THE LEGAL FRAMEWORK FOR MPAS AND SUCCESSES AND FAILURES IN THEIR INCORPORATION INTO NATIONAL LEGISLATION

by

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Executive Summary

The development and implementation of protected areas legislation applicable to marine and aquatic areas has been strongly promoted in recent years as a potential tool for protection of marine resources and the sustainability of their development.

Over the centuries, however, uses of the oceans have dramatically increased, as has the nature of those uses and their impact on the marine environment. These factors have engendered a strong activism in favour of the creation of marine protected areas (MPAs), including some calls from some sectors for high levels of immediate protection throughout the world's oceans. The scientific, community, logistical and financial elements of successful regulation are often not well understood. These are significant variations from the factors underlying the creation of terrestrial or freshwater protected areas, suggesting at minimum the need to separately consider MPA options and experiences, rather than simply relying on the approaches used for terrestrial protected areas (PAs).

The terms of reference for this paper call for an elucidation of the legal framework applicable to MPAs, and providing examples of countries' successes and failures in adopting and applying legal protections. Its secondary objective is to provide a basis for initial discussions in the Food and Agriculture Organization of the United Nation's (FAO) process in preparation of draft guidelines on the design, implementation and testing of MPAs.

The author has been instructed to focus only on the legal framework, and not to overlap with other information papers, including those on "*Best practices in governance and enforcement of MPAs*" and "*Social, economic and institutional considerations in the design, implementation and success of MPAs*." Given that it is functionally and analytically impossible to discuss any legal framework or consider its adequacy and coverage without consideration of socio-economic, institutional, governance and enforcement factors, the following discussion should not be considered a complete legal analysis of the MPA legal framework, but rather an elucidation of existing documents and experiences, their legal sufficiency and their potential impact.

After a discussion focusing on (i) terminology; and (ii) a general summary of the legal processes by which protected areas and relevant legal frameworks are adopted, this report describes

(a) the overall international framework of binding and non-binding laws and instruments relevant to marine protected areas, and their role in sustainable use of marine resources, considering:

- the nature of each individual instrument's relevance to marine protected areas;
- a collective consideration of "gaps" in the overall framework; and

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[1] The views expressed in this paper are solely those of the author, Tomme Rosanne Young, Consultant, International and National Marine Law and Policy, Tomme.Young@gmail.com.

- currently recognised inconsistencies and "controversies" within the framework.

(b) brief exposition of experiences relating to the development of legislation to implement MPA objectives at national, bilateral and multilateral levels. This discussion will include:

- national implementation through various kinds of legislation;
- bilateral and regional agreements that develop multilaterally-recognised MPAs; and
- geographic-based conservation systems undertaken through RFMOs.

It will identify issues and controversies for each body of information, and will be taken from a range of cases involving developing and developed countries from different regions of the world.

(c) an extraction of useful legal options that have been used or proposed for addressing MPA development, identifying the essential components of such options and any difficulties encountered with the legal options used and how these difficulties could be avoided. This discussion will be focused through the objectives of MPA creation, and will consider:

- effective legal options for achieving those objectives; and
- the most important areas in which guidance can provide assistance to the legal work involved in MPA development and implementation.

(d) lessons and recommendations for the process of developing the Proposed Draft Guidelines, based on case examples and research into the practical impacts of the legal/legislative processes described above, including:

- "guidance on best practices," based on analysis of legal options described under (3) above, and their use and implementation of MPAs and
- "warning of potential problems and hazards" based on difficulties encountered with the legal options (and other legislative experience) and the author's suggestions about how these difficulties could be avoided;
- the usefulness and essential features of processes for developing effective legislation or regulations for MPAs; and
- an examination of the "causes of success and failure."

(e) conclusions, specifically providing suggestions regarding topics to be included in a technical guideline, as well as a starting point for discussion of some of these points.

In presenting these issues, this report assumes a general definition of MPA which includes both formally recognised 'protected areas' and other kinds of 'geo-located protective measures' in oceans. It notes that a working definition of MPA could provide a basis for focusing the scope and research of the Guideline process, and that by the time the Guideline is completed, it will be important to have considered the definition in a more detailed way.

The MPA issue faces very different legal and practical challenges depending on the location of the proposed MPA – which of the legally designated ocean zones (territorial sea, EEZ, OCS, high seas and 'the Area') is involved. Similarly, IUCN's Protected Area categories have proven to be very useful in legal and legislative work (and technical guidelines) regarding terrestrial protected areas, and may provide a framework for MPAs as well, although they may require adaptation to the marine biome.

With regard to the international framework, the report describes numerous international and regional instruments relevant to MPAs. However, few of these documents actually create MPAs, and at present, there is little guidance within these instruments regarding how MPAs could be created, standards for their creation, and other factors.

The international framework's impact, however, differs in its relevance to MPAs within national control (terrestrial sea, EEZ and OCS), as compared with the high-seas and The Area, which outside of national control:

- *Within national seas*, the international framework does not *require* the creation of MPAs, although it does (directly or indirectly) include MPAs and geo-located measures among the mechanisms that can be used to achieve the countries' commitments regarding conservation, preservation and sustainable use of living resources and/or biological diversity. In this connection, the international framework provides many bases of legal support to each country's development of MPAs, and their recognition and acceptance/compliance by other countries.
- *In the high-seas and the Area,* international forums have direct oversight and control. This means that the creation of MPAs in these areas will have to be undertaken through international agreement. Significant international attention is currently focused on these issues, particularly on the possibility of creating one or more international instruments clarifying the processes and standards for international designation of PAs in the high seas.

At the national level, much of the current MPA work, particularly in developing countries is focused in territorial seas. Increasingly, however, countries are recognising the importance of applying a rationalised set of geo-located protections to their EEZs. As in all legislative development, the key elements of national MPA laws of all types include institutional development and mandate, clarification of relevant procedures (designation of MPAs, licensing and other decision-making, etc.), ensuring that all relevant civil protections and human rights are respected, clearly enunciating the requirements and restrictions imposed by an individual MPA or generally relevant to all MPAs, adopting effective enforcement and administrative measures, and providing a legal basis to enable MPA administration to meet its financial and logistical needs.

Legislative development is not a 'cut-and-dried' process, but rather depends on situational (social, political, institutional, etc.) factors and objectives. In addition, however, it is essential to recognise that the application of these legal measures will be different in oceans than on land, and also will be subject to different practical requirements depending on how far the MPA is from the country's ocean baseline and what capacity the country has to regulate, oversee, implement and enforce legislation in deeper, more remote ocean areas.

1. INTRODUCTION

The development and implementation of protected areas legislation applicable to marine and aquatic areas has been strongly promoted in recent years as a potential tool for the conservation and sustainable use of marine resources including halting the decline in species populations (including the collapse of fisheries) and destruction of critical habitats. Biodiversity objectives would further focus on the desire to ensure that representative selections of marine ecosystems are conserved, and (known and unknown) species extinctions. In both cases, MPAs are intended as an element of the underlying concept of the sustainable use and development of the natural resources of the seas.

Conservation and sustainable use of biodiversity and natural resources involves a combination of elements, including political will, social/economic acceptance, and enforcement capacity, as well as legislation and institutional development. Without the first three elements, the adoption of legislation will be relatively ineffective to achieve conservation and sustainable use objectives, no matter how strong and binding the legal provisions are. Moreover, where the political, social, and practical factors are present, implementing/supporting legislation must be crafted in a way that addresses these mandates specifically, if it is to be an effective and useful component of the overall process.

This paper, then, cannot provide a template or recommendation for an MPA legislative regime, but provides only one element in that creative process – a description of the legal/legislative tools

available and experiences to date. It will provide some ideas about how legislation can be developed to address particular political/social objectives, respond to particular implementation/enforcement problems, and provide a mechanism for integrating a variety of rights and policies. This paper does not address those connections, however, as they are covered in other resource papers provided for the workshop.

One caveat should be given at this point: This research focuses significantly on recent examples. Governmental options regarding marine conservation have been evolving quite intensively over recent years, reflecting newer views on both the objectives and methods to be used. However, like all legislation, MPA laws often require many years after adoption, before necessary legislation and institutions are in place, and perhaps longer before the framework is fully implemented. Consequently, the author's analysis with regard to best practices, warning signs, and causes of success or failure, is based on her experience.

1.1 Organisation and objectives of this report

The terms of reference for this paper call for an elucidation of the legal framework applicable to marine protected areas (MPAs), and providing examples of countries' successes and failures in adopting and applying legal protections. The author has been instructed to focus only on the legal framework, and not cover issues assigned to other information papers, including those on "Best practices in governance and enforcement of MPAs;" and "Social, economic and institutional considerations in the design, implementation and success of MPAs," neither of which are available to the author at the time of the final revision of this paper. This discussion should therefore not be considered a complete legal analysis (which must consider practicalities and objectives) of the MPA legal framework, but rather an elucidation of existing documents and experiences, their legal sufficiency and their potential impact.[2]

At the same time, recognising that the audience of this paper is not primarily legal experts, it will not discuss or analyse the underlying legal issues themselves, but will focus on *describing* the legal tools, experiences and needs. Its goal is to provide succinct information into the FAO's process in preparation of draft guidelines on the design, implementation and testing of MPAs (the "proposed Draft Guidelines.") Given the potential importance of MPAs as fishery management tools, this paper focuses to some extent on that role, while addressing the legal aspects relevant to the entire range of objectives to be served by the creation of MPAs.

After a discussion focusing on (i) terminology; and (ii) a general summary of the legal processes by which protected areas and relevant legal frameworks are adopted, this report describes

- the overall international framework of binding and non-binding laws and instruments relevant to marine protected areas, and their role in sustainable use of marine resources.
- brief exposition of experiences relating to the development of legislation to implement MPA objectives at national, bilateral and multilateral levels, identifying issues and controversies for each body of information, from a range of cases involving developing and developed countries from different regions of the world.
- an extraction of useful legal options that have been used or proposed for addressing MPA development, identifying the essential components of such options and any difficulties encountered with the legal options used and how these difficulties could be avoided.

[2] Given that the author cannot avoid being guided at some level by her experiences in national, regional and global framework development, it is possible that socio-economic, institutional, governance, and enforcement factors impact her statements in this paper. In particular cases she will mention such issues, presuming that they will be covered in other papers.

- Lessons, recommendations, possible "best practices" and "warning of potential problems and hazards" for the process of developing the Proposed Draft Guidelines, based on case examples and research into the practical impacts of the legal/legislative processes described above.

Each of the above discussion will include suggestions regarding topics to be included in a technical guideline, as well as a starting point for discussion of some of these points.

1.2 Basic terminology and report coverage

Legal systems depend on the existence of a clear understanding of the terms being used. In some instances, terms are generally understood to have a particular meaning, that is sufficient to address the particular issues and objectives addressed in the framework. In other cases, an existing instrument may sometimes be used to provide a uniform understanding of the terms of the law, which is appropriate to cover those issues and objectives. Where neither of these exists, it may be necessary to specifically adopt agreed definitions or interpretations, to ensure that the legal framework will have a consistent and usable meaning. Often such specific definitions are adopted on an instrument-by-instrument basis, and later reconciled, whether by agreement or by comparison.

Although a complete set of relevant terminology has not been agreed, two widely accepted existing terminology systems – the zonal designations in the UN Convention on Law of the Sea, and the IUCN Categories – may provide a basis for development of agreed terms and concepts.

1.2.1 DELIMITATION OF OCEAN ZONES

The international regime of oceans, centring around the UN Convention on the Law of the Sea (UNCLOS)[3], is based on a zonation of the ocean and the seafloor. There are many zone designations, the major elements of which are described below (all of which are based on determination of a 'national baseline' (or 'archipelagic baseline' in relevant situations) through a specified process):

a. *The territorial sea:* Extending up to 12 miles past the national baseline (a line generally determined based on the low water line as marked on charts of shoreline areas within national territory[4]), as well as any internal waters and archipelagic waters (where relevant), each country's territorial sea is considered as any other part of its sovereign territory;[5]

b. *The contiguous zone:* In a 12 mile 'zone adjacent to the territorial sea', the coastal state may exercise limited powers and conferred under UNCLOS, including the right to "exercise the control necessary to… punish infringements… committed within its territory or territorial sea";[6]

c. *The exclusive economic zone (EEZ):* the area extending from the outer boundary of a country's territorial sea to a maximum of 200 miles from the national baseline. The specific delimitation of its EEZ must be determined by the Coastal State.[7] Within these confines, the State has particular rights and jurisdiction "governed by the relevant provisions of this Convention"[8];

d. *Special sub-categories for delimitation*: UNCLOS also identifies a few other ocean areas, such as "straits used for international navigation";[9] "archipelagic waters" and "internal waters";[10]

[3] UNCLOS's functional/operational provisions are discussed in Part III of this report.
[4] UNCLOS Arts. 7 and 47.
[5] UNCLOS Art. 2.
[6] UNCLOS, Art. 33.
[7] States may (and some have opted to) designate EEZs smaller than authorized under UNCLOS, or choose not to designate any. Recently some States and commentators have interpreted Part V to enable a similar approach regarding the substantive content of the EEZ declaration, i.e., in declaring its rights over an EEZ, a Coastal State may choose to accept only a part of the rights and jurisdiction authorized under Part V.
[8] UNCLOS Art. 55.
[9] UNCLOS, Arts. 34-45
[10] UNCLOS, Arts. 46-54

"enclosed or semi-enclosed seas",[11] which are primarily included for purposes of delimitation and for clarification of rights of innocent passage. Although these designations sometimes give rise to particular glosses on the application of various provisions, they are included within the general concepts of territorial sea, contiguous zone, or EEZ.

e. *The outer continental shelf (OCS):* the seabed extending from the territorial sea to a distance between 200 and 350 nautical miles from baseline. The exact configuration is carefully delimited in UNCLOS, based on a number of factors, including the submerged geology of the continental margin.[12] A country's rights in its OCS focus on the exploitation of mineral and non-living resources as well as the sedentary living resources on or in the seabed;[13]

f. *The 'high seas'*: UNCLOS uses this term to include everything that is not within any countries exclusive economic zone, territorial sea, internal waters, or archipelagic waters.[14] As such, it may be narrower than the concept that is typically used in other agreements – "areas beyond national jurisdiction" (discussed below);[15] and

g. *The seafloor beyond national OCSs (known in international policy circles, rather opaquely, as "The Area"):* The "Area" is defined in UNCLOS to mean "the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction," which is generally thought to include all areas outside of national OCSs (which exists even if not formally declared.)[16]

International objectives with regard to conservation, and legal mechanisms for their implementation will necessarily be different, depending on which of these primary zones is involved.

1.2.2 PROTECTED AREAS TERMINOLOGY

A second useful framework is the IUCN Protected Area categories (the 'IUCN Categories') are set forth in the 1994 *Guidelines for Protected Area Management Categories* published by IUCN's World Commission on Protected Areas (WCPA). Given its objectives, this paper does not attempt detailed or comprehensive treatment of the categories, but offers a summary supplemented by Annex 1.

The categories were originally intended as a tool for enabling more effective implementation of protected area laws, and management of the protected areas themselves. They have since been recognised as an important mechanism for the development of international and trans-boundary collaboration, and the sharing of information. As a consequence, they have recently been utilised by UNEP and the World Conservation Monitoring Centre as the basis for their work in developing and analysing an international list of protected areas. They have also been recognised in work under several international agreements, including the CBD, World Heritage Convention, and Ramsar Convention. As further discussed below, there have recently been calls for further evolution of the IUCN Categories to enable their application to protected areas the marine biome.

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[11] UNCLOS, Arts. 123-124

[12] If the edge of the continental margin (as technically defined in UNCLOS) is less than 200 nm from baseline, then the OCS can extend 200 nm. If the actual continental margin extends more than 350 nm from baseline, the country's OCS (the area over which it will have undisputed dispository rights) will extend only to 350 nm. If the continental margin less than 350 nm, but more than 200 nm from baseline, the country's OCS will follow the continental margin. UNCLOS Art. 76.

[13] Specifically, "*Mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil."* UNCLOS Art. 77. The country's powers include the construction of pipelines, artificial islands, etc. Rights in the OCS do not confer on the coastal state any power or right with regard to the waters or airspace above the OCS

[14] UNCLOS Art. 86. As noted below, this designation includes waters above the OCSs of Coastal States.

[15] The regime for the high seas (rather than of the seafloor) addresses the issue (and relatively unbounded rights of each country) of laying submerged cables. *Id*.

[16] Art. 2 and Part XI. Article 77.1 specifically states that the country's OCS rights apply irrespective of the existence or lack of a national declaration. However, each state is called to map its OCS on or before 2009 (pursuant to Art. 76.4, extended from 1999) If mapping does not occur, however, this does not affect the country's right to the OCS; however, if any legal question arises, the tribunal deciding the issue will determine the 'map' of the area (for purposes of such decision), presumably based on the standards set out in Article 76.

