

TEN-YEAR HIGH SEAS MARINE PROTECTED AREA STRATEGY:

A ten-year strategy to promote the development of a global representative system of high seas marine protected area networks

Summary Version

As agreed by Marine Theme Participants at the 5th IUCN World Parks Congress, Durban, South Africa (8–17 September 2003)



TEN-YEAR HIGH SEAS MARINE PROTECTED AREA STRATEGY:

**A ten-year strategy to promote
the development of a global representative system of
high seas marine protected area networks**

Summary Version

**As agreed by Marine Theme Participants at the
Vth IUCN World Parks Congress,
Durban, South Africa (8 -17 September 2003)**

The designation of geographical entities in this book, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IUCN, WWF or WCPA concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The views expressed in this publication do not necessarily reflect those of IUCN, WWF or WCPA.

Published by: IUCN, Gland, Switzerland in collaboration with WWF International



Copyright: © 2004 International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is prohibited without prior written permission of the copyright holder.

Citation: IUCN (2004) TEN-YEAR HIGH SEAS MARINE PROTECTED AREA STRATEGY: A ten-year strategy to promote the development of a global representative system of high seas marine protected area networks (Summary Version), as agreed by Marine Theme Participants at the Vth IUCN World Parks Congress, Durban, South Africa (8–17 September 2003)
IUCN, Gland, Switzerland.

Cover photography: © JA Moya. Grateful thanks are given to JA Moya for permission to use these photographs.

Available from:	IUCN – The World Conservation Union Global Marine Programme Rue Mauverney 28 1196 Gland, Switzerland Phone: ++41 (22) 999-0217 Fax: ++41 (22) 999-0025 marine@iucn.org www.panda.org/endangeredseas/ www.iucn.org/themes/marine	WWF International Avenue du Mont-Blanc 1196 Gland Switzerland Phone: +41 22 364 9028 Fax: +41 22 364 0526 www.panda.org/endangeredseas/
-----------------	---	--

A catalogue of IUCN publications is also available.

Table of Contents

Background	1
Definition of terms	2
Core components and key strategic steps	3
Invitation	8
Tool Box 1	9
Opportunities to support high seas biodiversity conservation through MPAs using international and regional forums and agreements	
Tool Box 2	12
Informal mechanisms for designating HSMPAs	
Tool Box 3	13
Possible Preliminary Criteria for HSMPAs	
Tool Box 4	14
Research relevant to development and management of a global representative system of high sea marine protected area networks	
Explanatory notes	15
Glossary of acronyms	17

Background

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 unique species; however, much of the oceans remain poorly explored or understood.

Despite our lack of knowledge, we do know that the biodiversity and productivity of the high seas--the deep seabed and water column beyond national jurisdiction--are under imminent threat primarily from fishing activities (deep sea trawling, long-lining, etc.). The common assumption that living marine resources are inexhaustible has often been proven incorrect.

Sector-based, single stock and short-term management efforts have failed to protect target species, bycatch species and fragile seabed habitats. Achieving precautionary, integrated and ecosystem-based management is an essential goal.

This *Ten-Year High Seas Marine Protected Area Strategy* (Ten-Year HSMPA Strategy) provides a framework 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 area 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, species protection, equitable resource use and sustainable exploitation through integrated area-based management.

A representative system of MPAs is essential to protect habitats or ecosystems that are unique, special, fragile or representative on a regional biogeographic basis, including benthic habitats such as shelf edges, cold-water coral reefs, canyons, seamounts, hydrothermal vents, cold seeps and abyssal plains and open ocean features such as eddies, fronts and zones of upwelling.

Similarly, networks of MPAs are essential to link marine ecosystems and better protect species and habitats that depend on processes outside a protected area. An ecologically coherent network of MPAs is crucial for sustaining populations of many animals and plants and particularly 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 and natural catastrophes inside and outside these areas do not result in irreversible biodiversity loss.

While more is required to create a sustainable framework covering the world's oceans, a system of HSMPA networks is thus a key mechanism for 1) securing protection from immediate threats; 2) enabling coordinated decision-making involving a range of stakeholders (e.g., fishing, maritime navigation and commercial shipping, marine conservation, seabed mining, etc.); and 3) developing comprehensive, integrated and ecosystem-based oceans management.

