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Ed Couzens, Tuula Honkonen and Melissa Lewis (editors)

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Foreword

The papers in the present *Review* are based on lectures given during the ninth University of Eastern Finland – UNEP Course on International Environmental Agreements. It was held from 19 to 31 August 2012 in Grenada, in the Caribbean.

Previous courses have been held in Joensuu, Finland (2004, 2005, 2007, 2010), in South Africa (2006, 2008), and at the UNEP headquarters in Kenya (2009) and in Thailand (2011). The proceedings of those courses have been published in the previous Course *Reviews*.[1]

The aim of the Course is to equip present and future negotiators of multilateral environmental agreements with the information and experiences of others in the area of international environmental law-making in order to improve the impact and implementation of these key treaties.

In addition, others such as representatives of non-governmental organizations and the private sector may apply and be selected to attend the Course. Researchers and academics in the field are also eligible. Altogether 25 participants from 15 developed and developing countries, and with due respect to gender, participated in the ninth Course.

The Course also serves as a forum for fostering cooperation between developed and developing country negotiators; and for taking stock of recent developments in the negotiation and implementation of multilateral environmental agreements and diplomatic practices in this field. The ultimate aim of the Course is to improve environmental negotiation capacity and governance worldwide.

We would like to express our thanks to all of those who contributed to the successful outcome of the ninth Course, including the lecturers and authors who converted their presentations into paper form in order to compile the *Review*. In addition, we would like to thank Ed Couzens, Tuula Honkonen and Melissa Lewis for the skilful and dedicated editing of the *Review*, and the members of the Editorial Board for providing guidance throughout this process.

Professor Perttu Vartiainen
Rector of the University of
Eastern Finland

Achim Steiner
UN Under Secretary General and
UNEP Executive Director

[1] For an electronic version of this volume, and of the 2004–2011 *Reviews*, please see the University of Eastern Finland – UNEP Course on International Law-making and Diplomacy website, <http://www.uef.fi/unep>.

Editorial preface

1.1 General introduction

The lectures given on the ninth annual University of Eastern Finland[2] – United Nations Environment Programme (UNEP) Course on Multilateral Environmental Agreements, from which most of the papers in the present *Review* originate, were delivered by experienced diplomats, members of government and senior academics.[3] One of the principal objectives of the Course is to educate the participants though imparting the practical experiences of experts who work in international environmental law-making and diplomacy – both for the benefit of the participants on each Course and to contribute more widely to knowledge and research through publication in the present *Review*. As such, the papers in this *Review* and the different approaches taken by the authors reflect the diverse professional backgrounds of the lecturers, resource persons and participants (some of whom are experienced diplomats in their own right). Overall, the papers in the various *Reviews*, while usually focused on particular themes, represent various aspects of the broad and complex field of international environmental law-making and diplomacy.

The current *Review* is intended to provide practical guidance, professional perspective and historical background for all of decision-makers, diplomats, negotiators, practitioners, researchers, roleplayers and stakeholders who work in international environmental law-making and diplomacy. The *Review* aims to elucidate different approaches, doctrines, techniques and theories in the field, including international environmental compliance and enforcement, international environmental governance, international environmental law-making, environmental empowerment, and the enhancement of sustainable development generally – guided by rigorous academic standards in the presentation of these.

Forests and water dominate the landscape of Finland. The first and second Courses were hosted by the University of Eastern Finland, in Joensuu, Finland. The special themes of the first two Courses were, respectively, 'Water' and 'Forests'. The coastal province of KwaZulu-Natal in South Africa is an extremely biodiversity-rich area, both in natural and cultural terms, and the chosen special themes for the 2006 and 2008 Courses were therefore 'Biodiversity' and 'Oceans'. These two Courses were hosted by the University of KwaZulu-Natal, on its Pietermaritzburg campus. Finland has played an important role in international chemicals management and the fourth

[2] It is to be noted that the University of Joensuu merged with the University of Kuopio on 1 January 2010 to constitute the University of Eastern Finland. Consequently, the University of Joensuu – UNEP Course was renamed the University of Eastern Finland – UNEP Course. The Course activities concentrate on the Joensuu campus of the new university.

[3] General information on the University of Eastern Finland – UNEP Course on International Environmental Law-making and Diplomacy is available at <http://www.uef.fi/unep>.

Course, which returned to Finland, had 'Chemicals' as its special theme. 'Environmental Governance' was a fitting special theme for the sixth Course, which was hosted by UNEP, in Nairobi and at Lake Naivasha, in Kenya. 'Climate Change' was the theme for the seventh Course, which returned to Finland in 2010. The focused theme of the eighth Course was 'Synergies Among the Biodiversity-Related Conventions' and this Course was held in Bangkok, Thailand in 2011. The ninth Course was held in 2012 near the capital St George's in Grenada. The special theme of this Course – and therefore the subject of the present *Review* – was 'Ocean Governance'.

All of the Course organizers, the editorial board and the editors of this *Review* believe that the ultimate value of the *Review* lies in the contribution it can and hopefully will make to knowledge, learning and understanding within the field of international environmental negotiation and diplomacy. While only limited numbers of diplomats and scholars are able to participate in the Courses themselves, it is hoped that through the *Review* many more will be reached. The papers contained in the *Review* are in most cases based on lectures or presentations given during the Course, but take their subject matters further as the authors explore their ideas. In particular, the *Review* has been proud to receive ongoing contributions through the various editions – meaning that the same writers have contributed several papers and, in many cases, thereby been able to develop their ideas and themes – of persons who have been involved in some of the most important environmental negotiations in the past several decades. Publication of these contributions means that the experiences, insights and reflections of these environmental leaders and insightful analysts are now recorded and disseminated, where they might not otherwise have been committed to print. The value of these contributions cannot be overstated. In addition, an ongoing feature of the *Review* has been the publication of papers by Course participants – this has seen many fresh ideas and new research included in the *Review*.

All papers published in the *Review* undergo a rigorous editorial process (which process includes careful scrutiny and research by the editors, numerous rewrites, and approval for publication only after consideration by the Board). Each paper is read several times by each of the editors, and returned several times to the authors for rewriting and the addressing of queries. By the time a paper is published in the *Review* the editors and the editorial board are satisfied that it meets all that could be expected of it in terms of formal presentation and high academic standards, and that it makes a genuine contribution both to the special theme and to knowledge generally. While convinced of the quality of all of the papers in the *Review*, the editors introduced for the 2012 volume an anonymous peer-review process[4] where authors requested this.

[4] Per generally accepted academic practice, the process involved the sending of the first version of the paper, with the identity of the author/s concealed, to at least two experts (selected for their experience and expertise) to consider. The editors then relayed the comments of the reviewers, whose identities were not disclosed unless with their consent, to the authors. Where a paper was specifically so peer-reviewed, this is indicated in the first footnote of that paper; where even one of the reviewers did not endorse the paper

1.2 Governance of the oceans

In 1609 the Dutch jurist Huig de Groot ('Grotius') wrote a pamphlet entitled *Mare Liberum* (the 'freedom of the seas'). The pamphlet was written on behalf of the Dutch East India Company, and was designed to promote the idea that the oceans were open to all for free trade and free use. The pamphlet is considered, arguably unfortunately, to have been remarkably influential and to have set the tone for four centuries of states (and related entities) claiming such uninhibited access.

Grotius' views were strongly entrenched by an important early arbitral ruling, that of the *Bering Sea Fur Seals Arbitration*.[5] This matter concerned the right claimed by the United States to protect fur seals on the high seas where these seals returned cyclically to US territory, a right which was disputed by Great Britain (on behalf of Canada). The arbitral tribunal found against the US arguments and freedom of the high seas was held to be the prevailing doctrine. Birnie and Boyle have written about the decision that:

> [t]he importance of this decision to the development of the law concerning conservation of marine living resources cannot be overstressed. It laid the twin foundations for subsequent developments over the next century. First, it confirmed that the law was based on high seas freedom of fishing and that no distinction was to be made in this respect between fisheries and marine mammals … secondly, it recognized the need for conservation to prevent over-exploitation and decline of a hunted species, but because of the former finding, it made this dependent on the express acceptance of regulation by participants in the fishery.[6]

While Grotius' argument concerned rights of navigation, and the arbitral decision concerned the issues of fisheries and hunting of marine mammals, the ramifications of both have extended further than these issues. The damage that has been done to the oceans in the four centuries since 1609 is incalculable, but is only in recent years becoming truly apparent. At the same time that the extent of the damage done is becoming obvious, so it is becoming evident that Grotius' concept of freedom of the seas is extremely problematic; and that the lack of effective governance over the world's oceans has left them with precarious protection only.

When the International Convention for the Prevention of Pollution of the Sea by Oil[7] was signed in 1954, its main concern was so-called 'operational discharge' (the regular polluting of the marine environment in the course of day-to-day operations

for publication, no such indication is made. The reviewers' reports, and other relevant correspondence, are being held on file by the three editors.

5 *Bering Sea Fur Seal Arbitration (Great Britain v USA)*, *Moore's International Arbitration Awards* (1898) 755.

6 Patricia Birnie and Alan Boyle, *International Law and the Environment* (2nd ed., Oxford University Press, 2002) at 649–650.