The seven IUCN Categories specifically recognise that a protected area may be created for only one particular objective, although many multiple objectives:

Category I.A ***Strict Nature Reserve/Wilderness Area (Science/Research)****: PAs managed for scientific and research purposes;*

Category I.B ***Strict Nature Reserve/Wilderness Area (Protection)****: PAs managed for wilderness protection purposes;*

Category II ***National Park****: PAs managed for ecosystem protection and recreation;*

Category III ***Natural Monument****: PAs managed for conservation of specific natural features;*

Category IV ***Habitat/Species Management Area****: PAs managed for species/habitat/ecosystem conservation through management intervention;*

Category V ***Protected Landscape/Seascape****: PAs managed for landscape/seascape protection and recreation; and*

Category VI ***Managed Resource Area****: PAs managed for sustainable use of natural ecosystems.*

Appendix 1 to this Report provides a full description of each category: Including its definition, management objectives, selection guidance, and organisational responsibility.

1.2.3 DEFINING MPAS

Recent attempts to specifically define "marine protected area" for purposes of global discussions have not yet been completed. Existing definitions have been challenged in a variety of ways. One of the obstacles to this effort has been the goal of having a single definition, applicable to all areas from intertidal to the high seas, for all purposes.

This paper does not attempt to develop a definition, but presents the two primary definitions considered in recent international negotiations, and identifies some issues for discussion.

Existing definitions

Two starting points for a working definition of MPA have been IUCN (the World Commission on Protected Areas, and the 5th World Parks Congress) and the Convention on Biological Diversity (in the context of its development of its Programme of Work on Marine Biodiversity. Although neither is formally accepted in international processes, both definitions have been heavily negotiated, and represent a useful starting point.

The existing IUCN definition of MPA has not been fully utilised in the IUCN category system. It takes a relatively simple approach:

> *"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."*[17]

[17] This definition was adopted by the IUCN General Assembly in 1988, and reaffirmed and amended in 1994. IUCN General Assembly Resolutions 17.38 (1988) and 19.46 (1994). Since its adoption, a variety of aspects of this definition have been challenged, so that at least one alternative definitions have been proposed, replacing the phrase, "*any area of intertidal or subtidal terrain*" with "*any area* ***which incorporates*** *subtidal terrain*". Proposed at the 5th IUCN World Parks Congress in 2003, see "Emerging Issues" – a declaration of WPA-5. The objective of this amendment relates to ensuring that UNEP/WCMC's statistical evaluation of the number of MPAs would not be inappropriately skewed by including coastland PAs which include intertidal, but no fully submerged, terrain.

The IUCN Category System also suggests some elements of a definition. IUCN's World Commission on Protected Areas (WCPA) – the Commission charged with the development and refinement of the IUCN Category system – defines a "protected area" as "an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means."

Work under the CBD has provided a more detailed and somewhat broader definition in connection with its Programme of Work on Marine Biodiversity, which reflects some of the uniqueness of MPAs:

> *"any defined area within ... the marine environment, together with its overlaying waters and associated flora, fauna and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings."*[18]

This latter definition has the additional merit of having been discussed and negotiated by an intergovernmental forum consisting of representatives of sovereign nations. It is notable, however, that the CBD Parties could not agree on this definition as a part of the Programme of Work, ultimately relegating it to a footnote so that the significant efforts of their negotiations would not be lost.

Issues to be considered in adopting a definition

At the opening of the Guideline-development process, it may not be necessary to engage in a detailed word-by-word negotiation of a "legal" definition, however, some general agreement as to the scope of the concept will help in the design of the guidelines and in focusing the work. At this point, it may be useful to adopt an interim definition, and consider some issues that will be relevant to the coverage of the proposed Draft Guidelines, and the eventual negotiation of the final definition.

The differences between the IUCN and CBD definitions cited above, for example, may suggest some possible concerns. For example,

- The IUCN definition is defined by its submerged "terrain" where the CBD definition may apply to *"any defined area within ... the marine environment,"* thereby including fishery-related zones that do not specifically include the sea-floor.[19]
- The CBD definition also contains stronger language recognising varying levels of protection, noting that an area that *"enjoys a higher level of protection than its surroundings"* can be considered an MPA, even where its operation is in the form of resource management, rather than specific 'protection' of any or all components of the area.

A number of other questions, which are more fully described in other sections of this paper, may also be relevant to the definition process. For example,

- *Protecting only a particular depth or other volume*. New proposals, particularly in areas beyond territorial seas, are increasingly limited to particular depths (e.g., "the ocean depths below 1000 metres in depth," or "the surface and first XX metres of depth in a particular area", or "all oceans within XX metres of any face or incline of a particular seamount," etc.);[20]

- *The delimitation between 'marine' and freshwater:* Many countries must engage in a significant coverage question relating to whether freshwater and brackish-water areas are considered MPAs, and if not, what is the division between them;

- *Recognising the legal difference among ocean zones.* There are very significant legal and practical differences among MPAs in territorial waters, MPAs in EEZs, and those in areas beyond the EEZs, as well as differences where a protection applies to submerged terrain (seabed beneath territorial seas, OCS and 'the Area.') In particular, it is currently very difficult to

[18] CBD Conference of the Parties, Decision VII/5, at note 11.

[19] Noting that there are various types of submerged lands, this point may be particularly important, where, for example, the area in question involves waters considered to be in the 'high seas' but submerged terrain that is a part of a country's OCS.

[20] Only the first of these examples have been formally adopted by any document reviewed by the author (discussed in III.B.3, below). However, the author has participated in negotiations and discussions proposing or considering all of the above options. Both the CBD and IUCN definitions speak in two dimensional terms ("any area") suggesting that an MPA should protect it's the entire column within the designated coordinates from substrate to overlying air space.

determine what might constitute *"legislation or other effective means"* with regard to the high seas and the Area. Hence, it may be useful to consider the possibility of varying the definition for each maritime zone.

- *Nature of protection:* In a number of instances, protection of species of limited biogeographic ranges may often operate to create a *de facto* protected area – a practice that might be utilised in the context of an MPA.[21] Similarly, particularly where full biological data is not available, the range of alternate approaches to formal legislative protection may require fuller examination.

- *Competence/Capacity for Implementation and Enforcement:* This issue, addressed in another paper, is essential to successful MPA legislation and affects both definition and legal issues.

- *Socio-economic and political support, custom and practice:* This issue, addressed in another paper, is also critical to successful MPA legislation, and may affect definition and law.

Obviously, the foregoing are not the only definition questions that should be considered, but may provide a starting point for discussions. A related question – the designation of standards for MPAs creation[22] – may also impact and be impacted by the definition question. More comprehensive international work on this issue is presently commencing without specific mandate,[23] indicating that a need for some definitional work may be somewhat urgent.

Working definition used in this paper

For purpose of this Report, the author has adopted a working approach (and informal scope) that usually includes all types of geo-located protections within the term MPA. It considers individual measures directed at specific activities, uses and biomes, as well as more general conservation measures. For the most part, however, this discussion does not look at general marine conservation and sustainable use laws, considering only those provisions that specifically allow or require geo-located conservation measures.

2. INTERNATIONAL LEGAL FRAMEWORK

The terms of reference for this paper, call for a review of the overall international framework of binding and non-binding instruments relevant to MPAs, and their role in sustainable use, considering:

(i) a very brief summary of the nature of each individual instrument's relevance to marine protected areas (*i.e.,* not summarising the scope of the instrument or the framework it creates[24]);

(ii) legal/legislative gaps in the overall framework's provision for MPAs; and

(iii) currently recognised inconsistencies and controversies relating to MPAs.

[21] For example, the protection of tubeworms, which are believed to be endemic only to hydrothermal vents, might operate to protect such vents without necessitating the adoption of a protected area based on the coordinates of each vent field.

[22] Recent ongoing efforts for the creation of MPA designation standards at international, collaborative and national level. These efforts include work under the OSPAR and HELCOM conventions, and refer to similar guidelines developed in other forums, including CCAMLR, the Barcelona Convention, and the WHC. These standards discussions include both scientific and political concerns (See Korn, H., et al, Platzoeder *The United Nations Convention on the Law of the Sea and Marine Protected Areas on the High Seas"* In Proceedings of the Expert Workshop….. Vilm. 2001, considering whether the site can be protected under existing instruments, before designating it as an MPA, as a last resort.

[23] The CBD considered this in its most recent COP, and several international meetings on this point are planned. See, generally CBD-COP decision VIII-24, para. 29 *et seq.* Other detailed work has been undertaken in connection with IMO's PSSA process.

[24] The Specialised Bibliography, lists numerous papers providing varying descriptions, and legal and non-legal opinions concerning the scope and broader conservation elements of these instruments.

Parts A and B summarise of the primary relevant international and regional instruments and bodies, noting only their direct relevance to MPA issues, as well as their particular gaps and controversies.[25] Part C considers these same points across of the overall international legal framework.

2.1 International and regional agreements and processes

With the objective of identifying relevant instruments at the international level, and highlighting their "relevance, gaps, and inconsistencies," this analysis is divided into four categories – marine agreements, conservation (biodiversity) agreements, integrating instruments and processes, and regional instruments related to marine resource management/protected areas.

2.1.1 MARINE AGREEMENTS AND PROCESSES

Marine law is often a relatively independent area of law. Particularly at the international level, marine lawyers work in separate courts, negotiations and academic institutions and publications, with relatively little input from other fields, including environmental law. Marine instruments are therefore relatively comprehensive in coverage, sometimes without significant recognition of other international instruments and principles.

United Nations Convention on the Law of the Sea

The UN Convention on the Law of the Sea (UNCLOS) is a highly detailed and well accepted Convention comprehensively addressing many issues relating to the use and conservation of the ocean and its resources. UNCLOS embodies the traditional notion that there are certain ocean areas under national jurisdiction or other dispository rights, while other areas are beyond the control of any single State, but open to nationals and governments of all States, whether coastal or land-locked. Beyond the limits of national EEZs, UNCLOS recognizes "traditional high seas freedoms" (of navigation, overflight, cable laying, fishing and scientific research, etc.) Within EEZs, it recognises various levels of national controls, but imposes limitations on each coastal state's rights to restrain reasonable use of ocean areas within their jurisdiction.

(a) Relevance to Marine Protected Areas

UNCLOS's primary obligations relating to conservation and management of oceans and the marine environment (and/or living resources)[26] balance the "freedom of the high seas" (in particular regarding high-seas fisheries) with the shared obligation of all countries to protect against the destruction of marine species and ecosystems, and the collapse of shared fisheries. Parties have specific obligations to protect the marine environment, to conserve natural resources, and to cooperate with other states for conservation purposes.[27] These obligations include more references to the declaration of specific areas in which certain activities (fishing, shipping, activities causing pollution, marine research) may be prohibited or restricted, for the purposes of marine resource protection, conservation and/or restoration. These provisions are different, for different ocean zones.

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[25] This summary follows and is based on a review of relevant international instruments listed in Appendices 2 and 3, including both binding and non-binding (conventions, protocols, declarations, guidelines, principles and other instruments.) Only a few (thought to be the 'most relevant' instruments) have been summarized below.

[26] Terminology can sometimes be confusing. UNCLOS uses the two primary terms – "marine environment" and "living resources" (sometimes referred to in slightly different ways, such as "natural resources, whether living or non-living") – but does not define either term. Informal and intermediate definitions and examination of usage have given some indicators of possible definitions. For example, the ISA Assembly has stated a definition of "marine environment" and "serious harm to the marine environment," in its July 2000 *Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area.* It is not clear whether the various chambers of the UNCLOS Tribunal, and/or plenipotentiary representatives of its members will adopt these definitions, however, so they must be thought of as "interim." These various sources suggests that "living resources" may be comparable to the CBD term "biological resources," in some cases, but is often used in a more limited way – to describe commercially utilized resources (especially fisheries), where "marine environment" is given a very general meaning – essentially equivalent to "the ocean and submerged geography."

[27] UNCLOS, Articles 61, 118 and Part XII, especially Arts. 192 and 237.

- Territorial seas: UNCLOS does not specify particular requirements applicable to each country regarding conservation of its territorial sea. Each country has full sovereign rights over its territory, and UNCLOS presumes they will use these powers to control, protect, conserve and restore the marine resources and ecosystems within their Territorial Seas. It does not require MPAs, but notes States' authority to create and enforce them.[28]
- EEZs: UNCLOS mandates are much more strongly expressed with regard to the EEZ. States are required to control the 'allowable catch of the living resources' within their EEZs, and prevent 'over-exploitation' by imposing conservation and management measures (including through RFMOS and other organizations).[29]
- In OCS and superadjacent waters, UNCLOS does not specify conservation obligations, presumably again because these areas remain within the sovereign jurisdiction of the coastal state.[30]
- High seas: All waters beyond the EEZ, (including the water column above the OCS) are governed by more specific international environmental requirements. All States (individually or in cooperation with others[31]) must protect and preserve "rare or fragile ecosystems," the habitats of "depleted, threatened or endangered species" and "other forms of marine life."[32]
- The Area: UNCLOS created a special regime applicable to the seabed beyond national OCSs, which was quickly supplemented by a new sub-agreement (the Part XI Agreement.) UNCLOS gives the International Seabed Authority (ISA) responsibility for management and disposition of the mineral resources of The Area, empowering and mandating it to take measures to ensure effective protection of the marine environment, including flora and fauna, in connection with the various uses of the seabed beyond OCSs.[33]

Perhaps most important, the Convention requires other States to promote compliance with measures for marine conservation, whether they have been developed by a single state, a small group of States, an RFMO or other international cooperation mechanism, or the entire global community.[34]

(b) "Gaps" and Limitations of Coverage of Marine Conservation and MPAs

UNCLOS is intended to be an evolving framework, which will continue to develop as necessary to address needs, usages, and other changes. This suggests that every aspect of oceans and of the protection, preservation, sustainable utilisation and restoration of the marine environment is covered by UNCLOS's general provisions and the general obligations of parties.

However, on some issues UNCLOS provides a great deal of more specific detail, providing a 'regulatory' level of guidance, sufficient to enable immediate implementation measures. Where this level of detail is not provided, the UNCLOS framework is designed to enable the international community to develop it through mechanisms such as national implementation, regional cooperation, soft-law and voluntary principles, and/or international negotiations, both binding and non-binding. Some of the issues on which UNCLOS provides little or no guidance or direct provision include:

- Protected areas in the 'high seas'; and
- Conservation and management of the living resources of The Area..[35]

[28] UNCLOS, Articles 21 and 22. Similar power to regulate is specifically specified for other specially discussed areas within territorial seas. *See, e.g.,* Articles 42.1 (straits used in international navigation), 54 (archipelagic waters), etc. Although required to allow 'innocent passage' of ships (UNCLOS Articles 17-26), states can designate shipping lanes, which may also support these purposes.
[29] UNCLOS, Articles 58 and 61-68.
[30] UNCLOS, Part VI, Articles 76-85.
[31] UNCLOS, Articles 117, 118, 193, 194.4 and (viz RFMOs) 118 (final sentence), 119.1(a) and 119(b).
[32] UNCLOS, Articles 192 and 194.5
[33] UNCLOS, Articles 145, 208, and others.
[34] UNCLOS, Part VII, Section 2, Articles 116-120.

(c) Currently Recognised Inconsistencies and "Controversies"

With regard to the application of UNCLOS to MPAs, the UNGA has been active through a working group on conservation of the high seas (discussed in II.A.3.a, below). This issue has also been proposed to be a part of the wider consideration currently being given to the creation of a new 'implementation agreement" under UNCLOS.[36]

UN Agreement for the… Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks ("Fish Stocks Agreement" or "FSA")

This Agreement aims primarily at applying natural resource management to the objective of ensuring the "long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks through effective implementation of the relevant provisions of the Convention."[37]

(a) Relevance to Marine Protected Areas

In conjunction with its basic mandate, the FSA expressly calls for "conservation and management measures[38] to ensure the sustainability of covered species stocks. It is generally assumed that the direct or indirect designation of special areas in which activities are controlled is one of the potential measures that may be relevant. [39]

(b) "Gaps" and Limitations of Coverage of Marine Conservation and MPAs

Within the scope of its mandate, the FSA does not appear to have any primary gaps regarding its conservation objective. However, recently some authors have claimed that its mandate is too narrow, and recommended reopening the negotiations for the purposes of amending the FSA to cover all fisheries in the EEZs and beyond.[40] Given that the FSA has only been in force for 3 years, and that its negotiations (particularly its scope) were heavily negotiated over many years, this recommendation may not be workable,[41] but does suggest the level of urgency that some commentators place on international management of high-seas fisheries, in that they are willing to risk the FSA to achieve it.

(c) *Currently Recognised Inconsistencies and "Controversies"*

Current discussions relating to high-seas and EEZ fisheries revolve significantly around the application of the concept of "precaution" to fisheries management, and the extent to which lack of knowledge can be used as a justification for failing to impose or enforce controls, or for setting high catch limits. The FSA requires both the use of best scientific evidence available[42] and the application

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[35] Although giving the ISA a clear mandate relating to the "marine environment," however, neither UNCLOS nor the Agreement Relating to the Implementation of Part XI of the Convention (the "Part XI Agreement) specifically discuss any particular responsibility relating to benthic marine life of the Area. Hence, it is not clear who is responsible for these resources, nor which elements of UNCLOS's regime shall apply to them.