The Ten-Year HSMPA Strategy identifies seven core components to focus action over the next ten years and elaborates strategic steps necessary to implement these components. A series of "Tool Boxes" indicate key international and regional fora for promoting HSMPAs, mechanisms for HSMPA establishment, and priorities for research. It was introduced for discussion at the 5th World Parks Congress, Durban, South Africa (8-17 September 2003). This Summary Version contains the seven core components endorsed by Marine Theme Participants in World Parks Congress Recommendation 5.23, and as an "Emerging Issue", supplemented by key strategy steps identified by marine experts at the World Parks Congress.

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.¹ 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"¹. 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.

Core components and key strategic steps

- I. ENDORSE AND PROMOTE the World Summit on Sustainable Development (WSSD) Joint Plan of Implementation together with 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, consistent with international law; including through:
 - Identifying and dedicating financial and human resources to raise awareness, educate, conduct research and build capacity;
 - Establishing cost-effective mechanisms and providing venues to educate and raise awareness among stakeholders;
 - 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; and
 - Promoting the conservation of biological diversity, productivity and species on the high seas and the value of a global representative system of HSMPA networks as tools for this purpose at relevant international organizations and meetings.

- II. CALL on the United Nations General Assembly (UNGA) to consider an immediate moratorium on deep sea trawling in high seas areas with seamounts and cold-water coral reef communities until legally binding international conservation measures are in place¹; including through:
 - Developing global campaigns to inform decision makers and the general public about the value and importance of seamounts and cold water coral reefs;
 - Encouraging scientists and fisheries managers to synthesize current information on seamounts and cold water corals and the impacts of associated fisheries in a way meaningful to decision makers and the general public; and
 - Promoting immediate dialogue with the fishing and seafood industries on mechanisms for, and benefits of, protection of these systems, communities and habitats.

- III. UTILIZE available mechanisms and authorities to establish and effectively manage by 2008 at least five scientifically significant and globally representative HSMPAs consistent with international law and based on sound science to enhance the conservation of marine biodiversity, species, productivity and ecosystems, including through:
- Developing explicit proposals for pilot HSMPAs while plans for a representative system of HSMPA networks are under development.
 - Using known opportunities under regional and global agreements to establish HSMPAs through binding and nonbinding agreements; and
 - Encouraging broad-based support and endorsement of HSMPAs by any states not party to such agreement and regional and global bodies.
- IV ESTABLISH a global system of effectively managed, representative networks of marine protected areas; including through:
- 1) Taking immediate and urgent action to protect the biodiversity and productivity of seamounts, cold-water coral communities and other vulnerable high seas features and ecosystems and especially to safeguard species and habitats at immediate risk of irrevocable damage or loss; including through:
- Producing an expedited report on seamount and cold water coral habitats, their biological diversity and associated fisheries as well as options for international action;
 - Identifying within two years priority candidate sites for protection through MPAs;
 - Encouraging full and effective application of the principles and provisions of the UN Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stocks Agreement) to all high seas (including deep ocean) fishing activities, together with development of tools such as networks of strictly protected/managed areas to ensure long-term protection, conservation and sustainable use of marine biodiversity; and
 - Promoting, developing and implementing mechanisms to protect vulnerable high seas (including deep ocean) features, ecosystems, habitats and species from human activities at sea, such as fisheries, shipping, dumping of hazardous substances, harmful prospecting, military operations and deep-seabed mining.
- 2) Taking immediate and urgent action to protect the biodiversity and productivity dependent on large-scale, persistent oceanographic features, such as currents and frontal systems, known to support marine life and contain critical habitat for species such as those listed in the IUCN Red List and the appendices of the Convention on International Trade in Endangered Species (CITES), the Convention on Migratory Species (CMS) and related Agreements; including through:

- Producing a review of such oceanographic features and related biodiversity hotspots to identify priority candidate sites for protection through MPAs; and
 - Promoting, developing and implementing mechanisms to enable urgent action to protect threatened marine species, especially highly migratory species, and their habitats from human activities at sea, such as fisheries, shipping, transportation, dumping of hazardous substances, harmful prospecting, and military operations.
- 3) Developing mechanisms to enable urgent and long-lasting protection of non-target species and habitats threatened by high seas fishing activities, particularly by ensuring that measures to mitigate by-catch, incidental catch and habitat/ecosystem damage are developed for and implemented in all relevant fisheries; including through:
- Supporting and promoting all national and international activities to eliminate Illegal, Unregulated and Unreported (IUU) fishing, inter alia, by outlawing flags of convenience;
 - Assisting in identifying those fisheries whose interactions with non-target species of invertebrates, fish, sharks, turtles, marine mammals and seabirds are causing, or have potential to cause, unnecessary and/or unsustainable levels of mortality, especially of threatened species;
 - Promoting the development and use of new measures, equipment and techniques to mitigate and/or eliminate the by-catch of invertebrates, fish, sharks, turtles, marine mammals and seabirds, especially through dialogue and cooperation with fisher- and industry-based approaches and solutions; and
 - Promoting the mandatory and regulated use of best practice measures, equipment and techniques applied on a fishery-specific basis, to mitigate and/or eliminate the by-catch of invertebrates, fish, sharks, turtles, marine mammals and seabirds, especially through dialogue and cooperation with fisher- and industry-based approaches and solutions.