7 International Convention for the Prevention of Pollution of the Sea by Oil, London, 12 May 1954, in force 26 July 1958, 37 *United Nations Treaty Series* 3.

by seagoing vessels of all descriptions). It was only later that major oil spills came to dominate the agenda and to be the main focus of more recent conventions – such as the International Convention for the Prevention of Pollution from Ships (the MARPOL Convention) of 1973 and 1978.[8]

Today, in contrast, numerous threats are considered to endanger the health of the world's oceans. These include acidification of the oceans, which refers to ongoing shifts in acidity levels which have numerous potential effects on species of coral, crustacean, fish, mammal, mollusc, plant and many more; increased movement of alien invasive species, which are considered to be one of the greatest current threats to biodiversity; increased coral bleaching, with it being probable that at least 25 per cent of the world's coral reefs are damaged beyond repair; and eutrophication, which entails the oversupply of nutrients and leads to excessive algal growth which leads in turn to the starvation of oxygen. Other threats include habitat destruction, with consequent negative impacts on species that are threatened or which might become so; increased human coastal development, with consequent polluting problems such as discharge, dumping, run-off, sediment deposits and sewage disposal resulting from land-based human activities such as agriculture, construction, forestry, industry, land use, settlement and tourism. Melting of glacial and polar ice, and sea level rise, are expected to have deleterious impacts on coastal dunes, coral reefs, fish stocks and human settlements; overfishing is one of the worst problems of all, and is largely unacknowledged as a problem; pollution in all its forms, from raw sewage to plastic accumulation to heavy metals to acoustic pollution, is ever-present and ever-increasing; and changes in sea temperature, which will have many poorly understood impacts, are expected to exacerbate many of the problems already mentioned.[9]

Ultimately, 'the problem' is probably not that each one of these problems exists, but that they exist in conjunction with all of the others – it is the potential cumulative impact of all of these various problems that provide the most frightening of future scenarios. The impact of the combined whole may well prove to be far, far greater than is currently apparent from studying each problem separately.

In the face of such threats, there are currently few international legal instruments of global scope that can be used for better environmental management. The United Nations Convention on the Law of the Sea (UNCLOS)[10] is one of the most ambi-

[8] International Convention for the Prevention of Pollution from Ships (MARPOL), London, 2 November 1973, amended before entry into force, 12 *International Legal Materials* (1973) 1085; Protocol Relating to the Convention for the Prevention of Pollution from Ships, London, 17 February 1978, in force 2 October 1983, 17 *International Legal Materials* (1978).

[9] For slightly more detailed descriptions of these problems, see Ed Couzens, 'International Law Relating to Climate Change and Marine Issues' in Ed Couzens and Tuula Honkonen (eds), *International Environmental Law-making and Diplomacy Review 2010* (University of Eastern Finland – UNEP Course Series 10, 2011) 185–216, at 187–191.

[10] United Nations Convention on the Law of the Sea (UNCLOS), Montego Bay, 10 December 1982, in force 16 November 1994, 21 *International Legal Materials* (1982) 1261.

tious of all conventions, being an effort to codify all customary international law relating to oceans governance – ranging from navigational rights to natural resource use. The settling of maritime zones by UNCLOS, largely recognized by every state including those (such as the United States of America) which have not ratified UNCLOS, is extremely important as many management and protective consequences flow from this. However, UNCLOS is proving sadly deficient as a protective tool – indeed, the Convention does not contain a specific requirement that its parties protect the high seas,[11] and many of its provisions can even be said to work against environmental protection.[12]

There are also many specific global and regional conventions which provide for conservation, management and protection measures, such as conventions which deal with matters as disparate as anti-fouling compounds, ballast water disposal, collision prevention, container safety, dumping of wastes, undersea heritage protection, maritime claims, navigational aids, safety of life at sea, search and rescue, and many, many more. These tend to focus on aspects of environmental protection, or on issues which might by implication cover environmental protection, rather than providing general environmental protection.

This profusion may itself be a problem for effective governance. The University of Oregon's International Environmental Agreements Database Project lists 349 'instruments' (Agreements and/or Amendments, and including Declarations and Protocols) of global scope under the subject heading 'Ocean'; and 260 such regional instruments.[13] In respect of 'fish' alone, there are 197 global instruments listed; in respect of 'marine pollution' there are 148.[14] Leaving aside the argument that there is merit to be found in focused regional and/or issue-specific governance, this proliferation of international instruments implies a high degree of 'fragmentation' in the area. While there may be some benefits which accrue from this, such as increased and positive specialization, there are many problems which arise – such as contradictory legal instruments, conflict between regulatory bodies, overlapping of provisions, duplication and doubling of efforts, and general diminished efficiency levels.[15]

[11] Article 145 of UNCLOS, headed 'Protection of the marine environment', does provide that '[n]ecessary measures shall be taken in accordance with this Convention with respect to activities in the Area to ensure effective protection for the marine environment from harmful effects which may arise from such activities' (the 'Area' being defined, in Art. 1, as 'the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction').

[12] Consider, for instance, Art. 62 headed 'Utilization of the living resources', which provides that '[t]he coastal State shall determine its capacity to harvest the living resources of the exclusive economic zone'; but that '[w]here the coastal State does not have the capacity to harvest the entire allowable catch, it shall, … give other States access to the surplus of the allowable catch, …' (Art. 62(2)).

[13] See University of Oregon International Environmental Agreement (IEL) Database Project, <http://iea.uoregon.edu/page.php?file=home.htm&query=static>, generally, and <http://iea.uoregon.edu/page.php?query=base_agreement_list&where=start&InclusionEQ=BEA&SubjectIN=Ocean> specifically (both visited 19 September 2013).

[14] *Ibid*.

[15] See, generally, Louis Kotzé, 'Fragmentation of International Environmental Law: An Oceans Governance

Birnie, Boyle and Redgwell do indicate that, in their opinion, 'there is evidence that international regulation of serious environmental risks has proved more successful with regard to ships than for other comparably hazardous undertakings';[16] but it is telling that this faint praise is the best that they can muster. In the face of the numerous threats to the oceans, effective oceans governance seems to be floundering between the Scylla of state sovereignty and firm belief in the nature of the oceans as 'common to all' and 'free for the taking', and the Charybdis of uncoordinated, overly profuse and insufficiently enforced international law. In this context, increased understanding of multilateral environmental agreements related to oceans governance, and their strengths and weaknesses, is urgently needed.

1.3 The papers in the 2012 *Review*

In the papers collected in this volume of the *Review*, the writers evaluate ocean governance at both the global and regional levels, and make suggestions as to how various challenges in ocean governance might be addressed. It is the hope of the editors, the editorial board, and all involved with this *Review* that its publication will contribute to the body of research in the area of ocean governance; and, indeed, to the development of international environmental law and diplomacy generally.

The present *Review* is divided into four Parts. Part I contains a paper by Sylvia Bankobeza and Elizabeth Maruma Mrema, which addresses general issues related to international environmental diplomacy and negotiations. Although not specifically addressing the theme of ocean governance, the paper lays a foundation for those that follow by explaining what environmental diplomacy entails; providing practical advice on, *inter alia*, preparation for negotiations, negotiation strategies, techniques and etiquette, and the role and effect of negotiating language; and by suggesting qualities that might assist in making a skilled negotiator. This paper can usefully be read with the paper by Bankobeza[17] in the 2011 *Review*; and the paper by Mrema and Kilaparti[18] in the 2009 *Review*.

The papers in Part II address a selection of specific issues relating to ocean governance. Part II starts with a paper by Lisa Benjamin, which examines the role of Small Island Developing States (SIDS) in three international negotiations involving ocean

Case Study' in Ed Couzens and Tuula Honkonen (eds), *International Environmental Law-making and Diplomacy Review 2008* (University of Joensuu – UNEP Course Series 8, 2009) 11–38.

16 Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment* (3rd ed., Oxford University Press, 2009) 441.

17 Sylvia Bankobeza, 'Multilateral Environmental Diplomacy and Negotiations' in Tuula Honkonen and Ed Couzens (eds), *International Environmental Law-making and Diplomacy Review 2011* (University of Eastern Finland – UNEP Course Series 11, 2013) 3–17.

18 Elizabeth Mrema and Ramakrishna Kilaparti, 'The Importance of Alliances, Groups and Partnerships in International Environmental Negotiations' in Tuula Honkonen and Ed Couzens (eds), *International Environmental Law-making and Diplomacy Review 2009* (University of Eastern Finland – UNEP Course Series 9, 2010) 183–192.

governance: the United Nations Convention on the Law of the Sea, the United Nations Framework Convention on Climate Change,[19] and the Doha Round of the World Trade Organisation[20] negotiations. The paper critically discusses the negotiation strategies employed by SIDS in these fora and considers how these might be improved so that the gains achieved in one area of ocean governance negotiations are not lost in others. The particular interests and needs of the states which fall into the SIDS group are attracting considerable focus today, and understanding of these is essential if legal instruments in the area of ocean governance are to achieve their aims.

The second paper in Part II, by Michael Kidd, discusses the threat posed to marine biodiversity by fishing. After considering the state of the world's fisheries and the meaning of fisheries governance, the author provides an overview of the international legal regime relating to fisheries. He then examines some of the major challenges facing fisheries governance, as well as a selection of international legal and policy initiatives aimed at addressing these challenges.

The third paper in Part II, by Tuomas Kuokkanen, examines the challenges in crafting appropriate regulatory responses to ocean-based geoengineering techniques. Such appropriate responses are vital given that geoengineering, although intended to manage an environmental problem (climate change), itself poses potential threats to the environment. The author explains that, despite numerous difficulties, a number of treaties and customary rules are applicable to geoengineering. He further argues that there is scope for future rules on geoengineering to be developed under existing treaty regimes, but stresses the need to promote synergies between regimes in this regard.

The fourth paper in Part II, by Course participant Niko Soininen, discusses Marine Spatial Planning (MSP) as a tool to improve governance of the marine environment. The paper considers the aims of MSP and critically assesses the characteristics that are necessary in order for MSP to achieve these aims. After examining the MSP systems of four countries (Australia, Belgium, Germany and the Netherlands), the paper explores whether the aims of MSP (in particular, the aim of reconciling conflicting interests) are being achieved in practice.