[36] The relevance of MPAs to this process was discussed in detail in CBD COP-8 and the Ad-hoc Working Group on Protected Areas held in preparation for that meeting. See CBD COP decision VIII-24 at para 42.

[37] FSA, Art. 2, and see Article 5.

[38] For these purposes, "conservation and management measures" means measures to conserve and manage one or more species of living marine resources that are adopted and applied consistent with the relevant rules of international law as reflected in the Convention and this Agreement. FSA, Art. I(b).

[39] FSA, Articles 5 (a), (b), (c), and (e); and see Allison, G., *et al.* (1998) restating in the marine context the general assumption of the relationship between PAs and conservation.

[40] *Especially,* Kimball, et al., 2005, *but see also* Thiel, H., 2003.

[41] Given the nature of scope discussions the FSA negotiations, it is likely that work on a broader instrument covering fisheries that are not "straddling or highly migratory" would have to be commenced under a separate instrument. Such an approach would have the value of keeping the FSA in force, and keeping its implementation on track, during the new negotiations.

[42] FSA, ART 5 (b) and (c)

of the precautionary approach[43] to protect biodiversity in the marine environment. Recent studies have begun to demonstrate the difficulties inherent in applying the precautionary approach to natural resource management decisions, and indicate a need for further international efforts to clarify its meaning in this context.[44] These studies note that the issue of what is 'precautionary' varies according to what kind of action is being taken,[45] so that the adoption of catch limitations will utilise the principle entirely differently from the designation of MPAs. In the context of protected areas, precaution is relevant across the range of the MPA processes – including the selection of proposed MPAs, zoning, planning, licensing/permitting, and other actions.

International Maritime Organisation and Associated Instruments

The International Maritime Organization (IMO) is the repository and oversight body responsible for a number of specialized instruments primarily focused on shipping and traditional aspects of maritime law (such as the safety of human lives at sea, salvage, and piracy.) Among its instruments, a number have focused on dumping and pollution issues and other activities and areas in which shipping and maritime traffic can have an impact on the marine environment.[46]

(a) Relevance to Marine Protected Areas

Predictably, one of the environmental protection mechanisms frequently utilised by the IMO instruments is the designation of specific areas – including both areas which must be protected and areas which are specifically usable as dumping sites or for purging ballast. These designations may be useful, if they can be integrated into national and international processes of MPA creation.

There are two primary kinds of geo-located protection measures in the IMO 'family.' The first are a range of different types of "special areas" in which particular kinds of discharges and emissions (oily wastes, "noxious liquid substances," garbage, and air pollution) are forbidden.[47] These provisions are rather narrowly focused.[48] The second type of measure, the "particularly sensitive sea area" (PSSA),[49] is much broader in scope, mandating that all vessels undertake a list of protective measures, whenever they are in an area that has been designated as a PSSA. Because the PSSA concept is not derived from a single instrument or specific international agreement, it has developed in a flexible, still evolving manner.

(b) "Gaps" and Limitations of Coverage of Marine Conservation and MPAs

As the IMO is not directly mandated to focus on marine conservation issues, it is probably inappropriate to speak of "gaps" in its coverage. However, it is noted that at present, IMO's focus on maritime traffic matters is not well integrated with other international marine laws. For example, the

[43] FSA, ART 5 (d). *See also* FSA, ART 6 and Annex II which contains a lengthy and detailed analyses of the manner in which precautionary concepts should be applied
[44] Cooney & Dickson, 2005.
[45] Id., and see Bartley, D.M. and D. Minchin (FAO technical Paper - T350/2); and Caddy, J., 1998.
[46] *Specifically,* the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto ("MARPOL 73/78"); International Convention for the Control and Management of Ships' Ballast Water and Sediments (2004, not yet in force); Convention for the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention) (London, 1972); and particularly the IMO Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas, IMO Assembly Resolution A. 982 (24) (Adopted 2005)
[47] *See*, MARPOL 73/78, Regulation 10 of Annexes I, II, V, and VI. Some Special Areas are very large. For example, the Baltic, Black and Mediterranean Seas, as well as the Gulf of Aden, "Gulfs", Red Sea, "Antarctic Area, North West European Waters, and Oman sea have all been designated as Special Areas under this provision.
[48] At present, a separate "Special Area" designation must be separately proposed for each type of activity or discharge, even if they all cover the same area.
[49] The PSSA concept has been derived indirectly from multiple sources within IMO instruments, and has been specifically referenced in UNCLOS, Agenda 21 and processes under the CBD. Article 211 of UNCLOS is generally thought to reference the IMO system, especially MARPOL 73/78.

designation of an MPA within a country's EEZ may not be reflected by the declaration of the area as a Special Area or PSSA, if the IMO so decides.[50]

(c) Currently Recognized Inconsistencies and "Controversies"

A number of countries have strongly promoted the use of the PSSA designation as a tool for conservation, including as a tool for protecting very large ocean areas. However, as demonstrated by recent proceedings in the IMO, [51] these proposals have been controversial for two opposing reasons. On one side, many commercial enterprises and their advocates note that the PSSA mechanisms is still evolving, and its guidelines are in the process of revision/have been newly revised through an international process. As a consequence, the PSSA tool is still too rigid, and does not contain any basis for flexible application to individual circumstances of an area or activity. One the other side, it has been noted that the PSSA designation is not a mandate for conservation. Rather, if used in conjunction with other conservation systems, the PSSA might have a significant role in providing the linking/liaison mechanism between environmental and conservation action and IMO oversight of shipping. Currently, the IMO is developing a set of guidelines for the designation of PSSAs, under which it is expected that the PSSA designation will become less rigid, and thus more easily adapted to particular needs of individual areas.

FAO, and the Code of Conduct for Responsible Fisheries

The UN Food and Agriculture Organisation (FAO) has long recognised the intrinsic linkage between conservation and natural resource management, and the achievement of the Organisation's primary mandates relating to food, agriculture, fisheries, and forestry. Its work provides strong examples of the value of non-binding and voluntary instruments, including specifically the Code of Conduct on Responsible Fisheries,[52] which focuses on the balance between "the biological characteristics of the resources and their environment and the interests of consumers and other users."

Although not binding, the Code has had a significant impact on the growing trend toward co-ordinated management of, and the promotion of sustainability in, fishing activities in all ocean areas. The CCRF does not specifically discuss geographic-based protections, however, it focuses significant attention on the needs for conservation, restoration and sustainable use of ecosystems, commercially-fished species, and species that are not commercially fished.[53] As noted above, it is generally inferred that protected areas are a tool which is relevant (and often necessary) to achievement of these objectives.

Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas

Designed to help prevent "re-flagging" vessels as a means of avoiding conservation responsibilities, the Compliance Agreement states a direct intention to focus on compliance with "conservation and management measures." Its primary direct contribution to international conservation is the creation of a potentially valuable tool for enforcement (the Vessel Authorization Record, which is intended to create a comprehensive, centralized database on vessels authorized to fish on the high seas) of compliance information not only relating to fishing requirements, but also potentially to MPAs, in cases in which the MPA permits certain kinds of activities by licensed users.

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[50] *See* e.g., Chevalier, C. (2004) describing the denial of PSSA status in connection with protection of the Mouths of the Bonifacio Strait.

[51] *IMO,* Western European Waters PSSA proposal (initially proposed 2003, reviewed by the legal commission 2005, reconsidered 2005.)

[52] The Code "calls on States, International Organizations, whether Governmental or Non-Governmental, and all those involved in fisheries to collaborate in the fulfilment and implementation of the objectives and principles contained in this Code;" (FAO conference resolution _____?, 1996, para 2)

[53] CCRF Articles 6.1, 6.2 and 6.8. The CCRF also notes information sharing, and integration with other programmes and management planning, as critical elements of conservation. CCRF Articles 6.2 and 6.9.

International Whaling Convention

The International Whaling Convention was originally created as a tool for management and conservation of whale stocks – *i.e.,* as a single-genus sustainable use convention, essential an RFMO.[54] The IWC has created two whale sanctuaries (single species oriented protected areas), covering very large areas.[55] Unfortunately, the effectiveness of these sanctuaries have not been well tested or analyzed, since the IWC's natural resource management activities have been effectively curtailed by the lengthening "pause" in commercial whaling which began in 1985/86 and is now in its 21st year, thus becoming an effectively permanent moratorium on legal whaling in the high seas.[56]

Global Programme of Action for Protection of the Marine Environment from Land-based Activities

The Global Programme of Action for Protection of the Marine Environment from Land-based Activities (GPA) is a comprehensive, multi-sectoral instrument reflecting the desire of Governments to strengthen the collaboration and coordination of all agencies with mandates relevant to the impact of land-based activities on the marine environment, through their participation in a global programme. In addition to pollution issues, the GPA also addresses physical alterations of the coastal zone, including the destruction of marine habitats. The GPA specifically discusses and encourages the recognition of protected areas,[57] and references the need for attention to 'areas of concern' within the coastal zone. It also notes the value of declaration of zones, including both zones that must be protected, and those that serve as the only permitted area for certain activities (e.g., dumping). It also encourages cooperation through international instruments and other mechanisms.

Labelling and Certification

Up to now, the implementation of "dolphin-safe" and other kinds of certification have generally been undertaken through national law and commercial mechanisms. Currently, various approaches have been examined for improving the reach of these measures, including the creation of a new international instrument, the Agreement for the International Dolphin Conservation Programme. One of the primary tools that are used in the certification of tuna and other commercially harvested living marine resources involves the certification of the fishery itself – in some senses, the creation of an MPA focused on restricting the nature of fishing processes, and in some cases the volume of fish taken. Certification approaches represent a relatively new potential mechanism that can be used with other tools and approaches to promote conservation and sustainable marine management.

[54] RFMOs are discussed in III.B.2, below. The author offers her apologies to anyone offended by the inclusion of whaling as a 'fishery,' but uses the term in its sense of 'commercial extraction of living resources,' not suggesting that whales are 'fish.'
[55] The Southern Ocean Sanctuary (SOS, established 1994), includes all ocean areas below the 60th-S parallel. The Indian Ocean Sanctuary (IOS, established 1979) includes the entire Indian Ocean, specified by 'metes and bounds.
[56] Although a few countries continue to engage in whaling pursuant to limited exceptions to whaling ban, including aboriginal subsistence whaling, whaling activities for scientific purposes, and activities within a country's jurisdiction.
[57] GPA, §§ 152(d) and 153(a).

2.1.2 CONSERVATION AND PROTECTED-AREA AGREEMENTS

A number of conservation instruments are also directly relevant to the marine biome and MPAs.

Convention on Biological Diversity

The stated objectives of the Convention on Biological Diversity (CBD) are (i) conservation of biodiversity, (ii) sustainable use of components of biodiversity, and (iii) equitable sharing of benefits from use of genetic resources.[58] It includes both terrestrial and marine resources and ecosystems.

(a*) Relevance to Marine Protected Areas*

Protected areas, more broadly known as *in situ* conservation measures[59] are specifically addressed under the CBD as a primary tool for ensuring that valuable biological resources are not lost to extinction through abuse, overuse, or unintentional neglect.[60] The CBD clearly emphasises that such designations are tools for such protection, rather than *per se* objectives that can be fully satisfied by simply gazetting the area as a "paper park."[61] The CBD's system envisions an integrated, comprehensive approach to conservation and sustainable use. Hence, Parties are required to prepare and update inventories of biological resources as a basis for planning and decision-making.[62]

The Convention's scope specifically includes marine areas within the limits of national jurisdiction, *and* to processes and activities by a country or under its jurisdiction beyond the limits of national jurisdiction.[63] It has recognised marine conservation as a priority since its second year, when the Convention's parties adopted the 1995 Jakarta Mandate on marine and coastal biodiversity, which specifically includes the establishment of marine and coastal protected areas.[64] Most recently, the CBD's detailed programmes of work on marine and coastal biodiversity (adopted 1998 and 2004) and on protected areas (adopted 2004 and 2006) provide guidance to Parties in national legislation, as well as regional measures and actions in or impacting areas beyond national jurisdiction.[65]

(b) "Gaps" and Limitations of Coverage of Marine Conservation and MPAs

Legally, the CBD is designed to operate through national implementation. As a result, its application through regional implementation mechanisms was strongly opposed early on, and even today is rarely directly addressed. Consequently, most of its work on MPAs has focused on activities which a particular country may adopt. The Convention does not consider bi- or multi-laterally designated MPAs, nor create or recommend mechanisms for the creation of MPAs beyond national jurisdiction.

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[58] CBD Article 1.
[59] CBD., Art. 8.
[60] CBD, Article 8
[61] CBD, Art. 8. For a discussion of the importance of a "system" of protected areas, as opposed to former "token" approaches, *see* Global Biodiversity Outlook (CBD, 2001) at 131.
[62] CBD, Arts. 6 and 8.
[63] CBD, Articles 4, 5 and 22.2.
[64] CBD COP-2, Ministerial Statement.
[65] CBD Decisions VIII-24, /CBD/COP/7/5 (2004) (Protected Areas – this decision specifically addresses MPAs both within and outside of national jurisdiction); VII-5, UNEP/CBD/COP/7/5 (2004) (Protected Areas. This decision incorporates and surpasses earlier work on PAs); CBD Decision VII-28, UNEP/CBD/COP/7/28 (2004) (MPAs.) In 2005, a CBD Working Group began to try to address the question of marine protected areas. Although unable to resolve insoluble issues raised, the (partly) bracketed report indicated agreement regarding the urgent needs of coastal and EEZ areas. Report of the First Meeting of the Ad-hoc Open ended Working Group on Protected Areas, Annex 1, para. 1/1.l (Montecatini, 20 June 2005) UNEP/CBD/WG PA/1/6

(c) Currently Recognised Inconsistencies and "Controversies"

The primary MPA coverage issue for the CBD has been the relationship between the CBD and UNCLOS. Although the CBD specifically requires parties to "implement this Convention consistently with the rights and obligations of States under the law of the sea,"[66] the two international processes have an evolving relationship, particularly with regard to MPAs and other marine conservation issues. Most recently, in CBD-COP-8, the Parties generally agreed that the primary international work on this issue will be ongoing through the UN, with the CBD providing inputs and advice based on its specialised competence in the areas of conservation, protected areas, and biodiversity.[67]

World Heritage Convention

The World Heritage Convention (WHC) was created to ensure the protection and safeguarding of specific areas of 'international importance.' It is a list-based agreement in which sites are nominated (by or with approval from the government of the country in which they are located) to an international Commission which decides, based on a detailed list of criteria, whether they may be added to the list of "World Heritage Sites." The Convention also mandates international oversight of listed area (based on formally adopted operational guidance and principles) to ensure that the area's condition does not decline. Originally, a country's incentive to list a site was partly financial – access to the "World Heritage Fund." Over the years, however, as inflation has decreased the importance of the Fund, a new incentive has taken its place: Once listed, a PA may use the World Heritage designation as a kind of certification or "brand," which has proven to increase the number of visitors to the site.

(a*) Relevance to Marine Protected Areas*

Marine sites, particularly those in coastal waters or within relatively short boating distances of shore, have been designated as WHSites. The most famous Marine WHSite is probably the Great Barrier Reef World Heritage Area in Australia, which is generally part of[68] the Great Barrier Reef Marine Park – the largest MPA in the world. The World Heritage Committee has drafted specific criteria for MPAs, although these criteria have not yet been formally adopted.

(b) "Gaps" and Limitations of Coverage of Marine Conservation and MPAs

The main limitation of the WHC's coverage relates to its objectives. Specifically, the WHC is not a 'protected areas convention,' *per se*, but rather is designed to create incentives and mandates for a specific type of protected areas – natural and cultural areas of international importance that are or can be sites of tourism and similar uses. Hence, it is designed to address protected areas that will be used by the public. This means that, as a practical matter, the WHC mechanisms may not be meaningful for MPAs beyond the reach of tourist day-trips, nor MPAs intended to control commercial harvesting. In addition, the WHC is legally limited to the declaration of areas within national jurisdiction, and imposes numerous rights and responsibilities on the country or countries in which the WH Site is located. With regards to ocean areas beyond national jurisdiction, no country, organisation or other international entity is currently qualified or designated to act as the "country in which the Site is located" for these purposes.

UNESCO Convention on the Protection of the Underwater Cultural Heritage

Although not yet in force, this Convention is directed to protection of resources such as wrecked, vessels and other vehicles, as well as structures, artefacts, human remains, and prehistoric objects.[69] It also seeks to control salvage and other private actions involving such areas.

[66] CBD Art. 22.2
[67] CBD COP Decision VIII-24 at 42.
[68] The exact boundaries of the Great Barrier Reef WH Site and the Great Barrier Reef Marine park are not the same. Approximately 10% of the WH Site is outside of the Marine Park area, and is managed by provincial authorities.
[69] Underwater Cultural Heritage Convention, Art. 1(a).

