g., OTEC, currents, wind turbines)	UNCLOS IMO Conventions (e.g., MARPOL 73/78)
Open Water Aquaculture Pollution Disease Escape of non-indigenous or genetically-modified species	UNCLOS IMO Conventions (e.g., MARPOL 73/78) CBD
Large-Scale Ocean Modification (e.g., ocean fertilization)	UNCLOS
Marine Archaeology Physical destruction Physical (smothering)	UNCLOS UNESCO Underwater Cultural Heritage Convention
Tourism Physical destruction Light pollution, Noise	UNCLOS

## Annex 2. Glossary of Acronyms

CBD	Convention on Biological Diversity
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CITES	Convention on International Trade in Endangered Species
CMS	Convention on Migratory Species
COLREGs	International Collision Regulations
EEZs	Exclusive Economic Zone
FAO	Food and Agriculture Organisation
GBRMPA	Great Barrier Reef Marine Park Authority
HSMPAs	High Seas Marine Protected Areas
ICP	United Nations Informal Consultative Process (on Oceans and Law of the Sea)
ICRI	International Coral Reef Initiative
IGOs	International Governmental Organisations
IMO	International Maritime Organisation
IPOA	International Plan of Action
ISA	International Seabed Authority
IUU Fishing	Illegal, unreported and unregulated fishing activities
IWC	International Whaling Commission
MAB	Man and Biosphere Programme
MARPOL	International Convention for the Prevention of Marine Pollution from Shipping
MPAs	Marine Protected Areas
NGOs	Non governmental organisations
PSSAs	Particularly Sensitive Sea Areas
RFMOs	Regional Fisheries Management Organizations
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice of the CBD
SOLOS	International Convention for the Safety of Life at Sea
SPAMIs	Specially Protected Areas of Mediterranean Importance
UN	United Nations
UNDOALAS	United Nations Division of Ocean Affairs and Law of the Sea
UNEP	United Nations Environment Programme
UNFSA	United Nations Agreement on Highly Migratory Fish Stocks and Straddling Fish Stocks (UN Fish Stock Agreement)
UNGA	United Nations General Assembly
UNICPOLOS (ICP)	The United Nations Informative Consultative Process on the Law of the Sea
WCMC	World Conservation Monitoring Centre
WCPA	World Commission on Protected Areas
WHC	World Heritage Convention
WPC	World Parks Congress (Durban, South Africa, 8-17 September 2003)
WSSD	World Summit on Sustainable Development (Johannesburg, South Africa, September 2002)

### Annex 3. Endnotes

<sup>1</sup> The draft Ten-Year High Seas MPA Strategy has been prepared on behalf of the WCPA High Seas Working Group and made possible through the generous support of the J.M. Kaplan Fund. Please send your comments or requests for further information to Kristina Gjerde, High Seas Policy Advisor, IUCN Global Marine Programme, at [kgjerde@it.com.pl](mailto:kgjerde@it.com.pl)

<sup>2</sup> The goal of a global representative system of marine protected areas was adopted by 17<sup>th</sup> IUCN General Assembly in 1988 (Res. 17.38) and confirmed by the 19<sup>th</sup> General Assembly in 1994 (Res. 19.46). The primary goal is: “to provide for the protection, restoration, wise use, understanding and enjoyment of the marine heritage of the world in perpetuity through the creation of a global, representative system of marine protected areas and through the management in accordance with the principles of the World Conservation Strategy of human activities that use or affect the marine environment”. Resolution 2.20 adopted at the Amman World Conservation Congress in October 2000 specifically calls on IUCN, member governments and relevant organizations to explore an appropriate range of tools, including high seas MPAs, with the objective of implementing effective protection and sustainable use of biodiversity and ecosystem processes on the high seas. The Strategy incorporates recent global discussions calling for regional networks of coastal and marine protected areas that can address specific linkages within and between marine ecosystems and species life cycles.

<sup>3</sup> Young, TR., (2003). “Developing a Legal Strategy for High Seas Marine Protected Areas”, Legal Background Paper for the IUCN, WCPA and WWF High Seas Marine Protected Areas Workshop in *Towards a Strategy for High Seas Marine Protected Areas: Proceedings of the IUCN, WCPA and WWF Experts Workshop on High Seas Marine Protected Areas*, 15-17 January 2003, Malaga, Spain (Gjerde, K. and Breide, C. (eds.)) (IUCN, Gland, Switzerland) available at [www.iucn.orgs/theme/marine](http://www.iucn.orgs/theme/marine) (*Malaga Workshop Proceedings*).

<sup>4</sup> Kelleher, G. (ed.) (1999). *Guidelines for Marine Protected Areas*, IUCN, Gland, Switzerland and Cambridge, UK.

<sup>5</sup> “Seamount Biodiversity, Exploitation and Conservation: Conclusions from the Defying Ocean’s End Conference, Los Cabos, Mexico, May 29-June 3, 2003”, submitted to the United Nations Open-Ended Informal Consultative Process on Oceans and Law of the Sea, 2-6 June, 2003 (available online at [www.iucn.org/themes/marine](http://www.iucn.org/themes/marine)).