Part III of the *Review* focuses on ocean governance at the regional level, particularly in the Caribbean. The first paper in this Part, by Camilo-Mateo Botero Saltarén (who was a Course participant), Marlenny Diaz Cano and Celene Milanes Batista, concerns Integrated Coastal Zone Management (ICZM). The paper discusses the international law relating to ICZM and the manner in which this management approach has been incorporated into domestic laws and policies in both Colombia and Cuba.

[19] United Nations Framework Convention on Climate Change, New York, 9 May 1992, in force 21 March 1994, 31 *International Legal Materials* (1992) 849, <http://unfccc.int>.

[20] See generally, <http://www.wto.org>.

It then considers the need for a new multilateral environmental agreement (MEA) focused specifically on ICZM.

The remaining papers in Part III examine regional ocean governance initiatives within the Caribbean. The second paper in this Part, by Course participant Alana Lancaster, explains that, although the marine environment constitutes an invaluable resource to members of the Caribbean Community (CARICOM), there are significant challenges to managing the marine environment in the CARICOM Caribbean. An overview of regional management efforts is then provided, in which the author comments on the achievements and shortcomings of such efforts and argues, *inter alia*, that, although Caribbean states have often shown an interest in marine management, this has seldom translated into sustained strategies and proactive measures toward such management. The paper concludes with suggestions for improved ocean governance in the Caribbean. The third and final paper in Part III, by Spencer Thomas, again highlights the heavy dependence of Caribbean states upon marine resources and the increasing pressures on the marine environment from human based activities. The paper then explains that the development and implementation of ocean-related MEAs in the Caribbean is hindered by the economic and social challenges facing this region, and that, although Caribbean countries are parties to various ocean-related MEAs, the ability of these countries to ratify, and subsequently implement and participate in, such instruments has largely been enabled by external funding. The author argues that Caribbean countries need to establish integrated, regional and innovative approaches to improve ocean governance.

Part IV of the *Review* reflects the interactive nature of the Course. During the Course international negotiation simulation exercises were organized to introduce the participants to the real-life challenges facing negotiators of international environmental agreements in ocean governance contexts. In the two main simulation exercises, participants were given individual instructions and a hypothetical, sometimes country-specific, negotiating mandate and were guided by international environmental negotiators. Excerpts from, explanations of, and consideration of the pedagogical value of, the exercises are included in Part IV. The issues dealt with are issues of real international importance.

In 2012 there were two main negotiation exercises, each involving issues of both procedure and substance. The first paper in Part IV explains the second simulation exercise, which was devised and run by Cam Carruthers, who was assisted by Tuula Honkonen in preparing the exercise.

The scenario for the negotiation simulation focused on a climate-related geoengineering theme, and involved both substantive and structural/procedural issues. The exercise included negotiations in an Ad Hoc Joint Working Group (AHJWG) on the following four issues: common understanding of a detailed definition and scope of climate-related geoengineering; joint assessment of a need for regulation of scien-

tific research on climate-related geoengineering, and of net and specific climate-related geoengineering deployment impacts; joint recommendation on appropriate multilateral regulatory authority for deployment and research of climate-related geoengineering; and joint recommendation on a possible coordination/advisory body on climate-related geoengineering research and deployment. Although the simulation scenario was hypothetical, it drew on elements derived from recent actual work on climate-related geoengineering amongst certain multilateral environmental agreements. The theme was intended to provide participants with an opportunity to gain perspective on the complexity of international environmental law-making in the current international environmental governance system.

The second paper in Part IV, by Ed Couzens, explains how the first negotiation exercise was devised and run. The International Whaling Commission (IWC), the managing body created under the International Convention for the Regulation of Whaling of 1946 (ICRW),[21] provides a very useful subject for a negotiation simulation as its atmosphere is renowned for its hostility, in contrast to many more recent MEAs where consensus is the aim and the atmosphere is usually calmer. Within the IWC there is not even agreement on whether the Convention is environmental in nature or not. The exercise concerned governance issues in the context of considerations of original treaty texts relevant to the IWC; of recent IWC documentation; and of the implications for the IWC of the oceans-related paragraphs in the Outcomes Document *The Future We Want*, agreed to at the Rio+20 Conference in June 2012.

While the majority of the papers in the present *Review* deal with specific environmental issues, or aspects of specific multilateral environmental agreements, and thereby provide a written memorial for the future; the negotiation exercises provide, in a sense, the core of each Course. This is because each Course is structured around the practical negotiation exercises which the participants undertake; and it is suggested that the papers explaining the exercises provide insights into the international law-making process. The inclusion of the simulation exercises has been a feature of every *Review* published to date, and the editorial board, editors and course organizers believe that the collection of these exercises has significant potential value as a teaching tool for the reader or student seeking to understand international environmental negotiation. It does need to be understood, of course, that not all of the material used in each negotiation exercise is distributed in the *Review*. This is indeed a downside, but the material is often so large in volume that it cannot be reproduced in the Course publication.

[21] International Convention for the Regulation of Whaling, Washington D.C., 2 December 1946, in force 10 November 1948, 161 *United Nations Treaty Series* 72.

Generally, it is the hope of the editors that the various papers in the present *Review* will not be considered in isolation. Rather, it is suggested that the reader should make use of all of the *Reviews* (spanning the years 2004 to 2012), all of which are easily accessible on the internet through a website provided by the University of Eastern Finland,[22] to gain a broad understanding of international environmental law-making and diplomacy.

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[22] See <http://www.uef.fi/unep>; link to 'Publications and Materials'.

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Part I

General Issues related to International Environmental Diplomacy and Negotiations

International Environmental Diplomacy and Negotiations

Sylvia Bankobeza[1] *and Elizabeth Maruma Mrema*[2]

1 Introduction

The world is faced with a diversity of environmentally-related issues and concerns of wide international significance that can only be adequately addressed through international co-operation. International environmental diplomacy and negotiations bring together governments and related stakeholders in consultations and intergovernmental processes to address environmental issues at the global, regional and bilateral levels.[3] In the field of the environment, as in other international fields, international co-operation and joint action are needed to review implementation of various agreements and/or to develop standards and means for addressing various national and transboundary issues.

The main objective of international environmental diplomacy is to stimulate international co-operation in order to generate international agreements and direction on complex transboundary environmental issues. In this process, differences can be bridged, and the precautionary principle applied to take action to protect the environment, even when there is scientific uncertainty. The United Nations (UN), through its various organizations, funds and programs, as well as the conferences and meetings of the parties (COPs and MOPs) organized by the secretariats of multilat-

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[3] For instance, in connection with consultations and meetings on the sharing of natural resources; United Nations (UN) Conferences on the environment and sustainable development; meetings of the governing bodies of the UN, specialized agencies, funds and programs when they address environmental concerns; and Conferences and Meetings of the Parties (COPs and MOPs).

eral environmental agreements (MEAs),[4] are among the inter-governmental institutions that provide a unique platform for negotiations and diplomacy to facilitate international consultation or action.

This paper focuses generally on the issue of international environmental diplomacy and negotiations. It does not specifically address the theme of the Ninth UNEP – UEF MEA Course on 'ocean governance', in which, although still an evolving area of international law, significant developments in international environmental diplomacy and negotiations have been made over the last century.[5] Instead, this paper examines more generally what international environmental diplomacy entails; the processes of multilateral environmental diplomacy; preparations for negotiations; selecting delegations; negotiation etiquette; the role and effect of negotiating language; and negotiation strategies, tactics and techniques; and, finally, suggests qualities that might assist in making a skilled negotiator.

[4] The Conferences and/or Meeting of the Parties are created by treaties/MEAs. UNEP provides the secretariat for a number of MEAs, such as Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington DC, 3 March 1973, in force 1 July 1975, 993 *United Nations Treaty Series* 243, <http://www.cites.org>; Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, <http://www.biodiv.org>; Convention on the Conservation of Migratory Species of Wild Animals, Bonn, 23 June 1979, in force 1 November 1983, 19 *International Legal Materials* (1980) 15, <http://www.cms.int>; Convention on Persistent Organic Pollutants, Stockholm, 22 May 2001, in force 17 May 2004, 40 *International Legal Materials* (2001) 532, <http://www.pops.int>; Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, Rotterdam, 11 September, 1998, in force 24 February, 38 *International Legal Materials* (1999) 1, <http://www.pic.int>; Convention for the Protection of the Ozone Layer, Vienna, 22 March 1985, in force 22 September 1988, 26 *International Legal Materials* (1985) 1529, <http://ozone.unep.org>, and the various Regional Seas Conventions (<http://www.unep.org/regionalseas/>). MEAs dealing with climate change and desertification, such as the UN Framework Convention on Climate Change, New York, 9 May 1992, in force 21 March 1994, 31 *International Legal Materials* (1992) 849, <http://unfccc.int/2860.php>, and UN Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, Paris, 17 June 1994, in force 26 December 1996, 33 *International Legal Materials* (1994) 1309, <http://www.unccd.int>, fall under the framework of the UN headquarters.