Agreement Concerning the Shipwrecked Vessel RMS Titanic

This new agreement (also not in force) is essentially a very specific variation on the UNESCO Convention on the Protection of the Underwater Cultural Heritage – focusing solely on protecting the wrecked Titanic in its final resting place at the bottom of the Atlantic.

(a) *Relevance to Marine Protected Areas*

The RMS Titanic Agreement calls on Parties (individually or collaboratively) to take "all reasonable measures" to ensure that all artifacts recovered from the *Titanic* are conserved and curated, and to control or oversee the actions of vessels under their registry for this purpose.[70] It thus creates a kind of limited protected area on the seafloor, in which certain kinds of activities are restricted.

(b) Currently Recognised Inconsistencies and "Controversies"

This RMS Titanic Agreement represents a new way to take conservation action in the high seas and The Area. Rather than holding a broad international negotiation (a process that can be very expensive and take many years), the negotiations were relatively limited – involving only four Parties (US, UK, France and Canada). The Convention will enter into force after only two countries have agreed to and implemented it, however, its provisions are only binding on those countries which are signatories. In essence, the two parties agree that, they will consider the area to be protected area and govern their citizens and vessels accordingly. The Parties then hope and expect other Parties to subsequently join in these measures.

Convention on International Trade in Endangered Species of Fauna and Flora

Although not direct addressing protected areas or MPAs, the Convention on International Trade in Endangered Species of Fauna and Flora (CITES) has relevance to conservation beyond national waters. Functionally, CITES combines the properties of a conservation convention, with those of an "international trade agreement," closely regulating international movement of endangered and threatened species, or their parts and derivatives (including commercial products). CITES focuses significant attention on the listing of protected species, and efforts (some geo-local[71]) to ensure their protection.

(a) *Relevance to Marine Protected Areas*

CITES specifically requires Parties to monitor and regulate the movement of species that are "introduced from the sea" (beyond national jurisdiction.)[72] Implementation of this provision demonstrates some of the problems involved in implementation of geo-located resource management requirements, since this provision can only be implemented by knowing (or accepting the vessel operator's statements about) where the species was harvested.

(b) "Gaps" and Limitations of Coverage of Marine Conservation and MPAs

Within the past 5 years, the CITES COP has listed a number of commercial marine fish species as needing trade control (Appendix 2), both from national sources and through the introduction from the sea provisions. CITES's parties have specifically recognised that these listings will only be a positive contribution to sustainable ocean management, if there can be a high level of cooperation among parties and with FAO.

[70] Agreement Concerning the Shipwrecked Vessel RMS Titanic, Article 3.
[71] *See, eg.,* the CITES "Significant Trade" processes for, for example, sturgeon and paddlefish. To date, no geo-local arrangements have been proposed under this mandate relating to ocean areas.
[72] CITES, Article ___.

Convention on Migratory Species

Like CITES, CMS focuses on the listing of particular species (or groups of species), in this case focusing on those that are both migratory and endangered. Parties are then required to take measures to protect manage and conserve the habitats of those species. One mechanism used by CMS is the development of specialised agreements (sometimes non-binding) among the Range States of a particular listed species, under which they agree to management plans for the species' protection.
Among the Agreements developed to date, several address ocean species. These include the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS);[73] the Agreement on Small Cetaceans of the Baltic and North Seas (ASCOBANS);[74] Trilateral Wadden Sea Collaboration,[75] the Memorandum on the Conservation of Sea Turtles of the Indian Ocean and South East Asia,[76] the Agreement for the Conservation of Albatrosses and Petrels (ACAP).[77] Most relevant to this paper, the habitat focus of these instruments, coupled with the development of plans of action ('management plans') for the entire species range (often a single geographic region or sub-region), enables a kind of action that operates in coordination with other more formal geographic protections. This can enable coordination among countries and among sectors within each country, and typically embodies kinds of flexibility and awareness of use-related requirements that is sometimes missing in other kinds of marine protected areas.

2.1.3 INTEGRATING INSTRUMENTS AND PROCESSES

At some levels, international efforts have been ongoing to attempt to better reconcile the various marine interests and concerns relating to management of the natural resources of the marine realm.

UNGA *Ad Hoc* Informal Open-ended Working Group and Other Processes

Presently, processes under the UNGA are being undertaken, and offer some hope for further development and integration among the international instruments described above, and a more effective basis for integrated national action, regarding conservation in the marine biome and the creation of MPAs. Up to now, the most important of these processes have been the non-binding discussion processes under UNCLOS, known as the UN Intergovernmental Consultative Process on Oceans (UNICPO), which has given priority attention in most of its sessions to matters relating to the implementation of Article XII of UNCLOS, including to the further development of MPA rules.

In 2005, however, at its special session to commemorate the twentieth anniversary of the signing of UNCLOS, the United Nations General Assembly adopted a comprehensive resolution on Oceans and Law of the Sea that called again for States to protect the environment and its living resources,[78] and to achieve the WSSD 2012 target regarding the need for representative networks of MPAs. A more concrete expression of this resolution is found in the General Assembly has established a cross-cutting Working Group which is expected to enquire into "issues relating to the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction."[79] This process specifically called upon to address the issues of marine conservation and MPAs, across a range of international and regional binding and non-binding instruments and processes (including UNCLOS, CBD, and FAO) and to integrate with other 'soft processes, such as UNICPO.

[73] Monaco, 1996, entry into force 2001.
[74] (opened for signature at the UN HQ New York) 1992, entry into force 1994.
[75] Formerly, "Wadden Sea Seals Agreement," (1978) currently functioning under a broader "Administrative Agreement" among the three range states, adopted and in force as of 1987.
[76] Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia (2001.)
[77] Capetown, 2001, entry into force 2004.
[78] UNGA Assembly Resolution n° A/57/L.48
[79] Established by the General Assembly, the Group met from 13 to 17 February 2006, and it is expected that there will be some follow-up process, either directly or through the "consideration of the need for an implementing agreement under UNCLOS," mentioned in text.

The In light of its central role in addressing these issues and the paramount role of UNCLOS in this connection[80] (recognized by other bodies, including the CBD, which has adopted a decision regarding its participation as an information provider in this process[81]) this process will be overseen through the General Assembly itself, creating a level playing field for the discussion of the range of issues and positions currently promoted through a variety of international forums. It will, to some extent be guided by existing UNGA resolutions promoting conservation, including through geolocated protective measures.[82] Following its initial meeting, this Group's Co-chairs, recognized a number of possible options and approaches relating to the possible establishment of marine protected areas in the high seas, including the possible inclusion of MPA issues in discussions relating to the need for an implementing agreement under the United Nations Convention on the Law of the Sea.

Agenda 21

Agenda 21 (a non-binding document, sometimes called "Earth's Action Plan") identifies a full range of issues that must be addressed in a globally and locally integrated or interrelated way, in order to ensure the health, stability and sustainability of the ecosystems, species and the global environment. These principles are directly applied to the conservation and management of the oceans in Chapter 17, which calls on States to co-operate with regard to the protection and restoration of endangered marine species and the preservation of habitats and other ecologically sensitive areas.[83]

Declaration of the World Summit for Sustainable Development

In 2002, WSSD recognising that the ocean-related objectives of Chapter 17 are still largely unmet, and that the needs they discuss are becoming critical, agreed to a number of specific time bound commitments, including specifically the establishment of a representative network of MPAs by 2012.[84] States are called on to maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in the high seas; and to develop new approaches and tools to establish marine protected areas consistent with international law and based on scientific information." The WSSD targets on marine conservation and the network of representative protected areas have been recognised by an overwhelming majority of the instruments (both global and regional) described in this paper, and are providing a basis for coordination among them.[85]

2.2 Regional instruments

An extensive range of legal instruments address marine issues relevant to MPAs at the regional level. The number of available instruments is so great, in fact, that it is not possible to address them all in this paper.[86] Consequently, the following discussion discusses only a few documents and categories of documents, to provide examples of particular types of regional instruments, based on their objectives with regard to geo-located conservation laws. It is meant to be illustrative of the manner in which it can address the range of variation in regional instruments and their provisions. It begins with a summary of two overall categories of instruments – the 'Regional Seas Conventions' and the 'Regional Fisheries Management Organisations. Thereafter, it briefly considers MPA components of in three regions – the Antarctic, European waters and the Pacific islands.

[80] General Assembly resolution 60/30
[81] CBD Decision VII-24, para 42. (2006)
[82] General Assembly resolution 59/25;paras 66-69, and especially para. 71.
[83] Agenda 21, ¶ 17.46.
[84] WSSD Plan of Action, ¶ 31. Other key commitments of this section include the restoration of fisheries to maximum sustainable yields by 2015; and a significant drop in the rate of species extinction by 2010. The importance of a "system" of protected areas, as opposed to "token" approaches, is discussed in the Global Biodiversity Outlook (CBD, 2001) at 131.
[85] *See, e.g.,* Expert group on outcome-oriented targets for the Programmes of Work on the biodiversity of Inland Water Ecosystems and Marine and Coastal Ecosystems (Montreal, October, 2005)
[86] The list provided in Appendix 2 includes a number of regional marine governance instruments of various types. Although offered as 'complete,' this list is constantly changing.

2.2.1 REGIONAL SEAS CONVENTIONS

The UNEP Regional Seas programme is intended to foster regional co-operation on behalf of the marine and coastal environment. It has supported the development and adoption of nine "regional seas conventions" and various protocols under each, is active in four other regions, and has entered into partner programmes with two pre-existing regional agreements relating to oceans.[87] RS Conventions although often structurally similar are individualised, particularly their various protocols (where MPAs are typically addressed.) Most RS Conventions operate through Action Plans, which serve as "prescriptions for sound environmental management" and mechanisms for promoting co-operation.

The Regional Seas programme is a vehicle for synergies, as it provides a means for regional groups to facilitate effective implementation of the MEAs by the countries that are parties to the regional seas agreement. The Programme has recently become a platform for inter-regional coordination, as well.[88]

2.2.2 REGIONAL FISHERIES MANAGEMENT INSTRUMENTS AND ORGANISATIONS

Regional Fisheries Management Organisations, although long in existence have taken on a new character in the provisions of UNCLOS which recognise them,[89] and in the role contemplated for them in the CCRF. RFMOs are expected to establish conservation and management measures to facilitate joint assessment of stocks and ecosystems, and ensure that the biodiversity of aquatic habitats and ecosystems is conserved and endangered species are protected.[90] For many RFMOs, the designation of controlled zones and geo-located mechanisms have been utilised to achieve these purposes. RFMOs and fishing fleets have the primary current and potential responsibility and opportunity to exert oversight and management beyond the easy reach of land-based coastal services. Others have addressed these matters without formal instruments (either coordinating with other bodies or through more flexible (planning and scientific research) mechanisms.) Some have not addressed it at all.[91]

2.2.3 PRACTICAL EXAMPLES FROM THREE REGIONS

The following summaries (the Antarctic, Europe, and the Pacific Islands) provide some idea of the variation among regional approaches to MPA creation. More detail is provided about these examples, given that regional processes offer concrete examples of the legal framework for MPA creation and how it functions at a practical level. From a legal perspective, regional experiences demonstrate the manner in which existing instruments can operate in an integrated fashion.

<u>The Antarctic Treaty System</u>

The creation of marine protected areas under the Antarctic Treaty System is most specifically discussed in the Convention on Conservation of Antarctic Marine Living Resources (CCAMLR) Commission. CCAMLR recognises two types of MPA – Antarctic Specially Protected Areas (ASPAs) or Antarctic Specially Managed Areas (ASMAs),[92] as well as a third legal provision which creates a basis for *de facto* creation of MPAs:

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[87] The full list of Regional Seas Conventions and protocols and Partner Conventions can be found online at http://www.unep.ch/seas/main/hconlist.html.

[88] As reported in the RSP website, the Parties to the Antigua Convention are developing coordination with the Wider Caribbean RSC. Another cross-continental cooperation is developing between the Abijian and Nairobi Conventions.

[89] UNCLOS, Articles 117 and 118.

[90] CCRF., ¶¶ 7.2.2(d)-(g) and 7.3.2.

[91] A number of existing works summarise the contents and powers of RFMOs (see e.g., Kimball, L., 2000), although not to date have addressed the legal issues or examined the contents of their proceedings and practices to determine what those provisions have meant in practice and how they are being applied.

[92] Protocol on Environmental Protection to the Antarctic Treaty (Madrid, 1991), Annex V. ASPAs and ASMAs are not mutually exclusive. An ASPA may easily be a 'zone' within a broader ASMA.

- ASPAs are conservation-focused, designed to protect outstanding environmental, scientific, historic, aesthetic or wilderness values, as well as scientific research. Designation is based on the nature and value of the area and resources – as (1) wilderness areas, (2) representative areas, (3) "areas with important or unusual assemblages of species," (4) areas which are "the only known habitat of a species," and (5) other areas protected for their outstanding environmental, scientific, historic, aesthetic or wilderness values, or for scientific research.[93]
- ASMAs, by contrast, are focused on species or area sustainability. An ASMA may be declared wherever a limitation or control is needed (including in congested areas, or to minimize cumulative environmental impacts.) ASMAs are integrated management/zoning areas.
- CCAMLR's limitations on 'new and exploratory fisheries'[94] create a third *de facto* geo-located protection. Although NEFs may be applied by species, it is also possible to designate an area.

Procedurally, the CCAMLR operates through the CCAMLR Commission, a body composed of representatives of all original Parties (automatically) and all Parties that subsequently accede to the Convention (by vote of the current members). The designation of ASPAs, ASMAs and NEFs are all considered to be 'matters of substance';[95] hence, such a designation may be created only by consensus of all members of the Commission (that is, a proposal to designate an area will pass so long as no Commission Member objects). The primary legal difference among the three options relates to their permanence. NEFs are actually a two stage process, with a fishery initially being declared "new" and then becoming "exploratory," after these designations are declared, catch limits and other factors are annually re-defined.

European Regional Instruments

A variety of different regional instruments and processes govern European ocean areas, which seek to operate synergistically, despite legal and procedural difficulties.[96] Europe encompasses within its breadth a number of different approaches to conservation, and a very advanced level of international networking and cooperation.

One critical element of European regional cooperation in MPAs is found in the EU's Natura 2000 programme. Although the EU does not include all European countries, its 25 members as well as a number of other European countries which have formally committed to complying with key EU regulations, comprise the vast majority of the continent. Hence its coordinative framework can provide a strong basis for norm development and networking across the entire region, including between and among other regional programmes in the area.

Natura 2000 is focused on creating a "coherent network of protected areas," including both Special Protection Areas (SPAs) classified under the Birds Directive,[97] and the Special Areas of Conservation (SACs) designated under the Habitats Directive.[98] Protection of marine biological diversity is expressly stated as a component of this programme. Natura 2000 arises out of mandatory provisions

[93] Annex V. § 3.2. ASMAs include areas (1) needing strict protection; (2) exemplifying major ecosystems; (3) with important or unusual assemblages of species (including native birds or mammals as well as fish); (4) considered the only known habitat of a species; (5) of outstanding value, (6) set for scientific research, and (6) containing outstanding geological features.
[94] Created by CCAMLR Conservation Measures 21-01 and 21-02 (Adopted by the Commission in 2002.)
[95] CCAMLR Commission Rules of Procedure, Rule 4 (a).
[96] *See, e.g.,* the OSPAR, Barcelona Convention, and several RFMOs, as well as ACCOBAMS, ASCOBANS, Trilateral Wadden Sea Collaboration, and other agreements.
[97] EUROPEAN UNION, EU Birds Directive (79/409/EEC of 2 April 1979). Although focused primarily on birds, this document includes provisions for the protection of 'habitat species', and the designation of habitat areas for protection.
[98] EUROPEAN UNION, European Directive on the conservation of natural habitats and of wild fauna and flora (the "Habitats Directive" 92/43/EEC of 21 May 1992). This document focuses on the creation of a coherent network of protected areas.

of EU law, and has created a strong motivation to meet relevant targets. [99] Although work in the marine area has been somewhat slow at times, many countries have taken very strong affirmative steps toward meeting these targets in that biome. [100]

Beyond Natura 2000, which promotes individual countries to take action, regional processes also promote joint and collective action under a number of different instruments and processes, using mechanisms that vary greatly. The most active declaration and protection mechanism in this region are found under the Barcelona Convention and its "SPA and Biodiversity Protocol", whose Parties are specifically authorised not only to act individually (as to areas within their jurisdiction)[101] but also to declare MPAs collectively (as to areas that cross national boundaries or are outside of national jurisdiction,[102] but within the scope of the Convention.) Parties can create specially protected areas within their territory by adding them to the list of Specially Protected Areas of Mediterranean Importance (the SPAMI list).[103] Beyond their territory, a broader evaluation is necessary. The SPAMI process is also a vehicle for coordination of Mediterranean MPAs.[104]

By comparison, OSPAR has focused its listing and guidance for MPAs declared by Parties individually, as guidance regarding "necessary measures to protect [and] conserve marine ecosystems,"[105] and "develop[ing] means, consistent with international law, for instituting protective, conservation, restorative or precautionary measures related to specific areas or sites or related to particular species or habitats."[106] Although these discussions are currently ongoing, such means have not been developed as yet. Some current proposals have focused on areas that are fully or partly beyond national jurisdiction – whose formal designation through OSPAR will require a consensus decision.