V. INITIATE action to identify marine ecosystems, habitats, areas, processes and biodiversity hotspots for 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 international, regional and national meetings of key stakeholders, researchers and data holders to identify marine ecosystems, habitats, areas, processes and biodiversity hotspots for priority attention and develop criteria and guidelines for the identification, establishment, management and enforcement of HSMPAs;
- Convening multidisciplinary expert workshops and/or groups to analyse available information to assess potential HSMPAs, to develop a provisional representative system of MPA networks, including appropriate criteria and guidelines, and determine future research needs and priorities within a three-year time frame;

- Promoting adoption of the criteria and guidelines at relevant meetings;
- Developing and making available scientific, legal, socio-economic and policy research relevant to the development of a global representative system of MPA networks and the protection and sustainable use of biodiversity, species and ecosystem processes within the high seas; and
- Convening meetings of groups of key stakeholders including donors, finance institutions and the private sector to discuss options and develop mechanisms for facilitating sustainable financing.

VI. COOPERATE to develop and promote a global framework or approach, building on the United Nations Convention on the Law of the Sea (UNCLOS), the Convention on Biological Diversity (CBD), the UN Fish Stocks Agreement, CMS and other relevant agreements, to facilitate the creation of a global representative system of high seas MPA networks consistent with international law, to 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 sound governance as defined in the UN principles; including through:

- Requesting those countries which have yet to sign or ratify UNCLOS, and other relevant international agreements (e.g. Kyoto Protocol, Convention on Biological Diversity, UN Fish Stocks Agreement) to immediately ratify and implement these agreements;
- Promoting work pursuant to the CBD, CMS, and UNCLOS, in cooperation with relevant international and regional bodies, to identify appropriate mechanisms for the establishment and effective management of a representative system of HSMPA networks, 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 HSMPA networks;
- Promoting legally binding commitments for all Regional Fisheries Management Organisations (RFMOs) in respect of implementing sound governance, comprehensive data acquisition and dissemination and best practice management operations including all appropriate elements of current and relevant United Nations Food and Agriculture Organisation (FAO) Plans of Action, as key contributions towards the implementation of appropriate conservation and management measures within potential MPAs;
- Promoting cooperation within and between regional seas conventions and other regional bodies (including RFMOs) 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; and

- 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.

VII. JOIN TOGETHER through formal or informal networks to promote the development of a global representative system of high seas MPA networks within their own governments and organizations and in broader international forums to achieve protection of the biological diversity, productivity and sustainable use of the high seas, with the global representative system of MPA networks being a principal tool, reporting back on progress at the International Marine Protected Area Congress (IMPAC1) in Geelong, Australia in 2005 as well as at other relevant forums.

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, species, productivity and ecological processes.

Invitation

Those interested in learning more about high seas biodiversity and coordinating efforts to achieve its protection and sustainable use are invited to contact Kristina Gjerde, IUCN High Seas Policy Advisor at kgjerde@it.com.pl. Additional information is available at iucn.org/themes/marine.

WCPA High Seas Working Group Executive Committee

Charlotte Breide, WWF International, Solicitor, Senior Legal Advisor, Endangered Seas Programme

Simon Cripps, WWF International, Director, Endangered Seas Programme

Kristina Gjerde, IUCN, High Seas Policy Advisor, Global Marine Programme

Graeme Kelleher, WCPA Marine, Senior Advisor, and Chair WCPA High Seas Working Group

Carl Gustaf Lundin, IUCN, Head Global Marine Programme

Alex Rogers, WCPA High Seas Working Group Scientific Advisor

Tomme Rosanne Young, IUCN Environmental Law Center, Senior Legal Officer

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 By-catch in Long-line 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)². 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 forums³ 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/maine (Malaga Workshop Proceedings)⁴.

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,
 - ✓ Bio-prospectors,
 - ✓ 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

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

Explanatory Notes

¹ Endorsed by Marine Theme Participants at the World Parks Congress as being of significant importance meriting recognition as an emerging issue.

² 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.

³ 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.

⁴ 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>)

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)