[5] See, for instance, Ad hoc Open-ended Informal Working Group to Study Issues Relating to the Conservation and Sustainable Use of Biological Diversity beyond Areas of National Jurisdiction, available at <http://www.un.org/Depts/los/biodiversityworkinggroup/biodiversityworkinggroup.htm> (visited 30 March 2013). MEAs relating to ocean governance include the United Nations Convention on the Law of the Sea (UNCLOS), Montego Bay, 10 December 1982, in force 16 November 1994, 21 *International Legal Materials* (1982) 1261; the various Regional Seas Conventions (for instance the Cartagena Convention on the Protection of the Wider Caribbean Sea, Cartagena, 24 March 1983, in force 11 October 1986, <http://www.cep.unep.org/cartagena-convention/text-of-the-cartagena-convention>); the UN Food and Agricultural Organization (FAO) agreements on fisheries (for instance the Convention on the Conservation and Management of Fishery Resources in the South-East Atlantic Ocean, Windhoek, 20 April 2001, into force 13 April 2003, <www.seafo.org>); and the International Maritime Organization (IMO) conventions (for instance the International Convention for the Prevention of Pollution from Ships, 1973, first signed 2 November 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), adopted 17 February 1978; the combined instrument entered into force on 2 October 1983, 12 *International Legal Materials* (1973) 1319, <http://www.imo.org>).

2 International environmental diplomacy

International environmental diplomacy is the act and practice of conducting negotiations between nations in the field of the environment. Governments, through international environmental diplomacy and co-operation, consult and/or meet to deliberate on various environmental issues of transboundary, regional or global nature and make decisions on the way forward. International environmental diplomacy is also used to develop standards through treaties and soft law instruments[6] so as to ensure sustainable development and protect the environment at all levels. International environmental diplomacy takes place in the course of conducting negotiations among countries in conferences and meetings, diplomatic consultations, and inter-state interactions. The notion comprises government representatives and related stakeholders such as civil society organizations, professional bodies such as industry etc, who consider environmental issues through consultations in the process of negotiations. Included in the notion are also the skills of, and roles played by, negotiators when handling and resolving issues diplomatically – that is, courteously and without acrimony.

International environmental diplomacy provides an opportunity for countries to deliberate on emerging issues and measures that can be taken to ensure sustainable use, management and protection of environmental resources at the national level. In recent years, this has included negotiations for the development of not only environmental treaties but also implementation mechanisms, such as compliance mechanisms,[7] financial mechanisms[8] and technology support.[9] All these mechanisms provide tangible assistance for the implementation of MEAs to developing countries and countries with economies in transition.

Environmental resources (including biological diversity (biodiversity),[10] endangered species,[11] oceans,[12] rivers,[13] and other transboundary resources), and factors which

6 Soft law instruments are non-binding agreements such decisions and resolutions.

7 See UNEP, *Compliance Mechanisms under Selected Multilateral Environmental Agreements* (UNEP, 2007), available at <http://www.unep.org/pdf/delc/Compliance_Mechanism_final.pdf>; and UNEP, *Compliance-Related Texts and Decisions of Selected Multilateral Environmental Agreements* (UNEP, 2010), available at <http://www.unep.org/delc/Portals/119/Compliancerelatedtext.pdf> (both visited 30 March 2013).

8 For instance, under the international ozone protection regime, there is the Multilateral Fund for the Montreal Protocol (Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 16 September 1987, in force 1 January 1989, 26 *International Legal Materials* (1987) 154, <http://www.unep.org/ozone/>); while the UNFCCC and UNCCD have designated the Global Environment Facility (GEF) to operate as their financial mechanism.

9 Para's 269–276 of the Rio+20 Outcome Document 'The Future We Want', available at <http://www.uncsd2012.org/content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf> (visited 30 March 2013).

10 See the Convention on Biological Diversity (CBD).

11 See the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

12 See the United Nations Convention on the Law of the Sea (UNCLOS), Regional Seas Conventions and related Protocols.

13 International shared water resources co-operation agreements (for instance, the Southern African Development Community (SADC) Revised Protocol on Shared Watercourses, Windhoek, 7 August 2000, in

have impacts on these resources (such as measures to ensure sustainable use and combat pollution), are kept under review in various international meetings. There are global hazards that need to be addressed by joint action, such as the issues of climate change, handling of chemicals and other harmful substances and hazardous materials[14] and ozone depletion,[15] among others. There are additionally rules and procedures to be developed, adopted, and adhered to in conducting negotiation sessions. All these are addressed by countries jointly through international environmental diplomacy.

International environmental diplomacy has developed over the years to include features that were not envisaged in traditional diplomacy. The unique features in environmental diplomacy include the diversity of actors, which include business leaders, diplomats, environmental action groups, government officials, journalists, politicians, scientists,[16] and so forth. Another distinct factor is the complexity of international environmental diplomacy in terms of the kind of processes, segments, consultations and negotiation groups, the types of documentation, and size of meetings (including meetings within meetings) with which negotiators have to be familiar when navigating through the processes. There is diversity of fora, bilateral diplomacy, multilateral diplomacy – including United Nations related meetings, Conferences and Meetings of the Parties, and formal and informal consultations. There are also meetings of intergovernmental organizations (IGOs), non-governmental organizations (NGOs) and civil society dialogues.[17]

In view of the technicalities involved in, and the cross-cutting nature of, environmental issues, the preparation of negotiations requires prior cross-sectoral consultations and a variety of expertise among the negotiators. A skilled negotiator still needs to follow negotiations etiquette and to understand the role and effect of negotiating language as he/she uses a strategy to gauge his/her ambition to guide him/her in the course of negotiations. There may be a need to find synergies with related MEAs in the course of negotiations because diplomacy also involves a convergence of diverse areas with mutual linkages.

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force 22 September 2003, <http://www.sadc.int/documents-publications/show/Revised_Protocol_Shared_Watercourses.pdf> (visited 10 June 2013)).

14 The three global chemical conventions being the Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Basel, 22 March 1989, in force 5 May 1992, 28 *International Legal Materials* (1989) 657, <http://www.basel.int>; the Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam/PIC Convention); and the Convention on Persistent Organic Pollutants (Stockholm/POPs Convention).

15 Convention on the Protection of the Ozone Layer (Vienna Convention) and its Montreal Protocol.

16 For instance, the Kyoto Protocol (Kyoto Protocol to the United Nations Framework Convention on Climate Change, Kyoto, 11 December 1997, in force 16 February 2005, 37 *International Legal Materials* (1998) 22) negotiations at UNFCCC COP 3 held in December 1997, which were attended by over 10 000 participants, representing 159 states (153 being parties to UNFCCC), and including 2 211 states delegates, 282 observer delegates, 237 NGO delegations, 3 844 NGO delegates, 3 635 journalists, 455 media organizations and 400 UNFCCC Secretariat personnel.

17 See UNEP, *Negotiating and Implementing MEAs: A Manual for NGOs* (UNEP, 2007), available at <http://www.cbd.int/doc/guidelines/MEAs-negotiation-manual-ngo-en.pdf> (visited 31 March 2013) 26–37.

International environmental diplomacy at a global scale may be traced back to 1972 when the United Nations convened the United Nations Conference on the Human Environment (UNCHE). The Conference adopted a set of decisions and the Stockholm Declaration, which includes a set of principles for the preservation and improvement of the human environment.[18] The United Nations Environment Programme (UNEP)[19] was established in 1972 as a direct result of the UNCHE. In 1992 the United Nations convened the United Nations Conference on Environment and Development (UNCED). The Conference resulted in the adoption of a number of important documents, including the Rio Declaration[20] and Agenda 21[21] to guide towards sustainable development, and the global agreements on climate change and biodiversity protection. Ten years later in 2002, the United Nations organized the World Summit on Sustainable Development (WSSD), which adopted a Plan of Implementation[22] to implement Agenda 21 further, as well as the Johannesburg Declaration on Sustainable Development.[23]

In June 2012 the United Nations convened the Rio+20 Conference in Rio de Janeiro, Brazil. This Conference adopted an Outcome Document entitled 'The Future We Want' which is now guiding sustainable development action at the national and international levels in the field of the environment.[24]

3 Processes of multilateral environmental diplomacy

The format, preparation of agendas and provisional agendas, preparation of scenarios notes,[25] and the organization of work depends on the size of the meeting and the convener's practices. Intergovernmental meetings with a global scope organized by the United Nations tend to have, for example, a clear format guided by the rules of procedure for a specific meeting or conference. These guide the conduct of business in meetings, election of officials, bureau members, voting procedures, languages of meetings[26] and so on. In recent years, there has been an increase of the use of re-

[18] Declaration of the United Nations Conference on the Human Environment, Stockholm, 16 June 1972, UN Doc. A/CONF.48/14/Rev.1 (1973), 11 *International Legal Materials* (1972) 1416.

[19] See <http://www.unep.org/>.

[20] UN Declaration on Environment and Development, Rio de Janeiro, 14 June 1992, UN Doc. A/CONF.151/5/Rev.1 (1992), 31 *International Legal Materials* (1992) 876.

[21] Agenda 21, UN Conference on Environment and Development, Rio de Janeiro, 13 June 1992, UN Doc. A/CONF.151/26/Rev.1 (1992), available at <http://www.un.org/esa/dsd/agenda21/>. Agenda 21 is a global blueprint to assist states, municipalities and other bodies to implement sustainable development.

[22] Plan of Implementation of the World Summit on Sustainable Development, UN Doc. A/CONF.199/20 (2002).

[23] Johannesburg Declaration on Sustainable Development, Johannesburg, 4 September 2002, UN Doc. A/CONF.199/20 (2002), available at <http://www.un-documents.net/jburgdec.htm>.

[24] Rio+20 Outcome Document, *supra* note 9.

[25] Scenarios notes are planning notes prepared by the secretariat on the expected organization of work and outcomes of a session.

[26] See, for instance, the rules of procedure for CITES, available at <http://www.cites.org/eng/cop/E14-Rules.pdf>; for CMS, available at <http://www.cms.int/bodies/COP/cop10/docs_and_inf_docs/doc_05_rules_

gional blocs, working group meetings and preparatory meetings which are all facilitating the work of conferences.[27]

The internet is also being used to reduce the use of paper through a 'paper smart' system. It enables delegates to access documents using computers, and facilitates the distribution of in-session documents such as Chair's or Co-chairs' summaries for discussions, conference room papers, reports and other pre-session, in-session and post-session documents to be uploaded within the system for delegates' online access.