Coordination among the European instruments is a very important concept. All of these instruments are independent, with independent governing bodies, however, there is a high level of integration among their activities. Although legally important, most instruments seek to promote coordination through COPs or similar processes.[107] This may be partly facilitated by the overlap among members of these instruments, and the fact that most European regional instruments are observers in each other's processes.[108] Most of these instruments maintain databases or other resources regarding species, ecosystems and geographic areas protected under their respective systems. Formal or informal MPA designation under one instrument may be given special consideration by others whose geographic coverage includes all or part of the MPA. For example, most areas declared as PSSAs by IMO are also Special Areas under specific IMO treaties. Other synergies have sometimes been proposed.[109]

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[99] Natura 2000 sites were to have been identified by 1998. Several states failed to propose sites within this time. For example, after the deadline had passed without any German site proposals, the European Court of Justice found Germany to be in contravention of the Directive.

[100] Germany, following the ECJ censure, notified the EU of 10 new areas, totaling approx. 31% of the German EEZ. Together with the existing nominations of the states in the country's territorial sea, approximately 38 % of the total German marine area will eventually be under direct protection. Discussed in Natura 2000 materials provided by Henning von Nordheim of the Bundesamt for Naturschutz, and found online at http://www.habitatmarenatura2000.de/en/intro.php

[101] Primary responsibility for "ensuring consistency of proposed protection and management measures, as well as the means for implementation" rests with the party or parties who propose the area for listing. SPAMI Protocol, Arts 9.3(a), and 9.5

[102] No part of the Mediterranean is more than 200 nm from a shore or island, and few countries have declared EEZs, covering the full range of EEZ authorities. Consequently, one cannot understand or predict marine jurisdiction in the Mediterranean.

[103] SPA and Biodiversity Protocol of the Barcelona Convention, Art. 8.2.

[104] *Id.* Articles 3.2 and 3.4.

[105] OSPAR, Art. 2.

[106] OSPAR, Annex V, Art. 3. Annex V has not been adopted by all 16 OSPAR parties as yet.

[107] OSPAR's coordination provisions are very strong. *See* Annex V, and OSPAR's 1992 Agreement on the Meaning of Certain Concepts (calling for coordination with other instruments, and 'separate but coordinating' work with RFMOs.)

[108] *E.g.,* Observers to OSPAR include Secretariats of ASCOBANS, Arctic Monitoring and Assessment Programme (AMAP); Helsinki Commission, Barcelona Convention; Trilateral Wadden Sea Secretariat the Cooperative Programme on … Long-Range Transmission of Air Pollutants in Europe (EMEP); EEA (ASMO only); IOC; IAEA; International Commission for the Protection of the Rhine against Pollution; ICES; IMO; NAMMCO; NEAFC; North Sea Secretariat, OECD, and UNEP.

[109] *See for example*, Kimball, L., 2005, noting without citation that the OSPAR Commission has recently written to the North East Atlantic Fisheries Commission (NEAFC) regarding the possible protection of cold-water coral reefs on the western

[South] Pacific Regional Instruments

Coordination among instruments is a more direct objective of the Pacific Regional Environmental Programme. Originally created as a vehicle to enable small island countries in the South Pacific to share expertise, actions and results in the fields of environment and pollution issues, SPREP's continuing mandate "to promote co-operation in the Pacific region and to provide assistance in order to protect and improve its environment and to ensure sustainable development for present and future generations" has expanded and improved over the years since its creation. SPREP's approach to coordination at the regional level is much different from that of the European instruments, in two ways. First, in initial conception as a 'regional environmental programme', SPREP has found it easier to shape its mandate based on members' needs and desires for coordinated action. In addition, over the years since its creation the Programme has become the repository of other instruments (the Apia and Waigani Conventions), and involved in a broad variety of other region-wide actions.

As a consequence of this complete integration approach, SPREP's proposed involvement in MPA creation may be more integrated from the outset. Rather than having different geo-located protections developed by different sectors and later negotiated among them, the SPREP approach suggests that at least some of the relevant sectors will be involved in negotiations and programmatic development from the beginning. As a consequence, SPREP's provisions for conservation are much more focused on an 'ecosystem approach' which integrates social and economic issues with conservation concerns from the outset. Moreover, in a very real sense, the Pacific Islands represent one of the few areas in which one can consider a 'community' (rather than a commercial sector) to be directly interested in and part of the broader reach of oceans, so that it is not surprising that community decision-making is strongly integrated in SPREP's objectives and *modus operandi*.[110]

2.3 Overall Gaps, and Controversies in the International Framework[111]

The completeness and implementation of the current international framework as described above, has been the subject of long discussions and debate, and will be further considered in international processes, as described above. These discussions have different impact and relevance to different ocean zones, given that the central issues of MPAs in the high seas (legal coverage and mechanisms) are well decided for waters and submerged lands under national control.

2.3.1 IMPACT OF THE INTERNATIONAL FRAMEWORK ON MPAS IN THE HIGH SEAS AND THE AREA[112]

Recently numerous experts have considered the question of 'gaps and inconsistencies in the international ocean regime concerning MPAs and conservation in the high seas and The Area.[113] These

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slopes of the Rockall Bank, and elsewhere in the OSPAR region. In another example, in 2003, ASCOBANS proposed to alter its geographic coverage to match that of the OSPAR region. (That proposal was referred for further study.)

[110] Although giving "considerable attention" to coastal and marine environments, which it notes are the 'dominant ecosystems of most SPREP members, it is notable that to date, SPREP's work has not as yet specifically focused on MPAs. However, it is clear that MPAs created by SPREP member countries are guided by the Noumea Convention. (Article 14.)

[111] This section examines legislative gaps, inconsistencies and controversies, and does not consider the issues of implementation/governance, decision-making, and socio-policy, to be considered in other papers. Based on requests to avoid 'purely legal issues' and focus on questions of legislation of relevance for discussion/decision by non-lawyers, this section will not discuss the broader range of still unresolved legal issues relating to oceans and international conservation instruments, such as the legal status of marine jurisdiction (currently under continuing negotiations in numerous international forums), the extent of application of customary international law and international common law to these issues, the responsibility for development of consistent interpretation of overlapping provisions, and the ISA's ability/authority to redefine its mandate to include non-mobile living resources of the Area.

[112] The high-seas and Area represent one element of the concerns of this paper, but are not the primary focus of this report or of the planned meeting. Accordingly, these issues are only briefly summarized in this paper.

[113] See, e.g., Kimball, *et al.,* 2005; Herriman, *et al*., 2002; Baker M., and de Fontaubert, A.C., 2001; Young, T., 2003, and Young, T., 2005.

discussions have focused on two primary questions: (1) Is there sufficient international law to support the creation of MPAs in the high seas and in The Area? (i.*e.,* Are there gaps in the international framework?), and (2) What mechanisms or methods can be used for creating MPAs?[114]

Coverage of the Framework

In the high seas, three types of legal coverage issues should be examined relating to the international framework – *substantive coverage*, *geographic coverage*, and *political coverage*.[115]

(a) Substantive Coverage

Substantively, although the primary provisions and mandates of UNCLOS, the CBD and other international instruments are clearly broad and comprehensive enough to encompass the possibility of creating MPAs in the high seas or The Area. Coverage discussions instead focus on the need for additional detailed (regulatory-style) provisions to guide/mandate legal and practical actions relevant to MPAs, whether defined as such or in more general terms (measures for protection of the marine environment, *in situ* conservation, etc.).

At the global level, instruments and processes have not yet been able to agree on such detail with regard to MPAs *per se*, specific powers that might enable protection of particular areas have been specified in the context of other geo-located provisions, including limits on maritime transport, mining and mineral-related operations, fishing and use of other marine resources, as well as the protection of particular species and their habitats, and potential tools for enforcement. Some regional documents have begun to develop such agreements.

Regarding specific issues, two primary areas relevant to MPAs in the high seas are currently perceived to be unaddressed within the international framework–

(i) the rights and responsibilities relating to the living resources of The Area,[116] or

(ii) the declaration of protected areas in either the high seas or The Area.

Other open questions have been identified regarding the ability to develop legally valid criteria for site identification with regard to largely unexplored high-seas,[117] and the extent and nature of possible enforcement of MPA provisions in high seas and Area.

(b*) Geographic Coverage*

Geographic coverage (the ocean areas to which each instrument applies) is usually specific in the text of the instruments. UNCLOS is generally intended to cover all oceans, including enclosed and semi-

[114] A third question (actually the first that must be considered) – the necessity of MPAs or other geo-located protections in the high-seas is a scientific, policy and socioeconomic question, rather than a legal one.

[115] To date, although a full legal analysis of these issues is still needed, a number of authors have provided initial analyses of one or more of these points, based on the texts of the various instruments and decisions of the Parties.

[116] Many of these issues are couched in terms of the "genetic resources of the Area," based on Article 15 of the CBD. This issue is not further discussed below. These matters are currently the subject of ongoing and difficult negotiations under the auspices of the CBD, (*See, generally,* CBD COP VII/19, UNEP/CBD/COP/VII/19, at part D) and have only a limited relevance to MPAs. Existing international marine law does not appear to address these issues. For a detailed analysis, *see* Young, T. 2004 "An Implementation Perspective on International Law of Genetic Resources: Incentive, Consistency and Effective Operation," in *Yearbook of International Environmental Law*, (Oxford Univ. Press), (general analysis, but mentioning marine matters), and Young, T., et al., 2006, in *Covering Access – Addressing the Need for Sectoral, Geographical and International Integration in Implementing the ABS Regime* T. Young, ed. (IUCN, 2006) (specifically addressing marine resources).

[117] Information deficiencies extend beyond the fact that over 90% of ocean areas have not been studied or even surveyed. For example, efforts to declare hydrothermal vents as MPAs must find a way to address the fact that vent fields are not permanent phenomena. Although the length of their continuation is not yet known, it is clear that they have a potentially predictable life span. Particularly in areas beyond national jurisdiction (in which protection must be negotiated internationally) it may not be worth the effort to protect such areas.

enclosed seas, for example. Other instruments (the FSA and Part XI Agreement) apply only beyond national jurisdiction.[118] Others (*e.g.,* the CBD, CMS, IWC) focus on each country's use of its powers to regulate activities of its citizens and of vessels in the high seas.

Coverage at the regional level is more complex. Coverages sometimes overlap, while many other ocean areas may not be covered by relevant regional instruments.[119] Where a variety of regional instruments operate in generally the same area, their coverage areas typically vary from one another, so that a rather complex overlay pattern may emerge, creating geographic loopholes of various types.

(c) Political Coverage

The most significant gap in the substantive coverage of the international regime of oceans is that of the political status of the instruments themselves. The most comprehensive legal instruments and frameworks relevant to high seas conservation (*e.g.* UNCLOS, the CBD, and MARPOL (and some other IMO instruments) have not been ratified by the United States, for example. Each global instrument appears to be supported by a different mix of Parties (*e.g.*, the USA has ratified the FSA, even though it has not ratified UNCLOS.) Many regional instruments have been acceded to by only a small number of countries within the region.[120]

The patchwork of geographic and political coverage can operate as a restriction on action. Each instrument is entirely separate and cannot formally integrate. Coordination among instruments regarding a particular area can thus be difficult.[121] Consequently, although the substantive coverage of the international regime of oceans is clearly broad enough to support creation of high seas MPAs, guidance and some mechanism for coordination/integration of existing instruments seems essential. Where countries are not party to particular agreements relating to actions on the high seas, only a small number of principles of international customary law apply.[122]

(d*) Other Gaps*

Like all international legal frameworks the international regime of oceans faces perennial problems regarding enforcement, implementation and coordination. These issues can have a very serious impact on MPA proposals, which depend on a high level of compliance across the range of users and potential users of the area. Few international instruments function to promote compliance or implementation.[123]

Procedural issues – Methods and Mechanisms

With the exception of the Mediterranean, current global/regional provisions for creation of geo-located protections in high-seas areas can only be adopted by consensus.[124] This suggests that there may be

[118] The FSC includes a few provisions applicable within the EEZs of member states.
[119] *See* Kimball, L. 2000, which maps the metes and bounds of RFMOs and other instruments. *See also* Appendix 3 below.
[120] In some cases, countries outside the region are allowed to exceed to particular regional instruments.
[121] For example, the IMO has so far refused to grant PSSA protection for the mouths of the Bonifacio Straits in the Mediterranean, despite acceptance by the countries with jurisdiction over the area. Chevalier, C., 2004.
[122] These principles are generally codified in UNCLOS as 'freedoms of the high seas' – a concept which imposes relatively few restrictions on countries and vessels who use the high seas (for any purpose) in a peaceable manner, without endangering other vessels, installations or owned property, and without committing acts of violence or piracy. International customary law recognizes a number of elements that have been codified in UNCLOS, however, many provisions of UNCLOS (including those relating to conservation and sustainable use) address 'new' issues not formerly a part of international maritime law, and thus not yet recognized as international customary law. MPAs and other geo-located protection provisions are among these matters.
[123] The WTO is the most successful example: WTO parties agree to abide by its tribunal, and the sanction of restricted or curtailed trade with other members – which does not require an enforcement body – is a strong disincentive. CITES has had similar success, using a similar disincentive (restricted species-related trade with CITES Parties, and international censure through public opinion.) Lacking self-enforcing sanctions, other (voluntary) tribunals have been less effective.
[124] Under CCAMLR, the Commission acts by consensus. The Commission may not include all Parties to the Convention.

little procedural or political difference between deciding to protect an area under a binding framework and creating a new such instrument for each new protected area.[125]

Other options for the development of MPAs and other geo-located protections include

- Development of non-binding instruments (voluntary protections),
- recognition by existing global and regional instruments and entities (cumulative protections),
- agreement by individual countries to bind themselves immediately (incremental protections.)

The third option above would involve the creation of an instrument that is only binding on signatories. Signatory countries will endeavour to require their citizens, entities under their jurisdiction, and vessels under their registry to comply with the protective measures for the designated area. This mechanism may be undertaken (i) by agreement among like-minded countries (even if only a small number of countries participate), without formal adoption by an international forum or negotiation, or even (ii) by declaration of a single country. Some of the CMS instruments appear to utilise this approach (ACAP and the various instruments governing marine turtles). In addition, four countries (the US, UK, France and Canada) have developed the RMS Titanic Agreement, in this fashion, hoping that other countries will join in future.[126]

2.3.2 GAPS IN THE FRAMEWORK RELEVANT TO NATIONAL MPA ACTIVITIES[127]

No global or regional instrument reviewed for this report *requires* that countries adopt MPAs or any other geo-located protective measures. However, many of these instruments (both global and regional) strongly *authorise* or *enable* countries to take such action, if they decide to do so in the exercise of their sovereignty.

More broadly, however, countries *have* firmly committed to –

(i) adopting appropriate measures for the protection, conservation, preservation and sustainability of the biological resources within their territorial seas, EEZs and OCSs, and

(ii) ensuring that the persons, entities and vessels under their jurisdiction comply with measures imposed by other countries and international bodies, regarding all other ocean areas (i.e., the territorial seas, EEZs and OCSs of other countries, as well as the high seas and the Area.)

While many commentators view MPAs (and other geo-located conservation measures) as an essential part of achieving these international objectives,[128] the decision about whether they are necessary rests with the country itself. Since each country's MPA decisions are matters of national sovereignty, the coverage of the international framework relating to national MPAs focuses on facilitating national implementation and cooperation – on providing guidance and assistance, rather than imperatives. Legal gaps in that coverage may arise where international concepts are not clear, particularly as to matters affecting national rights or the relationship between countries or between any country and the international bodies relevant to oceans and conservation.

[125] The development of site identification criteria will have a different role in international process than at national level. At national level, site criteria are often adopted to enable an administrative body to designate sites without returning to the legislative body. This result is unlikely in international law, particularly where sovereign rights (high-seas freedoms) are involved. Recent proposals on high-seas MPA framework creation propose negotiating new instruments, adopting protocols under them, and reopening/amending primary issues (scope and coverage) of existing instruments. *See, e.g.,* Kimball, et al., 2005.

[126] The Titanic Agreement will enter into force once two countries have ratified/acceded to it. This has not happened as yet.

[127] Please note that this section only examines the gaps in the international framework relevant to national legislation. National implementation experiences and issues are discussed in Part III of this paper.

[128] Allison, G.W., et al. 1998.

Substantive Legal Coverage

Generally, the international framework recognises and supports States' sovereignty, and the shared objective of protecting the marine environment and resources within their jurisdiction. It is left to each State to decide whether it achieves these objectives through the use of MPAs or through other means. The WSSD Plan of Implementation serves as the strongest mandate calling specifically for MPAs.
Some legal/systemic issues may be relevant, regarding national rights, including

- Rights of a State that has not asserted an EEZ, or has asserted only part of the EEZ powers and duties;[129]
- Special concerns relating to the waters above a country's OCS, and the horizontal boundary between the two authorisations.[130] (In practical terms, a country will have the greatest access, best knowledge and strongest incentive, to control and protect the waters above its own OCS.)