<sup>6</sup> Other ongoing activities include oil and gas exploration and exploitation within national jurisdiction (may affect high seas species and the water column above), bioprospecting, military activities, the laying of submarine cables and pipelines, and marine scientific research. Emerging high seas activities include deep seabed mining beyond national jurisdiction (e.g., polymetallic sulphides deposits, manganese nodules, cobalt crusts, gas hydrates), tourism, CO2 sequestration, and large-scale open ocean operations for mariculture or renewable energy production

<sup>7</sup> See, e.g. Ad Hoc Expert Group’s Report to SBSSTA on Marine And Coastal Protected Areas (UNCEP/SBSTTA/8/9/Add.1) and the cites therein for a full discussion of the benefits of MPAs and MPA networks.

<sup>8</sup> See Young, TR., 2003. *Developing a Legal Strategy for High Seas Marine Protected Areas*, Legal Background Paper *Malaga Workshop Proceedings* (Annex 4). See also Scovazzi, T (2003). “Marine Protected Areas on the High Seas: Some Legal and Policy Considerations”, paper prepared for the Governance Session on Protecting Marine Biodiversity Beyond National Jurisdiction, World Parks Congress, 11 September 2003, Durban, South Africa; and Warner, R., 2001. *Marine Protected Areas Beyond National Jurisdiction: Existing Legal Principles and Future International Law Framework*. Environment Australia, Canberra. [www.ea.gov.au/marine](http://www.ea.gov.au/marine)

<sup>9</sup> Kimball, L. (in press) “Governance of High Seas Biodiversity Conservation: A Framework for Identifying and Responding to Governance Gaps” in *Proceedings of the Workshop on the Governance of High Seas Biodiversity Conservation* (in press) (check: <http://www.ea.gov.au/coasts/international/highseas>)

<sup>10</sup> See Scovazzi, T (2003). “Marine Protected Areas on the High Seas: Some Legal and Policy Considerations”, paper prepared for the Governance Session on Protecting Marine Biodiversity Beyond National Jurisdiction, World Parks Congress, 11 September 2003, Durban, South Africa.

<sup>11</sup> The United Nations Informal Consultative Process is a specialized oceans forum that helps prepare the annual United Nations General Assembly oceans debate, and focuses on selected topics that would benefit from enhanced cooperation and coordination. In 2003 it focused on the protection of vulnerable marine ecosystems and safety of navigation. See *Report of the Work of the United Nations Open-Ended Informal Consultative Process on Oceans and the Law of the Sea, June 2003, A/58/95*, available online at [www.un.org/depts/los/consultative-process/consultative-process.htm](http://www.un.org/depts/los/consultative-process/consultative-process.htm).

---

<sup>12</sup> Reports of these workshops can be found online at [www.bfn.de/09/090203.htm](http://www.bfn.de/09/090203.htm) (Vilm); [www.iucn.themes/marine](http://www.iucn.themes/marine) (Malaga); [www.defyingoceansend.org](http://www.defyingoceansend.org) (Los Cabos) and <http://www.ea.gov.au/coasts/international/highseas/> (Cairns).

<sup>13</sup> See Scovazzi, T (2003). "Marine Protected Areas on the High Seas: Some Legal and Policy Considerations", paper prepared for the Governance Session on Protecting Marine Biodiversity Beyond National Jurisdiction, World Parks Congress, 11 September 2003, Durban, South Africa.

<sup>14</sup> See, e.g. *The Regional Role in Developing Marine Protected Area Networks*, IUCN, 2003, paper prepared for Governance Session on Protecting Marine Biodiversity Beyond National Jurisdiction, World Parks Congress, 11 September 2003, Durban, South Africa.

<sup>15</sup> See also Scovazzi, T. "Marine Protected Areas on the High Seas: Some Legal and Policy Considerations", paper prepared for the Governance Session on Protecting Marine Biodiversity Beyond National Jurisdiction, World Parks Congress, 11 September 2003, Durban, South Africa. For additional information on legal and institutional forums and existing gaps and opportunities for improving governance of high seas biodiversity conservation, see, Kimball, L. (in press) "Governance of High Seas Biodiversity Conservation: A Framework for Identifying and Responding to Governance Gaps" and Ascencio, A. and M. Bliss (in press) "Conservation the biodiversity of the high seas and deep oceans: Institutional gaps in the international system" in *Proceedings of the Workshop on the Governance of High Seas Biodiversity Conservation* (in press) (check: <http://www.ea.gov.au/coasts/international/highseas/>)

<sup>16</sup> For a list of "potential areas of search" for priority pilot or demonstration HSMPAs, see *Malaga Workshop Proceedings*, pages 20-21.

<sup>17</sup> See e.g. Worm, B, Lotze, H.K. and R.A. Myers ((2003). "Predator diversity hotspots in the blue ocean". PNAS xxx.

<sup>18</sup> Based on: Kimball, L., (in press) "Governance of High Seas Biodiversity Conservation: A Framework for Identifying and Responding to Governance Gaps" in *Cairns Workshop Proceedings*.