4 Systems, processes and mechanics

Global and regional environmental meetings, depending on their size and scope, have over the years devised elaborate systems, processes and mechanics to organize their work. These enhance efficiency and save time. Elaborate processes in international environmental diplomacy can be found in intergovernmental meetings relating to the environment, such as the United Nations environmental conferences (for instance, the Rio+20 Conference). Further examples of relevant intergovernmental meetings include sub-regional and regional environmental conferences, Intergovernmental Negotiating Committee (INC) meetings,[28] and MEA Conferences of the Parties and Meetings of the Parties.[29] The COP/MOPs meet periodically to keep under review the implementation of MEAs or for further negotiations on a treaty. The outcome of these negotiations depends on the purpose of the meeting and the convener/s; and may include the adoption of legally binding or non-binding decisions (which may include a set of decisions),[30] a negotiated text, a report, recommendations or an outcome document.[31]

The structure and size of the international environmental meeting, and its actors and their interaction normally informs how business will be conducted. The meetings are normally convened to allow negotiations and interactions at technical and high lev-

of_procedure_e.pdf>; and for CBD, available at <https://www.cbd.int/doc/legal/cbd-rules-procedure.pdf> (all visited 25 March 2013).

27 See UNEP, Guide for Negotiators of Multilateral Environmental Agreements (UNEP, 2007), available at <http://www.unep.org/pdf/delc/Guide_for_MEAs_final.pdf> (visited 31 March 2013) 23–33.

28 For instance, the Intergovernmental Negotiating Committee to prepare a global legally binding instrument on mercury, see <http://www.unep.org/hazardoussubstances/Mercury/Negotiations/INC5/tabid/3471/Default.aspx> (visited 25 March 2013).

29 For instance, the CITES COP meets every three years, the CBD COP meets every two years, the CMS COP meets every three years, the CMS/AEWA (Agreement on the Conservation of African-Eurasian Migratory Waterbirds, The Hague, 16 June 1995, in force 1 November 1999, <http://www.cms.int/species/aewa/aew_bkrd.htm>) MOP meets every three years (having, in 2012, rejected a proposal to meet every four years), and the CMS/ASCOBANS (Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas, New York, 17 March 1992, in force 29 March 1994, <http://www.ascobans.org/>) MOP has agreed in 2012 to meet every four years.

30 For example, all MEA COPs or MOPs or COP/MOPs adopt either decisions or resolutions at the end of their meetings/conferences mandating their parties, secretariats, intergovernmental bodies, etc. to take specific actions for the implementation of their MEAs.

31 For instance, the Rio+20 Outcome Document, *supra* note 9.

els, with several formats, including at the plenary, in various committees and in contact groups designed to take place in parallel.

To manage the process and depending on the rules of procedure, the secretariat can convene a bureau meeting which is normally constituted by several government officials – the Chair of the meeting/conference, Vice-Chairs and a rapporteur, who are selected based on geographical balance – to hold sessions behind the scene to plan for the meeting, to monitor progress or to provide guidance to the chair on the conduct of business of the meeting. Within the United Nations, related meetings of a global nature or parallel consultations can be organized to save time and manage the meeting. These include, plenary as a sole decision maker for the conference; committees, such as a committee of the whole; working groups, such as open ended working groups or others for specific issues; drafting groups; expert groups; Friends of the Chair; and regional bloc consultations,[32] to mention but a few.

The processes and procedures of a negotiation involve aspects such as opening statements, the election of officials, organizational matters, general comments and the adoption of decisions. The structure of the meeting depends on its size, with large meetings being held both in the plenary and in smaller committees, working groups, inter-sessional groups, and informal and formal consultative sessions. Formal sessions include the plenary and major committees addressing agenda items assigned to them by the plenary,[33] while informal consultative sessions are conducted in contact groups or corridor work caucuses. All of these sessions include multiple actors and have multiple roles intended to feed into the main meeting. The composition of the delegations has over the years evolved to include the participation of government delegates, accredited civil society and major groups' representatives. Depending on the issue and the convener, these stakeholders will be given different opportunities to interact at various levels or segments.

5 Phases of multilateral environmental negotiations

Pre-negotiation involves problem-identification, fact-finding, setting the practices for engagement and organization of work, issue-definition, issue-framing, gauging and setting the level of ambition, among other things. This is followed by *formal negotiation*, which involves consolidation of country views, expression of initial positions, pre-formula building, formula building, coalition building, pre-bargaining, bargaining and adoption of decisions. There is also a *post-agreement negotiation* phase, which involves a process of appending signature, depositing instruments of ratification and/

[32] These are normally convened when there is a need to facilitate consultations other than in the plenary. Other groups and coalitions include regional or contact groups such as the EU, the Group of 77 and China, and Small Island Developing States (SIDS).

[33] For instance, the CITES COP normally meets in plenary plus two main committees (Committee I and II); CMS meets in plenary and Committee of the Whole; and the UNEP Governing Council has a plenary, Committee of the Whole and Drafting Group, to give just a few examples.

or accession, undertaking interim activities in the period before the treaty enters into force, operationalization or implementation at the national level, review of implementation, establishment of new instruments, and so on.[34]

Personnel potentially involved within the multilateral process include Chairs of subsidiary bodies (for instance, a Standing Committee), Chairs of working groups and contact groups, rapporteurs, and members of expert groups. It is likely that more experienced negotiators will be called upon to fill these positions of greater responsibility, due to their greater familiarity with the issues being negotiated. These positions are key within a negotiation process and require impartiality.

Personnel potentially involved within coalitions include a spokesperson for a coalition (for instance, the Chair of the African Group) and an issue coordinator (for instance, the G-77 Coordinator on a specific agenda item). These people must represent the interests of their constituencies effectively. Within individual delegations, there are likely to be at least a head of delegation, an issue negotiator and a facilitator, who works between different groups or coalitions to help reach a compromise.

Negotiating groups may be formed on several bases.[35] There are power-based groups and coalitions, including the Umbrella Group JUSCANNZ (developed, non-EU states); the European Union (currently 27 member states forming an 'institutionalised' group); the G-77 and China; and the Least Developed Counties (LDC) Group. Some groups are clearly interest-based. These include the SIDS/AOSIS (Small Island Developing States/Alliance of Small Island States) group, and like-minded groups (for instance, the Like-Minded Mega-Diverse Countries (LMMC)). In addition, there are UN regional groupings: the African Group; the Western Europe and Others Group (WEOG, including the EU, United States, New Zealand, Canada and Australia); the Latin American and Caribbean Group (GRULAC); the Eastern European Group (EEG, or Countries with Economies in Transition); and the Asia-Pacific Group (formerly the Asian Group).[36]

All of the negotiation groups have a role to play in bringing all their members up to speed on the issues before the meeting and on engaging them to agree on positions and a strategy for the negotiations. A negotiator needs to identify his/her coalitions and use these platforms to sell some of his/her country positions. He/she must fur-

[34] See materials prepared by Johannah Bernstein on Effective Participation and Negotiation in Environmental Conferences, 'Steps and Phases for MEA Negotiation Process', for a UNEP-UNITAR Multilateral Environment Negotiation Training Workshop for Mid- to Senior Level Government Officials from Africa held in Johannesburg, South Africa 21–25 November 2005.

[35] Elizabeth Mrema and Ramakrishna Kilaparti, 'The Importance of Alliances, Groups and Partnerships in International Environmental Negotiation', in Ed Couzens and Tuula Honkonen (eds), *International Environmental Lawmaking and Diplomacy Review* 2009, University of Eastern Finland – UNEP Course Series 9 (University of Eastern Finland, 2010) 183–192.

[36] See UNEP, *Guide for Negotiators*, *supra* note 27, at 23–29.

ther participate in all the bloc and coalition meetings to gain insight and to be represented appropriately.

6 Preparation for negotiations[37]

6.1 Negotiations etiquette

In preparation for negotiations, one needs to understand the rules of procedure, which will govern the conduct of the meeting. Before seeking permission to speak, negotiators are expected to judge the discussion point and to time their interventions strategically. Writing down one's position can assist the negotiator in articulating his/her position and in putting his/her point across clearly. Negotiators are expected to use the correct tone, conveying their ideas or position in a polite and diplomatic manner. It is also important to consider other delegates and to give them room to react and intervene.

Negotiation is about giving and taking, so a negotiator is expected to be flexible and willing to compromise in the course of the negotiations. The negotiations may start on a high note of ambition and end up encountering other delegates' objections and proposals along the way. A negotiator must avoid contradicting statements made by the representative of a coalition to which he/she belongs because these statements are made on his/her behalf. A negotiator is expected to use his/her intervention to support statements made by the coalition spokesperson; to elaborate upon that statement or present additional arguments; and to explain why the issue is of particular concern to his/her delegation.

A delegate can concur with, or express his/her support for, statements made by previous speakers who have expressed a viewpoint with which he/she agrees. When one agrees with the viewpoint of a previous speaker, time can be saved by simply referencing the positions taken or arguments made by such speaker. It is therefore important for a delegate to note the areas in which he/she agrees. When the negotiator disagrees with what another speaker has said, he/she should refrain from naming that group or country (negotiators should not, in other words, personalize positions). Instead, a negotiator should state his/her position affirmatively and raise difficulties that other positions pose for achieving agreed ends. A negotiator is expected to understand the basic language of negotiations.[38]

[37] *Ibid*. at 20–22.
[38] *Ibid*. at 34–44 as well as UNEP, *Negotiating and Implementing MEAs*, *supra* note 17, at 39–50.