Responsibilities of Foreign Citizens, Entities and Vessels

The most important contribution of the international framework to national MPA development and implementation is the fact that each country and its citizens and vessels must comply with requirements of other countries. UNCLOS's strong provisions for 'innocent passage' through waters under national control or oversight are balanced by other provisions (also very strong) that countries must require compliance with the national and regional measures for protection of marine resources, including geo-located measures (MPAs, restricted-use areas, shipping lanes, ballast water discharge zones (or prohibitions) or facilities.) This enables countries to take action against foreign citizens and vessels for conservation violations, and to demand that the country with jurisdiction over the defendants should support and enforce those actions. These provisions have been applied through the International Tribunal on Law of the Sea, as well as in national courts, and could well be applied to MPAs.

The primary gap in this connection is the lack of a reliable penalty/incentive system that can be applied where the violators' country will not take action, or submit to the jurisdiction of the ITLOS. Ultimately, the resolution of this problem may require additional legal instruments, however, the primary obstacle preventing such action is probably political.

Guidance for the Creation and Implementation of MPAs

The international framework also provides mandates regarding the creation of guidance documents, technical assistance and other mechanisms which can share experiences, new concepts, best practices, and other tools.[131] Such mechanisms can support integration and synergies among international instruments (which is very difficult at the level of the instruments, as noted above) through national implementation. Unlike formal decisions of the instruments, the development of guidance principles and other tools can (and will usually be required to) reflect the objectives and requirements of as many relevant instruments as possible, and to focus on the synergistic implementation and compliance. At present, many international processes call for such guidance, suggesting that this issue is not really a gap, but rather an 'still-being-completed mandate." For example, OSPAR's has undertaken serious work toward the creation of guidelines and an implementation plan for the identification and

[129] For the present, it is common to consider these areas to be part of the regime of the high seas. Scovazzi, T., 1999, Chevalier, C., 2004.
[130] Although the OCS is fully controlled by a single State, the superadjacent waters above it are part of the high seas and therefore under the control of all States. OCS rights consist solely of "the mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil." UNCLOS, Article 77.
[131] *See, e.g.,* CBD-COP Decision VIII-24, paras 29-34 and 38 (2006).

establishment of MPAs throughout its coverage area.[132] In the early steps of implementing these decisions, OSPAR has already compiled lists of threatened species and habitats.[133] These documents have been discussed in international meetings as possible starting points for the development of global guidelines and standards.[134]

Networking

Increasingly, international processes provide significant forums for networking of technical and administrative experts, sharing experiences, needs and requirements.[135] These provisions also promote cross-border coordination and the development of informational databases, analysis of broader issues such as representativity and the need for a network of protected areas. In particular, Agenda 21, and especially the targets and objectives stated in the WSSD Plan of Implementation are directed towards networking national efforts that contribute to international environmental objectives.
In this connection, there are several possible gaps, such as the needs for

- official mapping of biomes and spatial distribution factors, as well as of geo-located protections, and providing a basis for integrating national measures into such mapping process; [136]
- guidance for biome-specific application of the application of the precautionary principle in the context of geo-located conservation measures,[137] and
- development of mechanisms for the involvement of stakeholders in marine resource management decisions.[138]

These issues continue to be difficult and somewhat controversial in many biomes and frameworks, and generally require specific provisions for application in each.

3. NATIONAL LEGISLATION FOR MPAS

Under the Terms of Reference, the next tasks of this Report focus on national legislation authorising the creation and operation of MPAs. The TORs envision two parts of this work – (i) brief exposition of experiences relating to the development of legislation (at national and regional levels, including RFMOs) to implement MPA objectives at national, bilateral and multilateral levels, and (2) discussion of useful legal options that have been used or proposed for addressing MPA development.

Owing to the limitations in the size of this paper, and the substantive difficulties involved in presenting legislative experiences in a way that ensures their usefulness, [139] the author has decided to

[132] OSPAR Strategy on the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area. IMO has also adopted, and is revising Guidelines for the identification and Protection of Special Areas and Particularly Sensitive Sea Areas. Resolution A. 720(17).
[133] Id at Paragraph 2.2, *and see* 2004 Initial OSPAR List of Threatened and/or Declining Species and Habitats (adopted in OSPAR 2003 and updated in 2004), Reference Number: 2004-06.
[134] Meeting documents, CBD Ad-hoc Working Group on Protected Areas, Montecatini Italy, November, 2005.
[135] Programmes of work under the CBD and CITES, and operational guidelines under the WHC provide detailed examples of the manner in which they can contribute to the international process, and to synergies among international instruments.
[136] *See, e.g.,* CBD-COP Decision VIII-24, para 44(c) (2006).
[137] *See* Korn, H., S. Friedrich and U. Feit, *Deep Sea Genetic Resources in the Context of the Convention on Biological Diversity and the United Nations Convention on the Law of the Sea.* (BFN – Skripten 79, 2003), proposing that "The new user of a resource has to prove that the intended uses will not cause severe damage to the resources." This approach appears to have as its inception, the precaution language from the Code of Conduct on Responsible Fisheries (Section 7.5): *If a natural phenomenon has a significant adverse impact on the status of living aquatic resources, … [and] where fishing activity presents a serious threat to the sustainability of such resources, States should adopt conservation and management measures on an emergency basis to ensure that fishing activity does not exacerbate such adverse impact.* (CCRF, § 7.5.5, slightly reorganized.) However, as shown in Cooney, R., 2005, the actual meaning and application of this language is particularly difficult in the resource management process and needs further elucidation.
[138] Often a large percentage of the primary users of marine areas (unless very close to shore) may have little or no connection to the country or its governance.
[139] The concept of "legal case studies" is highly complex, owing to the number of factors (political, practical, social and economic) and sectors whose input re-shapes the legislative proposal before its adoption, the amount of time between initial

merge these two elements. This section provides a single discussion of national legislative measures and systems, illustrated with examples from author's the review of national legislation undertaken in the preparation of this Report. [140]

This discussion will be focused through the objectives of MPA creation, and will consider including

- effective legal options for achieving those objectives;
- the most important areas in which guidance can provide assistance to the legal work involved in MPA development and implementation.

The contents of this section are strongly guided by the author's belief and experience that legislation must be crafted to the particular situation of the individual country (or other jurisdictional unit that will adopt the law), and that it is not productive to adopt specific generalisations about what all countries should do to maximise legislative effectiveness. However, recognising the object of the process for which this Report will be presented, these examples are offered to provide some object-oriented basis for the development of legal guidance.

3.1 MPA legislation – crafting a system to address national needs

At the national level, legislation for the development of MPA systems is or should be a relatively straightforward (although certainly not simple) task. The primary obstacles and challenges of MPA creation and implementation are practical in nature; hence, legislation can be a tool to enable action, to eliminate impediments, or to clarify rights and interests, but cannot bring about conservation or protection of anything. The drafting and negotiation of legislation addressing natural resources and conservation is a highly individualised process, almost never conducive to the use of model laws. Among the more than 200 national governments on the planet, it is not possible to find two that are truly alike for purposes of national legislation. Hence, no matter how common the topic is, one will usually find a very broad range of significantly different approaches among functionally effective national systems. This can create a problem for the development of guidelines.

Successful legislative development and implementation is rarely linked to textbook perfection of legal drafting. Instead, functional and effective legislation is "situational." The difficulty is not in being able to draft proper legislative provisions, but to design legislation so that it addresses relevant national needs, requirements and problems, and so it can operate effectively. In drafting or negotiating national legislation for MPAs, the success of the legislative process depends on how completely the drafter understands five factors:

(i) What is required (both by national law and under international commitments, as discussed above)?

(ii) What is desired by the body seeking to adopt or propose the legislation?

(iii) What particular problems have been noted in connection with current law or related laws?

(iv) What stakeholders are involved, and what interests or incentives might apply to them?

(v) How do existing relevant agencies and authorities function, and what factors appear to increase their effectiveness within the system?

The challenge for the draftsman of MPA legislation is not in perfect drafting of 'model' legislation, but in discerning what is needed, and crafting the relevant instruments so that they address these five

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drafting and full implementation, and the difficulty in measuring progress and/or ascribing particular results to particular legislative choices.

[140] See Specialised Bibliography and Appendix 2.

factors, operate in an integrated manner that is consistent (both internally and with other laws), and (where possible) can adjust or evolve to address needs that are found by experience, newly arising problems, and alterations in the physical area involve.

3.1.1 NATIONAL COMMITMENTS AND OBLIGATIONS

As noted above, international law does not place any specific obligation on any country to create MPAs, although several instruments impose obligations on countries to take measures to protect, preserve, conserve and/or ensure the sustainability of marine natural resources, and to ensure that persons, entities and vessels under their jurisdiction comply with such measures that are adopted by other countries. While many commentators view MPAs (and other geo-located conservation measures) as an essential part of achieving these international objectives,[141] the decision about whether they are necessary rests with the country itself. Accordingly, current international law provides guidance rather than imperatives regarding whether and how MPAs and similar tools can be utilised.[142]

The UNCLOS provisions delineating the ocean zones and the rights of countries within those zones, as described above, are very important to national legislative development as are the requirements imposed under UNCLOS regarding the actions of foreign persons or vessels in territorial seas, EEZs and OCSs. These provisions clarify the rights a country may take with regard to these zones, however, it is not required that a country accept or exercise all of these rights. For example, many countries that have not formally adopted EEZs have chosen to formally adopt only a limited set of rights and responsibilities – *i.e.,* to create only a "fisheries zone"[143] or "environmental protection zone"[144] rather than a complete "exclusive economic zone." Often these zones do not extend to the full geographic area that might be declared as an EEZ. [145]

With regard to their marine resources, including the resources of the OCS, it is important to distinguish between the countries' powers and their duties. Powers (including the right to obtain fees or exert other controls on the taking of biological and mineral resources) are not mandatory. No country is required to take these actions. Duties, however, are generally mandatory. Hence, the UNCLOS and CBD mandates about adopting measures to promote conservation, preservation, protection and/or sustainability of marine resources is a duty. However, in choosing how to meet this obligation, States have many options (powers) including the possibility of designating areas for protection (limited or complete) or for other purposes.

3.1.2 LEGISLATIVE OBJECTIVES

At the national level, the primary basis for action is the objectives and desires of government, and through it, of the people. Typically, legislation is developed around one or a series of objectives and needs, which have been identified. Protected Areas legislation, for example, may be spawned by intense interest in protecting a specific area or addressing a particular problem. By choosing to adopt a framework of legislation, however, the parliament may perceiving one or more broader objectives, such as conservation, protection of threatened areas, tourism, etc. to be pre-eminent.

In many cases, however, national legislative objectives have a 'second line' which follows the basic conservation objectives, and specifically indicates their relationship to other priorities. For example a

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[141] Allison, G.W., et al. 1998.

[142] In some cases, countries have specifically created international MPA obligations for themselves. For example, the Great Barrier Reef Marine Park in Australia is the subject of two international commitments, which Australia voluntarily committed to in international process. Specifically, most of the Park is listed as a World Heritage Area under the WHC, and a PSSA under the IMO system.

[143] *See, e.g.,* ALGERIA, Legislative Decree of 28 May 1994, at Art. 6; SPAIN, Royal Decree no. 1315/1997, modified by Royal Decree no. 431/2000.

[144] *See, e.g.,* FRANCE, *Zone de Protection Ecologique*, created by decree no. 2004-33 (J.O no. 8 of 10 January 2004, at 844, and CROATIA, Zone of Ecological Protection and Fisheries (3 October 2003).

[145] *See, e.g.,* SPAIN, Royal Decree no. 1315/1997, cited above.

protected areas commitment may include the phrase "without causing undue interference in existing commercial operations" or "while recognising the special rights of coastal residents (or indigenous communities, or some other group)" or "while recognising the interests created under pre-existing EEZ agreements." In some cases one or more particular concerns (either positive or negative) will predominate.

One example of this is found in Tanzania's Mafia Island Marine Park (MIMP.) Although designated as a marine '*park'* a term which in Tanzania is integrally connected to tourism, at the time of its creation the objective of the MIMP was not primary tourism. Other activities such as commercial fishing, community participation/livelihoods and critical habitat protection are much more central to its creation and operations. Consequently, its management and cooperative processes are focused on use issues, with notable implementation success in addressing key abuses, to wit: Elimination of dynamite fishing; demarcation and implementation of protection zone in Chole Bay; and removal of seine nets through gear exchange scheme.[146]

3.1.3 NATURE AND SOURCE OF PARTICULAR PROBLEMS OR CONCERNS

In most instances, countries will already have some legislation related to conservation and/or sustainable use in marine areas, but will have determined that it is not sufficient to meet their needs in the designation and implementation of MPAs or other geo-localised measures. Analysis of the underlying source of this conclusion, and the extent to which legislation can resolve these problems is one of the most difficult elements of the legislative development process. Typically, the nature of the problem can be

- Institution selection and organisation (the choice of agency/ies, ministry/ies or other legal units assigned to the task, the effectiveness of inter-agency collaboration);
- Constitutional/Procedural (providing mechanisms that ensure due process, equal protection, transparency, and public participation, while meeting governmental obligations in dealing with public resources);
- Empowerment (authorisation of appropriate persons or entities to oversee various aspects and/or to take necessary actions);
- Structural (ensuring that the contents of the law are appropriate and acceptable under existing national legislative practice, determining the division between primary legislation (statutes and ordinances, etc.) and secondary legislation (regulations, rules, operational guidelines, etc.);
- Jurisdictional (relation between MPA legislation and other laws being implemented by other ministries, or with other mandates);
- Functional (capacity of relevant agencies to take necessary action, legal empowerment of specific tools and mechanisms used by agencies);
- Financial (mechanisms for obtaining budgetary support, and for supplementing it through fees and other sources); and
- Evidentiary (standards of proof and documentation necessary to take administrative and legal actions.)

Examples of legislation drafted to address these factors are found in a wide range of countries. Available literature does not provide a basis for determining if the change in legislation actually resulted in alleviation of the problem. Often, assumptions are made about the source of the problem without full investigation. For example, attributing a problem to the choice of the wrong agency may

[146] From official website (http://www.mafia-island-tanzania.gold.ac.uk/ecology/) supported by the IUCNWCPA-Marine/WWF's MPA management effectiveness project (described at http://effectivempa.noaa.gov/sites/mafia.html)

overlook the fact that the budgetary allotments are insufficient (so that any designated agency would be unable to fulfil the mandate), and that the country does not possess the necessary equipment or other capacity to implement existing laws. In many instances, the above problems will not be "solved" through legislation, although appropriate legislation may be one component of resolving the problem.

One proven example, however, is found in Germany. Prior to 2001, the selection of German MPA sites was legally possible only within the territorial sea, and the relevant decision rested solely with the states (Länder) responsible for the particular site. It was claimed that this structure prevented Germany from meeting its NATURA 2000 obligations in the marine areas of the German EEZ. In April 2002, the relevant law was amended, establishing a statutory basis for federal declaration, giving the German Federal Agency for Nature Conservation (BfN) within the German Environment Ministry (BMU) the full responsibility for selecting, designating and managing protected areas in the EEZ.[147] Germany has now successfully designated MPAs covering far more than 10 percent of its territorial sea and EEZ.

3.1.4 STAKEHOLDERS AND INCENTIVES

Natural resources management and conservation are processes that involve both government and various non-governmental stakeholders. In many cases, these laws are designed to regulate and control commercial and other private use of resources. Given that patrolling and other direct oversight are frequently difficult and expensive, and sometimes require the development new skills and capacity, it may be impossible to implement these laws through direct government supervision. Instead, it may be necessary to enquire into the underlying objectives of various stakeholder groups and to attempt to design incentives that encourage compliance.

This process may take the form of the development of , for example –

- tax benefits, streamlined processes for license renewal and other benefits provided to users who are able to document their compliance;
- certification systems that enable the user to get access to particular markets or buyers, or to obtain a premium price or other benefit;
- voluntary codes, tied to clear promotional information explaining the benefit to the individual user, the stakeholder group or the wider community that will arise from compliance.

Another, less frequently addressed issue relates to the unintended or perverse incentive arising out of the designation of an MPA. Often, MPA designation is proposed as a tool to curtail certain activities that are harming a particular ecosystem or feature – *e.g.,* to prevent bottom trawling which is damaging cold-water corals. However, given that many such ocean features are not yet fully mapped, the designation of an MPA in an area already damaged may operate only as an added incentive to the fishermen to find and exploit another cold coral site, before it can be officially identified and protected.

3.1.5 SYSTEM DESIGN

One critical factor affecting legislative development is the design of the institutions and processes by which the MPAs will be governed. This task necessarily involves a combination of factors, including the integration of new concepts and structures from other countries with the functional approaches and systems currently in use in the country. In this connection, it is essential to consider a range of relevant legal frameworks operating within the country, to determine how they function, how they collaborate with other sectors, how governmental responsibilities are divided, how conflicts between legislative enactments are resolved, and other questions.