6.2 Selecting delegations

Governments have the discretion to select delegates from among their officials. In composing a country's delegation, however, (and depending on the subject of the meeting) it is important to consider the mixture of talents and skills needed: technical/scientific, diplomatic, and legal. If a delegation has more than one delegate, the head of delegation should be identified. The advantage of having a large delegation is to have greater human capital to attend to parallel sessions. However, when the delegation is small, with few delegates, one delegate can 'wear many hats'. In such situations, some small delegations rely on regional groups and/or coalitions for their representation in parallel sessions.

It is important to initiate the process of selecting the delegation early so that the names can be submitted timeously for accreditation, and the funding and travel arrangements can be initiated on time. In selecting delegations continuity is critical for ongoing meetings; this can be secured by having focal points/desk officers, if appropriate, to attend these sessions. This consideration of having the same person attend to particular meetings has to be balanced with the ongoing need to train and empower new negotiators to be exposed to the negotiation process.[39]

6.3 Preparing yourself for negotiations[40]

In preparing for negotiations, a negotiator needs to understand his/her position, objectives, interests, strategy, bottom line (in terms of how far he/she can go to accommodate other negotiators' proposals on particular issues in the agenda, proposals), options and ambitions, as well as whether he/she has any alternatives. The negotiator also needs to understand his/her relationship with others, whether he/she will play a dominating role, and how to interact with negotiators from like-minded or opponent countries. A negotiator will need to know what the other side or those who are on the same side stand for, as he/she understands their objectives, interests, strategy, proposals/options, and alternatives, if any.

In preparing oneself as a member of a delegation one needs to prepare thoroughly in one's home country long before negotiations take place. It is important to have a good understanding of the national interest and position on the issues under negotiation, and those of other delegations or groups. This includes being able to identify the most significant agenda items of priority interest to your country and to focus closely on these.

A negotiation team should be identified and mobilized well in advance for negotiators to have sufficient time to become familiar with the agenda items and issues, and to brief other government policy-makers on important issues. A delegate is also ex-

[39] UNEP, *Guide for Negotiators*, *supra* note 27, at 20–21.
[40] *Ibid*. at 20–22 as well as UNEP, *Negotiating and Implementing*, *supra* note 17, at 39–50.

pected to prepare by learning more about the particular negotiation which he/she will attend. This can be done by taking time to research the outcomes of previous negotiation sessions (for instance, COP decisions and subsidiary body recommendations or conclusions). One can also familiarize oneself with the Rules of Procedure, especially relating to decision-making, such as the distinction between consensus requirements (for instance, within the Convention on Biological Diversity) and two-thirds majority voting requirements (for instance, within CITES). It is important that a delegate plans and organizes himself/herself ahead of time, so that he/she can participate effectively by consulting and engaging others in negotiations and by improving his/her ability to negotiate successfully.

A negotiator is expected to know particular coalitions or regional groups with which his/her country can associate; in a particular meeting one can associate with more than one group depending on the issue at hand. For example, a country can associate with the African group, or G77 and China; if he/she comes from a small country in Africa, he/she can also associate with Small Island Developing States (SIDS). One needs to know which among the groups his/her delegation can associate with. The delegate needs to know when and where the coalition is meeting to discuss common positions. He/she needs to know the spokesperson for each of the coalitions he/she will be associating with. He/she also needs to find out if his/her country's concerns are being reflected in the positions taken by his/her coalition or group. If not, the delegate should express his/her country's national needs and concerns and follow up to ensure that these concerns are being addressed. If his/her country is part of more than one coalition, it is also important for the delegate to find out if there are any inconsistencies between the positions taken by these groups. If an issue a delegate has been following has been referred to a contact group or an informal working group, the delegate needs to find out when and where the relevant meetings are taking place, and who is representing his/her interests in that group.[41]

6.4 Reviewing the agenda

In reviewing the agenda and the annotated agenda a negotiator should have a clear understanding of the expected outcomes for the negotiation. It is important to be aware of the expected decisions of a particular conference and meeting and how they are adopted. Not all environmental conferences adopt decisions in the same way. Therefore, it is important to know whether decisions are adopted through consensus, or by resolution, or by voting, and understanding the rules of procedure for the meeting or conference being attended becomes a condition quo non for the negotiator's effective action. If an international legal instrument is at issue – such as at an Intergovernmental Negotiating Committee (INC) conference – a negotiator is expected to be familiar with all the issues relating to the preambular and operational

[41] UNEP, *Guide for Negotiators*, *supra* note 27, at 24–27 as well as UNEP, *Negotiating and Implementing*, *supra* note 17, at 79–100.

paragraphs of the negotiating texts or any summary or texts proposed for discussion. In such an ongoing process as an INC, a negotiator needs to locate, access online and read all previous documents so as to have the same background knowledge as other negotiators. It is also important to find out if there are rules of procedure that one should review.

A negotiator can also determine whether there are existing coalitions in the negotiating process. If there are, the negotiator needs to know which coalition's preparatory meetings his/her country can participate in. In this regard, a negotiator can find out if the coalition meets in advance of the negotiation session to agree on its strategy or a coalition/regional position, and should consider how he/she can advance his/her country's positions through the coalition and how the coalition can affect his/her country's position.

7 Negotiation strategies and techniques

Prior to negotiations, a negotiator can prepare a brief on significant issues, listing key issues in order of priority, relative importance and weight. Furthermore, the brief can include information on the deliverables that his/her government expects from the process, on relevant MEA articles and provisions, on relevant documents for discussion under certain agenda item(s), and on relevant previous decisions, conclusions or recommendations on the issue, especially from the immediately preceding session. The preparatory brief should list any national goals on this issue, if known. Finally, an assessment of the positions of other parties or interest groups and their preferences, if known, can also be included. The negotiator can then outline his/her options, ambition for linkage and trade-offs between his/her preference and those of others, and the outcome expected at the session. Taking into account all these issues, a negotiator can make a recommendation for a national position.[42]

8 The role and effect of language used in negotiations

It is important to understand the basic language of negotiations, as a negotiator must choose his/her words carefully in the course of making interventions or participating in various groups, including drafting groups. Negotiators can spend hours arguing about words in a negotiated text. These words – such as *affirms*, *agrees*, *calls*, *considers*, *endeavours*, *endorses*, *guided*, *notes*, *permits*, *prohibits*, *pursuit*, *recalls*, *recognizes*, *recommends*, *requests*, *requires*, *takes note of*, *urges* – have different meanings.

A negotiator should participate actively in drafting groups where key terms and phrases are discussed to influence the process. For instance, a word such as '*may*' is

[42] *Ibid.* at 41–44.

permissive and discretionary, and creates no obligation for a country to carry out an action. In contrast, use of the word '*must*' renders the provision peremptory, with the result that a country is required to take an action. 'Must' is almost always legally binding. '*Shall*' means that an action is required, and will be binding, unless used with another word that weakens its strength – for instance, '*A Party shall endeavor to do* x, y, or z'. '*Should*' means that an action is not required, but is advised: for instance, a Party ought to try to do x, y or z. It is important to note that a slight change in a verb or tense can make an enormous difference in the kind of commitment that a country makes.[43] In this regard, concrete examples include the following: Article 15(2) of the CBD: '[e]ach Contracting Party *shall* endeavour to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and not to impose restrictions that run counter to the objectives of this Convention'. Article II.2 of the African-Eurasian Waterbird Agreement (AEWA) reads: '[i]n implementing the measures prescribed in paragraph 1 above, Parties *should* take into account the precautionary principle' (emphasis added).

9 Who is a good negotiator?

A good negotiator is one who is well-prepared, shows patience and listens, controls emotions, and is able to break bigger issues down into smaller ones. An effective negotiator looks out for interest-based decisions, he/she rejects weak solutions, and is able to see the bigger picture. He/she respects others and uses diplomacy when presenting positions or commenting on another delegation's position. Good language skills and strong analytical skills are a requirement.

A negotiator needs to have a clear understanding of his/her country's interests and positions and knowledge of prior negotiations and their outcomes. Knowing the positions of other states and coalitions gives a good negotiator an edge across coalition divides and gives him/her an added advantage and capacity in negotiating.[44]

10 Conclusion

International environmental diplomacy continues to grow to include features which were not initially anticipated in international diplomacy. This Chapter is just one attempt among others in the previous editions of this *Review* to articulate the new features that have evolved over the years in international environmental diplomacy; and to provide additional information, as it unfolds, on how these features are applied by negotiators. In recent years, negotiations at various environmental-related conferences and meetings have become increasingly complex, as they include eco-

[43] UNEP, *Guide for Negotiators*, *supra* note 27, at 45–49; and UNEP, *Negotiating and Implementing*, *supra* note 17, at 92–97.

[44] *Ibid*. UNEP, Guide for Negotiators, *supra* note 27, at 41–43.

nomic, financial, legal, technical and technological-related issues. The growing list of Agencies that are designated as financial mechanisms, for example, are bringing relatively new players, including banks, into the negotiation processes. In addition, apart from normal sessions, the work of inter-sessional meetings such as the Implementation Committees, Open-ended Ad hoc Working Groups of MEAs, Scientific and Technical bodies and the activities of international organizations scheduled regularly have increased the opportunities for Governments and related stakeholders to negotiate. All these environmental-related meetings call for a multi-disciplinary set of negotiators, with competence in both legal and technical skills, who are conversant with substantive and procedural issues at hand.

To be effective and confident in negotiations, a negotiator is expected to have the knowledge and skills for negotiations and to be on top of the issues at hand when negotiating in the field of the environment. The information provided in this *Review* should enable a negotiator better to appreciate his/her role and to understand the organization of work and formats of meetings that take place in the course of negotiations.