[147] GERMANY, Federal Nature Conservation Act (Bundesnaturschutzgesetz, BNatSchG), art. 38

Often one of the best tools for structural development is the comparison among natural resource administrative systems from various ministries. It may be useful to engage in significant research and analysis regarding institutions and systems operating in other sectors, to determine which systems function best, and attempt to identify the particular structural and other factors behind their success.

3.2 Guidance and experience with particular legal options and components

As noted above, the actual drafting of legislation addressing MPAs or other kinds of geo-located measures is not unduly difficult or challenging. The greatest challenges of the legislative process are system design – (i) to create a system that effectively addresses the five components described above in an integrated and internally coordinated manner; and (ii) to identify and respond to the unique factors relative to the marine biome (as compared with terrestrial ecosystems) which affect how they are administered; and focusing on outcomes.

In developing guidance on national MPA legislation, it is necessary to consider a list of key legislative elements, providing a range of options and of factors that might be useful in selecting among the options, rather than promoting specific choices. The following sections discuss a number of key elements that must be considered in drafting national MPA legislation, and suggests some of the possible options for each element, illustrated with examples from national implementation. It attempts also to provide some ideas and suggestions regarding criteria that may affect the selection among options.

3.2.1 INSTITUTION(S): SELECTION AND AUTHORISATION

The nature of the institution or institutions designated to manage MPAs or related designations, and the manner in which they must operate or coordinate is obviously a key concern for any MPA framework. In identifying and addressing the causes of pre-existing problems or system failures, it is common to identify the institutional framework as the source of the problem. However, generalisations about these issues should be avoided, and institutional development should be guided by national situation and experiences.

Two primary institutional approaches are possible – (i) the development or authorisation of a single, unitary body with responsibility for MPAs and/or other geolocated marine protective/conservation measures or (ii) distribution of these responsibilities among multiple institutions. On the surface, this is a choice or spectrum running from maximising internal consistency (the unitary approach) and maximising expertise in management (allowing each agency to act in the areas in which they are expert.) In fact, however, the choice will depend on many factors, including past experience regarding the effectiveness of inter-agency cooperation, the specificity of each agency's existing expertise on relevant issues, questions of continuity and many other political and social issues.

In practice, a truly unitary approach is almost impossible. Virtually all MPA institutions involve at least some level of distribution. For example, the Great Barrier Reef Marine Park in Australia, although primarily under a single relatively comprehensive governing framework still recognises the role of sectoral agencies.[148] In addition, although most of the Marine Park's area is under

[148] Domestically, at the Commonwealth level, the GBRMP is governed by three laws addressed (only) to the GBRMP,. AUSTRALIA Great Barrier Reef Marine Park Act 1975; Great Barrier Reef Marine Park (Environmental Management Charge-Excise) Act 1993; and Great Barrier Reef Marine Park (Environmental Management Charge-General) Act 1993. Three Commonwealth regulations govern operational matters including management planning , permits, compulsory pilotage, mining/extraction restrictions, aquaculture controls, and general administration. AUSTRALIA Great Barrier Reef Marine Park Regulations 1983; Great Barrier Reef Region (Prohibition of Mining) Regulations 1999; Great Barrier Reef Marine Park (Aquaculture) Regulations 2000. In addition to these, the GBRMP is also subject to more general Commonwealth laws of specific relevance, including laws governing biodiversity/species conservation, cultural heritage, pollution prevention, indigenous rights, and other ocean-based activities ("sea installations.") AUSTRALIA Environment Protection and Biodiversity Conservation Act 1999; Environment Protection (Sea Dumping) Act 1981; Historic Shipwrecks Act 1976; Native Title Act 1993; Protection of the Sea legislation; Sea Installations Act 1987

Commonwealth jurisdiction, some parts are specifically under jurisdiction of the State of Queensland.[149] These separate authorities are fully linked into the planning and management processes of the GBRMP, through a detailed regulatory system for the development, implementation and regular (every 5 years) reconsideration of the GBRMP's Strategic Plan.

By contrast, in Tanzania, responsibility for the marine protected areas was contested between the Fisheries Division and other agencies responsible for protected areas and wildlife conservation.[150] In the end, although the initial marine protected area to be designated (The Mafia Island Marine Park) includes entire islands and many of its provisions focus on tidelands and other areas very near shore (and thus very similar to terrestrial PAs), the government chose to create a separate law and institution within the fisheries Division as the primary management body. This choice was apparently driven by a high level of operational (and legislative separation) among departments within the Ministry of Tourism, Natural Resources and Environment, and the Fisheries Division's existing expertise and involvement in the primary issues of greatest importance.

Legislatively, it will be essential to determine the limits of MPA jurisdiction (or the division of responsibility among relevant agencies) in a way that ensures that there are no unintended gaps in overall governance of marine matters, and that there is a basis for determining involved agencies' mandates in areas of overlap.[151] One approach to coordination involves the creation of one or more supervisory, advisory, or oversight bodies. Very commonly, such a committee may be created including a representative of the relevant sectoral and cross-sectoral governmental agencies. Difficulties arise in considering whether the members of the Committee are

- specified individually (ensuring continuity, but creating additional procedural problems when the individual moves to another ministry);
- identified by their specific, high-level position (theoretically ensuring that the agencies' decision-makers are aware of MPA issues and inter-agency agreements, but practically making it difficult to have full attendance at meetings, due to the time demands on this level of government officials); or
- designated by the head of each named agency (ensuring that each agency is represented at each meeting, but potentially limiting continuity and possibly also minimising the extent to which the Committees actions and agreements are generally known throughout the agency members.)

All of these options have been used in various legislative instruments,[152] however, it is not really possible to identify one approach as 'best.' A related question is the inclusion of members of the public and private sector in such oversight committees. Here the main options are inclusion as full members, inclusion as observers, creation of a separate 'advisory committee' which reviews and advises before the oversight committee's decision, or inclusion only through extension of public

[149] *See,* AUSTRALIA (Queensland) Coastal Protection and Management Act 1995; Environmental Protection Act 1994; Fisheries Act 1994; Integrated Planning Act 1997; Marine Parks Act 1982 and Marine Parks Act 2004; Native Title (Queensland) Act 1993; Nature Conservation Act 1992; Transport Operations (Marine Pollution) Act 1995; Transport Operations (Marine Safety) Act 1994; Workplace Health and Safety Act 1995. All statutes referred to in this and the previous footnote obtainable from the GBRMPA website at http://www.gbrmpa.gov.au/index.html .

[150] TANZANIA, Marine Parks and Reserves Act, 1994 (Act No. 29 of 1994); *implemented by* Marine Parks and Reserves (Declaration) Regulations, 1999 (G.N. No. 85 of 1999); *and see,* Young, T., *Legal and Administrative Assistance Regarding the Management of Marine Resources and the Proposal to Establish and Manage the Mafia Island Marine Reserve* (FAO, 1991-92, two reports.)

[151] This latter need must generally be addressed by negotiation among the relevant agencies and their various instruments, rather than a simple statement in the new law that it predominates over all other laws on these issues, given that this provision is often found in all legislation, wherever an unresolved problem of gaps and overlapping mandates exists among ministries or agencies. See also *Legal and Administrative Assistance* (1991-92), cited above.

[152] See, e.g., TANZANIA, Marine Parks and Reserves Act, 1994 cited above, and related reports; SEYCHELLES, Fisheries (Amendment) Act, 2001 (Act No. 2 of 2001).; Maritime Zones Act, 1999 (Act No. 2 of 1999); Environment Protection Act 1994 (Act No. 9 of 1994); and Young, T., *Legislation and Institutions for Marine and Terrestrial Biodiversity Conservation and National Parks in the Seychelles* (FAO, 1992-93)

participation processes (discussed below.) Here also, the selection of options depends on the national situation, with all these (and probably other) options having been adopted by various countries.[153] In many countries, as discussed below, oversight committees are also established at the local level, for each MPA.[154]

One final institutional point which must be mentioned is that of community management. Although a high-profile issue in other Protected-Area contexts,[155] community-managed MPAs are a far more difficult concept. Community interests are strongly reflected in public participation processes (discussed below), but direct community management can be difficult, particularly as the distance between the MPA and the shoreline increases. In part this may reflect the complexity of the subject matter, the lack of relevant equipment, the need to address the interests of other stakeholders (fishing vessels from outside the area, the international nature of ocean governance, or other factors.

3.2.2 PROCEDURES AND CIVIL PROTECTIONS

One of the most 'legal' areas of legislative drafting relates to the protection of the civil, human and procedural rights of people involve in or affected by the MPA or its operations. These issues are closely governed by primary and organic laws of each country, but are also generally based on internationally accepted principles such as the rights to "due process of law," "equal protection under the law", transparency, and public participation. In addition to protecting the rights of stakeholders and other persons affected by the MPA and its operations, these principles also protect a more general right – the right of citizens to expect their government to protect the country's natural resources, to obtain a fair return from their use, and to ensure that those proceeds are used fairly for legitimate governmental purposes.

Key elements of the legislation will include detailed and transparent processes and standards for

- Identifying, declaring and implementing MPAs;
- Addressing the possibility of de-commissioning MPAs where significant national interests require, or where the site conditions change, due to human factors (such as global warming), natural conditions (such as the end of the 'life-cycle' and eventual disappearance of a protected hydrothermal vent), and unexplained problems (such as coral bleaching.)
- applying for and obtaining concessions and licenses;
- ensuring appropriate public involvement in relevant decisions; and,
- protecting the civil rights of stakeholders and others impacted by MPA decisions, by providing rights to
    - appeal or challenge decisions;
    - contest enforcement actions; and
    - have access to information, decisions and discussions.

In addition, more specific protections and concerns will have to be addressed in the form of, for example, the protection of the livelihoods and other interests of local residents and local or traditional users of the natural resources. These provisions present a very limited risk of challenge by foreign and commercial users under the WTO or national equal protection laws.

Increasingly, the role of the public is most highlighted and most difficult and controversial within these drafting processes. A number of different options for public participation have been tried.

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[153] *See, e.g.,* SEYCHELLES, Proposed Marine Conservation Act, 1994 (creating a separate committee with advisory powers)
[154] TANZANIA, Marine Parks and Reserves Act, 1994 cited above, and related reports
[155] See various documents adopted by the 5th IUCN World Parks Congress (2003); found at http://www.iucn.org/themes/wcpa/wpc2003/index.htm .

These processes, while relatively straightforward in developed countries, they present greater difficulty in developing countries, where the most affected communities may also be the least well equipped to participate in these processes. A detailed example of the application of participation mechanisms in a developing country's MPA process is found in Tanzania's Mafia Island Marine Park, where large multi-day public meetings were held bringing together all relevant government agencies, commercial stakeholders, NGOs, parliamentary representatives, scientists, and a "representative" selection of representatives of local communities.[156]

One of the most important components of this process was the identification of a representative list of local residents, and assistance in their participation. Although geographic representivity (representatives, including village chiefs, from all affected islands) was important, it was also important to get the views of local fishermen, women's collectives who earned money by collecting, drying and selling octopus, entrepreneurs who were collecting and burning coral for lime production, and other groups. It was important also to recognise that local and artisanal fishermen who did not live within the marine park area (from mainland communities) were also affected, and should be represented. A number of local residents needed particular kinds of assistance in order to participate, including language assistance, opportunity to ask questions on a one-on-one basis, and encouragement to provide their own perspectives, even when it differed from those of higher level local officials.[157] Standards for determining whether a meeting is 'representative' and for ensuring that all views are properly expounded may sometimes require different processes and more detail in these situations. [158]

In developed countries, participation provisions are yielding significant alterations in operations, and creating *de facto* partnerships between government and stakeholders. For example, Australia's GBRMP Authority, in light of its symbiotic relationship with the various businesses which provide and promote touristic services within the Park, has adopted a "Marine Tourism Contingency Plan," which "recognises that environmental incidents, such as cyclones and oil spills, may severely degrade the quality of a tourism site and that presentation of that site may damage the reputation of the Great Barrier Reef and the marine tourism industry." Under this plan, the Authority assists with temporary relocations for affected tourism operations, to ensure that they do not suffer economic hardships during recovery.

Another key legal issue relating to participation, relates to participation of stakeholders from outside of the country. In many countries, the main fishing interests operating in their EEZ are foreign nationals and/or vessels operating under foreign flags. Many (perhaps most) of these activities are undertaken under specific agreements and/or licenses with the country. However, it is often difficult under national law to develop, adopt and enforce participation requirements to enable these stakeholders to protect their interests in national decision-making relevant to or affecting their activities in the EEZ.

Another important point regarding public participation is the variety of kinds of actions and decisions where it can be required. While earlier laws typically focus only on management plan development, public comment and participation requirements are increasingly applied across the full range of MPA actions from legislative development through licensing and monitoring and evaluation.

3.2.3 SPECIFIC DUTIES, RESTRICTIONS, CONTROLS AND PROCESSES

The enunciation of the particular required, prohibited, controlled, and permitted actions within an MPA is an interesting combination of technical/scientific/practical needs with legal concerns such as evidence, enforcement, and due process.

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[156] *Described in* Coughanowr, C., M. Ngoile & O. Lindén, "Coastal Zone Management in Eastern Africa Including Island States," in Ambio, v. 24, n. 7-8 (1995); Andersson, J., and Z. Ngazi, "Marine Resource Use and Establishment of a Marine Park," in Ambio, v. 24, n. 7-8 (1995).; and Young, T., (1991-92), footnote 149, above,

[157] This need was extremely important with the women's collectives who were relatively shy about expressing their positions.

[158] Young, T., "Legislative proposal Regarding the Management of Marine Resources in the Proposed Mafia Island Marine Reserve and Provision for Future Additional Reserves" (FAO, August 1992)

Some of the most important technical-legal issues focus on the manner in which scientific and modelling data will integrate with protective measures. The two aspects of legislative drafting most relevant to these issues are zoning and planning within the MPA. While many kinds of geo-located protective measures do not call for zoning (where the measure is designed to apply fully to a precisely described area), formal MPA legislation frequently either allows or requires zoning. In Canada, for example, one MPA law specifically requires that all MPAs must have at least one strict conservation zone and at least one sustainable utilisation area.[159] Effective zoning may also be created by 'layering' more specific geo-local protective measures, including requirements for integrated coastal and marine planning, and controls on fishing, pollution and discharges from ships, minerals exploration, and species and habitat destruction.[160] Examples of a variety of approaches to planning and zoning are available.[161]

Another critical issue in some cases relates to the need to ensure that protective measures are reasonable in terms of the level of restrictions involved. One recent example of this approach is found in a 2005 decision of the General Fisheries Commission for the Mediterranean (GFCM.) Its interest in preventing harm to the geological and biological structures of the seafloor was addressed in a limited way by a statement calling on its Members to 'prohibit the use of towed dredges and trawlnet fisheries at depths beyond 1 000 meters.'[162]

Among procedural and practical issues, one important factor guiding the legislative draftsman is the manner in which such provisions will be enforced. If enforcement will be based on visual, radar or satellite surveillance for example, the law must specify the requirements imposed on vessels and users (VTS and specific statements about when and how one may enter an MPA) in a way that enables the data from surveillance, alone, to create a basis for action -- a *prima facie* case which the vessel or user must disprove. It must also find a way to address the users who cannot be identified solely from the surveillance data. Both of these requirements must satisfy important "due process" principles, including

- ensuring that vessels and users have sufficient available data to know about the restrictions and to identify the areas to which they apply;
- identifying and justifying those vessels and users who may be exempt from these requirements (indigenous traditional fishermen, for example);
- ensuring that the shift of the burden of proof (requiring the user/vessel to prove that his action was legal, once the *prima facie* case is established) is valid and not a denial of civil rights;
- creating standards for the satellite evidence – requiring that it be is sufficiently detailed and clear to demonstrate not only location, but violation of the law, etc.

In many cases, the most effective provisions are best when they focus on what may be proven. For example, a prohibition on capturing marine turtles may be more difficult to enforce than one which punishes possession, sale, or purchase of marine turtles or their parts. The latter can be proven

[159] CANADA, National Marine Conservation Areas Act, R.S.C. 2002, c. 18

[160] One example of all of the above within a single country is found in Canada. *See* respectively Oceans Act, R.S.C. 1996, c. 31, s. 4(1); Fisheries Act, R.S.C. 1985, c. F-14 (these provisions are not generally geo-located, however the wording of the legislation indicates that they may be applied in that way); Coastal Fisheries protection Act, , R.S.C. 1985 c. C-33; Collision Regulations, C.R.C. c. 1416, whale-strike reduction objectives described in *Transport Canada Press Release* AO17/02, Dec. 19, 2002, online at: http://www.tc.gc.ca/atl/marine/fundy_20021219.htm; Environmental Protection Act, 1999, R.S.C. 1999, Part VII, Div. 3; Shipping Act, R.S.C. 1985, c. S-9, *updated by* Canada Shipping Act 2001, S.C. 2001, c. 26 (in force as soon as regulations are adopted, expected 2006); *generally* (viz marine oil and gas exploration), Environmental Assessment Act, R.S.C. 1992, c. 37; Migratory Birds Convention Act, 1994, R.S.C. 1994, c. 22; *and* Species at Risk Act, R.S.C. 2002, c. 29. Although not stated directly, many of these laws appear to contemplate some implied vertical zoning (focusing protection provisions on activities affecting benthic or pelagic fish, for example.)