PART II

SPECIFIC ISSUES RELATED TO OCEAN GOVERNANCE

Small Island Developing States in International Negotiations involving Ocean Governance: UNCLOS, UNFCCC and the Doha Development Round of the WTO

Lisa Benjamin[1]

1 Introduction

Small Island Developing States (SIDS) have been, and continue to be, involved in a number of multilateral negotiations. Despite their small size and significant capacity constraints, SIDS have made gains in these negotiations by using a number of varied strategies, particularly in the law of the sea negotiations. However, in the areas of climate change and trade in particular, it is arguable that SIDS have enjoyed a more moderate level of success. SIDS have tried to combat their structural disadvantages through the use of negotiating blocs and regional institutions which have generally proved advantageous for these countries.

This paper will take a very brief look at the role of SIDS in three international negotiations with a focus on ocean governance; the United Nations Convention on the Law of the Sea (UNCLOS),[2] the United Nations Framework Convention on Climate

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[2] United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, in force 16 November 1994, 21 *International Legal Materials* (1982) 1261.

Change (UNFCCC),[3] and the Doha Round of the World Trade Organization (WTO)[4] negotiations, with a focus on the fisheries subsidies negotiations of the Doha Development Round.[5] Although SIDS made significant gains in the UNCLOS negotiations through the grant of large exclusive economic zones, these gains may be diminished by difficulties encountered by SIDS in governing these ocean resources, and difficulties encountered in both the UNFCCC and Doha Round of the WTO negotiations.

Due to the socio-economic and environmental vulnerabilities of SIDS, ocean resources are often fundamental to their survival and economic development. Ocean resources provide important sources of capital and foreign exchange, support industries such as tourism, and contribute to subsistence livelihoods and poverty reduction. Both climate change and fisheries subsidies are having significant adverse effects, which effects are anticipated to worsen, on ocean resources. Given the importance of these resources to SIDS, deteriorating ocean resources may have even greater detrimental effects for their development prospects. The global nature of these resources, however, requires international cooperation in multilateral negotiations, and SIDS can often be marginalized in international negotiations due to capacity constraints. The aim of this paper is to determine whether any lessons might be learned from an examination of the results of SIDS' negotiation efforts across three multilateral fora involving ocean governance, with a focus on successes won as a result of coalition forming, and the development of strategic alliances. This paper concludes that SIDS must adapt and increase their existing strategies to focus across multiple international negotiation fora to ensure that negotiation 'wins' in one arena of ocean governance negotiations are not lost in another.

2 Small Island Developing States' environmental and socio-economic vulnerabilities

There is no single definition of a small island developing state. The United Nations Department of Economic and Social Affairs (UNDESA)[6] lists 51 SIDS, and the UN Office of the High Representative for the Least Developed Countries (LDCs), Landlocked Developing Countries and Small Island Developing States (OHRLLS) lists the following 38 independent states as SIDS:[7]

[3] United Nations Framework Convention on Climate Change, New York, 9 May 1992, in force 21 March 1994, 31 *International Legal Materials* (1992) 849, <http://unfccc.int>.

[4] See generally, <http://www.wto.org>.

[5] There are a number of other multilateral fora that involve ocean governance, such as the Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, <http://www.biodiv.org>. UNCLOS, the UNFCCC and the Doha Development Round have been chosen as three examples only.

[6] See <http://www.un.org/en/development/desa/index.html>.

[7] Taken from <http://www.un.org/special-rep/ohrlls/sid/list.htm> (visited 18 December 2012).

Antigua and Barbuda	Cuba	Haiti (LDC)	Nauru	St. Lucia	Trinidad and Tobago
The Bahamas	Dominica	Jamaica	Palau	St. Vincent and the Grenadines	Tuvalu (LDC)
Bahrain	Dominican Republic	Kiribati (LDC)	Papua New Guinea	Seychelles	Vanuatu (LDC)
Barbados	Fiji	Maldives (LDC)	Samoa (LDC)	Solomon Islands (LDC)	
Belize	Grenada	Marshall Islands	São Tomé and Principe (LDC)	Suriname	
Cape Verde (LDC)	Guinea-Bissau (LDC)	Federated States of Micronesia	Singapore	Timor-Lesté (LDC)	
Comoros (LDC)	Guyana	Mauritius	St. Kitts and Nevis	Tonga	

The UN OHRLLS also lists the following 14 non-UN members/associate members of the regional commission as SIDS:[8]

American Samoa	Aruba	Commonwealth of Northern Marianas	French Polynesia	Montserrat	New Caledonia	Puerto Rico
Anguilla	British Virgin Islands	Cook Islands	Guam	Netherland Antilles	Niue	U.S. Virgin Islands

It is clear from the above tables that the type of states which are grouped as SIDS is varied, with some authors pointing out that some SIDS are neither small,[9] islands,[10] developing[11] or even states.[12] SIDS are largely made up of Caribbean and Pacific

[8] *Ibid*. The OHRLLS separates SIDS into those which are independent states and those which are not, and also includes Bahrain which the UNDESA list does not.

[9] Suriname, Cuba and Papua New Guinea have relatively large land masses. Also see Liam Campling, 'A Critical Political Economy of the Small Island Developing States Concept – South-South Cooperation for Island Citizens?' 22 *Journal of Developing Societies* (2006) 235–285 at 249, who points out that although there is no universal definition of 'small' the Commonwealth and World Bank have described small states as having populations of less than 1.5 million.

[10] Belize, Guyana and Suriname are part of mainland Central and South America and Guinea Bissau is part of the African mainland.

[11] See Ian Fry 'Small Island Developing States: Becalmed in a Sea of Soft Law' 14(2) *Review of European Community and International Environmental Law* (2005) 89–99 at 89 and Carola Betzold '"Borrowing Power" to Influence International Negotiations: AOSIS in the Climate Change Regime, 1990–1997', 30 *Politics* (2010) 131–148 at 132–133 who have pointed to the relative prosperity of states like Singapore, The Bahamas and Barbados.

[12] Some AOSIS member states are not fully independent. Some, like the Netherland Antilles, are dependent

states, but also include states from regions such as Africa, the Indian Ocean, the Mediterranean and South China Sea. These countries are diverse economically, geographically, socially, and culturally, and are often competitors in the tourism, offshore banking and fisheries sectors. Some SIDS are least developed countries (LDCs), and some are not part of the G-77 and China negotiating bloc. Caribbean SIDS have over 'four times more people than the Pacific SIDS, and nearly one-third higher gross domestic product per capita' than Pacific SIDS,[13] but higher debt to gross domestic product (GDP) ratios than Pacific SIDS.[14] SIDS do, however, share a number of commonalities, including both environmental and socio-economic vulnerabilities. These include:

- low-lying areas vulnerable to sea level rise and storm surges;
- geographic positions strongly affected by tropical storms and cyclones;
- high temperatures;
- scarce land resources;
- limited development or diffusion of technology;
- considerable dependence on scarce or depleted fresh groundwater resources;
- small natural resource bases, with nutrient depletion, soil loss, deforestation and biodiversity loss occurring;[15]
- concentrations of population and infrastructure along coastal areas;
- dependence on a narrow range of export products;
- heavy dependence on imports;
- susceptibility to international trade and commodity price fluctuations;
- small domestic markets and limited ability to develop economies of scale;
- limited opportunities for economic diversification;
- high transport and communication costs (particularly acute in archipelagic nations);
- limited public budgets and dependence on foreign capital to finance development; and
- weak institutional structures and limited human capacity, primarily due to small manpower resource bases.[16]

These capacity constraints have made SIDS particularly vulnerable to environmental injury, including sea level rise, increased storm surge and flooding, ocean acidification, biological diversity degradation, and damage from stronger or more frequent

territories and some members like the Cook Islands and Niue are 'freely associated' with New Zealand, and others like the Marshall Islands and Palau with the United States.

13 See Pamela S. Chasek, 'Margins of Power: Coalition Building and Coalition Maintenance of the South Pacific Island States and the Alliance of Small Island States', 14 *Review of European Community and International Environmental Law* (2005) 125–137 at 134.

14 See 'Achieving Debt Sustainability and the MDGs in Small Island Developing States', UNDP Discussion Paper, 20 October 2010 at 16–17.

15 Jon Barnett, 'Titanic States? Impacts and Responses to Climate Change in the Pacific Islands' 59 *Journal of International Affairs* (2005) 203–219 at 207.

16 Lino Bruguglio, 'Small Island Developing States and Their Economic Vulnerabilities' 23(9) *World Development* (1995) 1615–1632 at 1616.

hurricanes and typhoons. Betzold et al point out that although SIDS suffer from common vulnerabilities, the varied nature of these states means that their levels and types of vulnerability also vary.[17] These authors point out that some low-lying states, such as Vanuatu, are more vulnerable to sea level rise than others such as Cuba or Belize, which can better adapt to that particular threat; whilst others, like Guyana, are more interested in the REDD+ mechanism[18] in the UNFCCC negotiations than other, less forested, SIDS.[19] However, on the whole, these shared capacity constraints contribute to SIDS' unique vulnerability to environmental changes. These constraints also reduce the resilience of these states, making them less able to combat and/or adapt to environmental degradation. In some arenas, such as climate change, the threats can detrimentally affect the development of these states.[20] This vulnerability has motivated, and continues to motivate, significant activity by SIDS in multilateral negotiations.