[161] *See, e.g.,* NEW ZEALAND, Guidelines for the creation of MPAs, TANZANIA, Marine Parks and Protected Areas Act, 1993.

[162] GFCM, Report of the 29th Session, at page 38.

wherever illegal material is found on the person, vessel, vehicle or private property of an individual, or on the market. By contrast, to successfully enforce a prohibition on capture, it may be necessary that the arresting officer has seen the actual capture. Similarly, in marine protected areas, it may be easier to enforce a provision limiting the possession of certain kinds of fishing equipment within an MPA than one which prohibits 'fishing in an MPA."[163]

3.2.3 ADDITIONAL CONCERNS IN DEEPER WATER

National and international MPA discussions increasingly consider the use of MPAs in deeper waters (EEZs, the OCS, waters above the OCS, the high seas and the Area.) Additional objectives and approaches may be necessary, suggesting the need to develop different kinds of legal measures (both hard and soft), based on different paradigms.

Within EEZs, a limited number of MPAs have been declared, but so far, most of these have been by developed countries.[164] It is not entirely clear why EEZ-MPAs have not generally been declared in developing countries, however the author suggests a combination of (i) lack of capacity to oversee/enforce, and (2) the fact that the prevailing administrative and legislative approach to MPA description does not appear to apply to deeper water. Specifically, in developing countries (and some developed countries as well), the primary model of the "Marine Protected Area" continues to be a watery version of the terrestrial protected area – the limits of the area, and of zones within it are platted on a map by "metes and bounds" descriptions, for example, and regulations apply from the surface to the seabed and resources found beneath it. This type of approach appears most operable where the protected area is near shore, and perhaps to the limits of territorial seas or a bit beyond – that is, within the range of most of the currently extant MPAs.

This point is partially demonstrated by examination of the implementation of Canada's two MPA laws.[165] The purposes underlying MPAs in the Oceans Act are generally focused on marine issues and sustainability concerns; by contrast, the purposes (and level of protection) of MPAs National Marine Conservation Areas Act have been described as "more analogous to that of a [terrestrial] national park (though not as complete.)"[166] As such, the NMCAA's authority has been utilised solely within territorial seas, and the Oceans Act for areas within the EEZ. This analysis is borne out by consideration of national MPA legislation from developing countries. In all such laws examined, the nature, objectives, terminology, approaches and mechanisms/methodologies are frequently identical to those applicable to terrestrial protected areas.[167] This suggests that, if MPA goals and targets require the creation of MPAs in EEZs, it may be necessary to provide assistance to countries in identifying and addressing the aspects of MPA law and practice that are different from terrestrial PAs, and will need to be addressed and empowered differently in national legislation.

A few countries have also proposed to unilaterally declare some areas of the high seas to be protected in less conventional ways. In some cases, a country proposes to declare an MPA that includes waters within the high seas (usually superadjacent to the country's OCS.)[168] Another approach, described

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[163] SEYCHELLES, Environment Protection Act 1994 (Act No. 9 of 1994); Proposed Marine Conservation Act, 1994; and Young, T., Legislation and Institutions for Marine and Terrestrial Biodiversity Conservation and National Parks in the Seychelles (FAO, 1992-93)

[164] *See,* CANADA, Oceans Act, R.S.C. 1996, c. 31, s. 4(1). Some of the more prominent such areas include the Bowie Seamount, the Endeavour MPA, including the Juan de Fuca Ridge (hydrothermal vents), and the Gully (a deep canyon area, habitat to many marine species, including whales; NORWAY, lophelia banks; PORTUGAL, Dom João de Castro Seamount in the Azores (*see* http://www.joel.ist.utl.pt/dsor/Projects/Asimov.) In addition, the Seychelles has imposed stricter conservation/sustainability motivated controls on fishing in all its EEZ areas. (Personal communication with Randolph Payet, Ministry of Fisheries.)

[165] CANADA, Oceans Act, R.S.C. 1996, c. 31, s. 4(1); and National Marine Conservation Areas Act, R.S.C. 2002, c. 18

[166] Breide, C., and P. Saunders, 2005, at 70.

[167] *See,e.g.,* SOUTH AFRICA, Marine Living Resources Act, Act18/1998, at §43 (authorizing only two-dimensional boundaries for MPAs, and prohibiting a full range of activities ('fishing, other biodiversity collection, pollution, construction or 'any activity which may adversely impact on ecosystems of that area') within any such area.

[168] E.g., CANADA, proposal for the Grand Banks MPA (Breide, C., and P. Saunders 2005); UNITED KINGDOM, general discussion of this option in DEFRA, 2004. In addition, some MPAs in the Mediterranean are believed by some to be 'high-

above, is the negotiation among two or more countries, who agree to consider an area of the high seas to be protected.[169] Under both of these options, the country or countries involved agree to recognise the designated area(s) as MPAs and to take legislative and other measures to require persons, entities and vessels under their jurisdiction to recognise the MPAs and comply with restrictions and regulations that will be developed. These measures do not, in themselves, place any obligation on other countries, persons and vessels, to recognise the MPA or comply with its terms. However, the designation may trigger the requirements of UNCLOS, which call upon countries to "refrain from unjustifiable interference" with marine conservation and other measures adopted by other States.[170]

3.2.5 PENALTIES, FEES, ASSESSMENTS AND OTHER REQUIREMENTS

A problem common to many countries is the difficulty in assessing penalty and other amounts which are appropriate to deter violators and to provide the level of funding needed to repair or compensate for the damage caused by violations. In many cases, fines and penalties can only be set by primary legislation, hence a long and complex legislative process will be necessary to revise these amounts. Often fees for services, licenses, concessions and other activities can be set by the administrative body without going to Parliament, but this is not universally true.

Two primary related problems here are (1) ensuring that the penalties and assessments are large enough that they deter illegal behaviour, including by foreign persons or vessels whose financial resources are larger and might be undeterred by penalties directed at local users; and (2) creating a basis or standard for assessing local users at a different rate than that applicable to foreign users. Particularly, in the case of fees and assessments, it is important to realise a dual purpose, and consider the need to ensure that these amounts are reasonable and promote a sustainable level of resource use for the welfare of the country.

Another essential legislative issue here relates to the assessment of the costs of remedy, or reimbursement of the value of harm, where a user or other person or vessel causes damage to natural resources. The actual decision to claim such amounts depends on a number of political and other factors, however, it is usually important for the law to enable such assessments. This will usually require the development of both a criminal penalty based on the value of the harm or the cost of remedy, as well as a civil claim mechanism for such harm.

3.2.6 FINANCIAL, LOGISTICAL, NETWORKING AND CAPACITY ISSUES

Finally, although law cannot affect budgetary allocations, or obtain equipment or training, it may be an important tool in enabling them. In most countries, it is not reasonable to expect MPAs to be self-supporting, however, where national law permits, the legislative draftsman will usually consider specific provisions allowing the MPA to retain all amounts that it receives in the form of license fees, concession payments, compounded penalties, and civil awards for damage to the MPA. In addition, it is sometimes important to develop mechanisms that enable direct donor assistance to be received and utilised by a specific protected area (something that may not be authorised under the country's general financial legislation.) [171]

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seas' MPAs, because most Mediterranean countries have not adopted EEZs. (*See* Chevalier, C. (2004); *and* Scovazzi, T., ed., 1999.)

[169] *See,* RMS Titanic Agreement and UNESCO Convention on the Protection of Underwater Cultural Heritage. One MPA, which may be considered to be a "high seas" MPA, is the Pelagos Sanctuary declared by France, Monaco and Italy (described in Notabartolo, G, 1999.) This MPA is entirely within the area which would be included in the EEZs of those three countries, however. In addition, proposals by regional instruments and proceses technically fall within this category, to the extent that the regional body seeks to apply its designations to waters outside of its members national EEZs and/or to seabed areas beyond national OCSs. A number of such proposals have been floated at recent OSPAR meetings.

[170] UNCLOS, Articles 117, 194.4.

[171] In Tanzania, the Mafia Island Marine Park was able to overcome serious challenges arising out of budgetary shortfalls preventing the acquisition of equipment needed to patrol the significant levels of fishing in the area. Ultimately, NGO support and a positive collaboration with local residents and artisanal fishermen have yielded positive results. Source:

In many cases, greater concern relates to the availability of equipment and manpower for particular purposes, including especially patrolling and the apprehension of violators on the ocean. While some of these issues can be addressed by mandate to police and coast guard regarding their duties in enforcing these laws, however, such provisions cannot alter the priorities of those enforcement bodies, which may place greater emphasis on controlling smuggling or other criminal behaviour above that of enforcing conservation laws. Alternatives to this approach, however, are not always effective. The empowerment of MPA officials to engage in these activities will not overcome the lack of budget, the need to train these officials in evidentiary collection practices, and the need to address the risk that violators may be armed or violent.[172]

Many of these issues have been confronted by the Seychelles in developing, adopting and implementing their national marine conservation regulations. Those measures include legally valid and effective authorisation to take appropriate action to oversee and enforce geolocal protection measures in its EEZ. Unfortunately, however, budgetary and other limitations have made these measures virtually ineffective in practice. The primary mechanism utilised to date has been apprehending Seychelles vessels returning to shore with catches that are either not licensed or not found outside of controlled areas.[173]

Information exchange is another particularly important concept derived from international instruments. At the national level, it is often necessary to provide express authority to share information (which might be a valuable commodity and sovereign property of the country.) It is also possible for national legislative provisions to incorporate key informational services created under national law. For example, the High Seas Vessels Authorization Record (HSVAR) database created under FAO Fisheries "Compliance Agreement," may be an important tool in national permitting and other MPA implementation processes.[174] Another example is the Clearinghouse Mechanism (CHM) under the CBD,[175] which includes specific information on marine conservation activities and legislation at national and regional levels.

4. CONCLUSIONS: PROVIDING TECHNICAL GUIDANCE FOR MPA LEGISLATION

As noted above, a variety of legal and legislative issues can be usefully addressed in the Proposed Guidance, and in the process of its development. Several types of issues have been identified, in many different contexts.

4.1 Legal/Legislative Scope of the Guidance

One initial issue to be addressed by the guidelines process will be the scope of the issues that will be covered by the Guidance – defining "marine protected area" for purposes of determining the scope of the Guidance (i.e., will the Guidance apply to areas which are formally created as "protected areas" or

official website (http://www.mafia-island-tanzania.gold.ac.uk/ecology/) supported by the IUCN-WCPA-Marine/WWF's MPA management effectiveness project (described at http://effectivempa.noaa.gov/sites/mafia.html)

[172] Incidence of substantial crimes involving the capture and sale of endangered species have been increasing, in part because these commodities are relatively high value, and the penalties are significantly less severe than those imposed for trafficking in drugs, for example. However, as this kind of crime becomes systematic and 'organised' the level of associated violence increases. *See,* IUCN Workshop on Species Trade Crimes, Cambridge, 2001.

[173] SEYCHELLES, Proposed Marine Conservation Act; and Young, 1992-3 cited in footnote 162; supplemented by Personal communication with Randolph Payet, Ministry of Fisheries

[174] *See, e.g.,* FAO Compliance Agreement, Circular State Letter (G/X/FI-30) August 2003, sent to all the States which had accepted the Agreement informing them of the entry into force, on 24 April 2003, of the Agreement and reminding them of their information sharing obligations. Obligations under Article VI of the Agreement. Article VI of the Agreement requires Parties to exchange information on vessels authorized by them to fish on the high seas, and obliges FAO to facilitate this information exchange.

[175] This constantly evolving database is intended to provide countries with a way to develop general knowledge of custom and practice of other countries, relating to biodiversity issues such as conservation, integrated planning, and implementation of, inter alia, obligations relating to in-situ conservation.

will it also discuss the use of other geo-located conservation measures, non-binding and/or voluntary measures?)[176] Another potentially valuable scoping and planning tool might be reconsideration of the IUCN Categories (Appendix I), in terms of their use in the marine biome.

4.2 International legal mandate for MPAs

International law has two primary roles with regard to MPAs – addressing conservation of areas and biodiversity beyond national control, and authorising national action.

4.2.1 BEYOND NATIONAL CONTROL – THE HIGH SEAS AND THE AREA

Significant discussions are currently beginning in international forums regarding the creation of MPAs in these areas. Given that these areas are commonly held by all countries, formal designation of MPAs in these areas would be subject to international decision-making processes (international negotiations). Gaps in the international instruments and understanding suggest that the process by which such formal designations can occur will be developed through normal international negotiating processes, including possibly the current discussions on the development of an Implementing Agreement under UNCLOS.

A number of formal instruments, particularly at the regional level appear to create authority for designation of particular more limited geo-located conservation measures, if adopted by consensus-based international processes. In addition, it is possible for countries to decide to act unilaterally (to formally announce their intention to protect an area of the high seas), however, they cannot formally bind other countries, unless those countries also formally take such action.

4.2.2 WITHIN NATIONAL CONTROL – TERRITORIAL SEAS, EEZ AND OCS

International law does not mandate the creation of MPAs, but includes many national commitments regarding conservation and sustainable utilisation of marine biological resources and ecosystems (under various names.) MPAs are thus a possible, but not a mandatory, means of achieving these broader aims.

For purposes of the Guidance, the most important legal elements of Guidance regarding the international regime are the following:

- Listing, describing and suggesting the process relating to available options for States wishing to individually or collectively designate and implement MPAs in the various ocean zones?
- Specifying the legal rights and duties under the international oceans framework that limit the ability of any state or group of states to declare MPAs in the various ocean zones
- Considering options and suggestions to address the international elements of MPA issues – international cooperation, participation and enforcement – and the tools and mechanisms in international law may be of use to national legislative development and implementation
    - Analysing the open legal issues relating to MPAs under the international oceans framework with specific focus on whether and how they impact national and regional/cooperative actions and options

It will be particularly important to determine the extent to which the Guidance will address the question of high-seas MPAs and MPAs in the Area. To some extent, these issues have obscured other MPA issues in international discussions[177]

[176] This paper does not discuss other legal/procedural issues related to the creation, adoption and promulgation of the Guidance.

[177] Note, for example, the number of primary research materials listed in the Specialized Bibliography which according to their titles focus on the High seas. The author made a serious attempt to find legal analysis of conservation issues under the

4.2.3 NATIONAL LEGAL AND LEGISLATIVE ISSUES AND PRACTICES

The drafting of MPA laws and protections are, in some ways, very straightforward, once objectives and mandates from the national government are clarified, and the legislative framework's functions are designed. The design of the framework must be individualised, reflecting the national (or subnational) situation.

Given its situational requirements, national MPA legislation can probably not be addressed through model laws or generic statements of essential components of the legislation. However, Guidance can provide a range of options, as well as a discussion of the particular factors that might suggest that one option is preferable over another, in a given country. While the outline of this guidance may be approached in several ways, the outline of Section 3.2 of this paper might provide a useful starting point:

- Institution(s): Selection and Authorisation
- Procedures and Civil Protections
- Specific Duties, Restrictions, Controls and Processes
- Additional Concerns in Deeper Water
- Penalties, Fees, Assessments and Other Requirements
- Financial, Logistical, Networking and Capacity Issues

Another useful element of the Guidance could be the provisions of indicators of excellent legislation, including –

- Clear and direct legal authority/mandate;
- Status of current framework and potential of improvement or better utilisation of existing instruments as opposed to creating a new framework;
- Relationship between the mandate and the nature of the provisions selected (binding, non-binding, mandatory, voluntary, etc.);
- Direct connection between the proposed legal approaches and the practical objectives being sought;
- Strong scientific information and commitment to scientific analysis and monitoring to support that connection;
- Logistical ability to deliver the actions and outcomes necessary to make that connection (*i.e.,* to enforce the law or support other kinds of mandates);
- Support and/or acceptance by relevant community and stakeholder groups; and
- Reasonable financial expectations with regard to those logistical matters.

One final essential element of legal guidance is a practical and legal examination of the value and utilisation of hard-law (legislation) vs. soft-law (including voluntary codes of conduct, non-mandatory provisions, incentive programmes, etc.) A wide range of such options are available, which may be used in any combination (making some elements of the overall regime voluntary and others mandatory.) Given current limitations on the ability of states or regional/global bodies to enforce many MPA-related provisions, the practical value of voluntary approaches, particularly as initial measures, may be essentially equal to that of formally adopted mandatory measures.

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ocean regime, and this sampling is more than representative – if anything it includes a lower percentage of high-seas papers than exists.

Finally, it is important to remember that laws and legal systems are intended to facilitate human interactions with other humans and with their surroundings. As such, the law is an evolving construct, which has experienced dramatic, and constantly accelerating levels of change as population and technology have engendered exponential increases to the types of stresses which humans place on themselves (*e.g.*, through the development and growth of urban areas and lifestyles) and on their environment.