3 Why multilateralism for SIDS?

SIDS make up approximately one-quarter of developing states, but less than one per cent of the world's land area.[21] As a result of decolonization, collectively SIDS have a large number of votes at the United Nations, with members of the Alliance of Small Island States (AOSIS) alone making up approximately one-fifth of United Nations membership.[22] Campling charts the course of SIDS' negotiation strategies, pointing out that SIDS emphasized their structural inequalities in the 1970s, their geopolitical security concerns in the 1980s, and their economic and environmental vulnerabilities in the 1990s.[23] Campling continues, stating that the 1994 Declaration of Barbados[24] and the Barbados Programme of Action on Small Island Developing States[25] 'heightened international concern with the particularities of SIDS' developmental trajectories, constraints and opportunities'.[26] SIDS have tried to harness this international concern to their advantage,[27] particularly in multilateral negotiations

[17] Carola Betzold, Paula Castro and Florian Weiler, 'AOSIS in the UNFCCC Negotiations: From Unity to Fragmentation?', 12 *Climate Policy* (2012) 591–613 at 595.

[18] Reducing emissions from deforestation and forest degradation. For more information on the REDD+ mechanism in developing countries and the UNFCCC negotiations, see 'Agreed outcome pursuant to the Bali Action Plan', Draft Decision -/CP.18 (2012), II C.

[19] Betzold et al, 'AOSIS in UNFCCC Negotiations' *supra* note 17, at 6.

[20] Economic Commission for Latin America and the Caribbean, 'The Economics of Climate Change in the Caribbean – Summary Report' (2011), available at <http://www.eclac.org/portofspain/noticias/paginas/0/44160/Final_Caribbean_RECC_Summary_Report%5B1-3%5D.pdf> (visited 5 February 2012) at 13.

[21] See Betzold, 'Borrowing Power' *supra* note 11, at 3.

[22] See *ibid*. The history of AOSIS is dealt with in Section 5 of this paper.

[23] See Campling, *supra* note 9, at 239–241.

[24] Declaration of Barbabos, UN Doc. A/CONF.167/9 (1994), part I, Annex I, available at <http://islands.unep.ch/dbardecl.htm> (visited 13 February 2013).

[25] Programme of Action for the Sustainable Development of SIDS, UN Doc. A/CONF.167/9 (1994), part I, Annex I, available at <http://islands.unep.ch/dsidspoa.htm> (visited 13 February 2013).

[26] See Campling, *supra* note 9, at 235.

[27] See *ibid*. at 236, 239–241.

by the formation of, and active participation in, negotiating blocs to promote their common positions.

Multilateral negotiations often involve a number of asymmetries for SIDS, including asymmetries of economic clout, sheer number of negotiators, historical knowledge of the negotiations, and power. In a small survey of members of AOSIS, a negotiating bloc for SIDS in the UNFCCC, the following capacity constraints were cited: the small sizes of their delegations, limited staff and human capacity to attend the large number of meetings, reliance on third parties such as non-governmental organizations (NGOs) or other countries to represent their interests, insufficient preparation opportunities, and change of domestic personnel.[28] Zartman argues that power in negotiations does not just include 'force' but also includes pressure, resistance and inducement.[29] He argues that because of this more nuanced definition of power, multilateral negotiations can conclude in a structuralists' paradox 'that the most powerful party in terms of force or resources does not always win at negotiation'.[30] Larson notes that low power parties can become influential participants in multilateral negotiations.[31] Small states are not always hampered by their size. Active engagement and use of expertise can often help to even out asymmetries for small states in multilateral negotiations.[32]

As a result, the multilateral process can be an advantageous one for SIDS, particularly when they negotiate in blocs. Blocs provide a critical mass for small states that often have small negotiating teams. It allows SIDS to 'pool their sovereignty'[33] to enable them to attend the many, and often simultaneously held, meetings, and report back to the collective bloc. They can also hold normative power as a result of the perceived legitimacy of their claims.[34] Kaniaru highlights the importance of negotiating blocs, particularly for small delegations, as 'an irreplaceable means of defining areas of agreement and disagreement; interests involved and who the protagonists are'.[35] Prioritization of issues and coalition forming, or borrowing power,[36] are two

[28] The survey was conducted in 2010–2011 and represents the views of a small number of AOSIS negotiators who attended the 2010 COP 16 negotiations in Cancun, Mexico. For more information, see Lisa Benjamin, 'The Role of AOSIS in the UNFCCC Negotiations' in Tuula Honkonen and Ed Couzens (eds), *International Environmental Lawmaking and Diplomacy Review* 2010, University of Eastern Finland – UNEP Course Series 10 (University of Eastern Finland, 2011) 117–132.

[29] William Zartman, 'The Structuralist Dilemma in Negotiation' (1997), available at <http://id.cdint.org/content/documents/The_Structuralist_Dilemma_in_Negotiation.pdf > (visited 4 March 2013) at 4.

[30] *Ibid*. at 5.

[31] Mary Jo Larson, 'Low Power Contributions in Multilateral Negotiations: A Framework Analysis', 19 *Negotiation Journal* (2003) 133–149 at 145.

[32] Diana Panke, 'Small States in EU negotiations: Political Dwarfs or Power-Brokers?*'* 46 *Cooperation and Conflict* (2011) 123–143 at 135.

[33] Chasek, 'Margins of Power', *supra* note 13, at 126.

[34] Nicole Dietelhoff and Linda Wallbott, 'Beyond Soft Balancing: Small States and Coalition-building in the ICC and Climate Negotiations' 25 *Cambridge Review of International Affairs* (2012*)* 345–366 at 348.

[35] Donald Kaniaru, 'International Environmental Negotiating Blocs' in Ed Couzens and Tuula Kolari (eds), *International Environmental Lawmaking and Diplomacy Review 2006*, University of Joensuu – UNEP Course Series 4 (University of Joensuu, 2007) 3–15 at 7.

[36] Dietelhoff and Wallbott, *supra* note 34, at 348.

legitimate negotiation strategies that SIDS have consistently employed in multilateral negotiations to overcome significant capacity constraints.

SIDS have worked hard across a number of multilateral negotiating fora to argue for multilateral rules that protect the global commons, and have joined or formed negotiation blocs to achieve their aims and overcome capacity constraints. UNCLOS is often cited as one of the most successful and wide-ranging conventions of its time dealing with a global common good, the oceans.

4 SIDS in the UNCLOS negotiations

The law of the sea has a long history, with a number of competing theories regarding the ocean's usage. Hugo Grotius dominated the field with his publication in 1609 of *Mare Liberum*, expressing his theory of freedom of navigation on the high seas.[37] The naval powers of the 17th century, such as England, Holland, Portugal and Spain, strongly supported trade and exploration on the high seas. As a result, Grotius' theory of freedom of navigation of the high seas became the dominant theory of the law of the sea for several centuries, with the exception of the territorial sea of a state which was generally understood to extend to three nautical miles from the baseline.[38] The 1945 Truman Proclamation[39] began a unilateral extension by the United States of its territorial sea beyond the historic three nautical mile limit in order to mine marine resources in the extended area.[40] Other states began to follow suit, and it became clear that the pursuit of marine resources necessitated a stable international regime which would codify the law of the sea and regulate its use. The UNCLOS treaties resulted from a series of conferences to achieve this task: UNCLOS I held from 1956 to 1958, UNCLOS II held in 1960 and UNCLOS III from 1973 to 1982.[41] The final conference led to an 'omnibus' convention; or the United Nations Convention on the Law of the Sea (also known as UNCLOS), which incorporated the results of the previous conferences, and resulted in the most comprehensive multilateral convention of its time regarding a global natural resource.

[37] See Scott J. Shackleford, 'Was Selden Right? The Expansion of Closed Seas and Its Consequences', 47 *Stanford Journal of International Law* (2011) 1–50 at 10–11.

[38] This was in part based on the length of a cannon shot in the 17th century. See *ibid*. at 12.

[39] Proclamation 2667 of September 28, 1945: Policy of the United States with Respect to the Natural Resources of the Subsoil and Sea Bed of the Continental Shelf, available at <http://www.oceancommission.gov/documents/gov_oceans/truman.pdf> (visited 13 February 2013).

[40] *Ibid*. at 14. Shackelford notes that this move was motivated by the desire by the US to exert sovereignty over oil and gas deposits in its Continental Shelf.

[41] UNCLOS III was later updated by amendments agreed to in the Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea 1982, otherwise known as the 1994 New York Implementing Agreement. This Agreement altered contentious provisions in the mining arrangements of the International Seabed Authority under Part XI of UNCLOS III.

The long time span over which the UNCLOS negotiations took place saw a number of developments involving not only SIDS, but also most developing countries. Most important among these developments was the transition of what were former dependent colonies into newly independent countries (or NICs). The proliferation of NICs in the 1960s and 1970s changed the nature of the United Nations by shifting the voting majority to the developing (or then third) world. Many developing countries wanted this transition to political independence to be mirrored by economic independence, which they felt required the assertion of full sovereignty over their natural resources. This desire led to a movement by NICs labelled the 'new international economic order' or NIEO, which reached its height in the 1970s.[42] Mickelson asserts that this tension between developed and developing countries was partly due to the inability of developing countries to equalize global structural inequalities between states.[43] She states that:

> [i]n the period immediately following decolonization in the 1950s and early 1960s, there was widespread faith in the notion that political independence and formal legal equality would permit the new [s]tates of Africa and Asia to achieve autonomy. This reliance on formal legal and political formulas quickly gave way to a realization that the obstacles to self-determination were considerably more formidable than had been anticipated. The focus on structural impediments in the international economic system arose most notably in the context of the formation of the United Nations Conference on Trade and Development ('UNCTAD') in 1963 and the coalescing of the 'Group of 77' at the first session of UNCTAD in 1964.[44]

UNCTAD[45] became the forum through which developing countries, through the Group of 77, or G-77 negotiating bloc, were able to assert the NIEO and their development agendas,[46] and the G-77 negotiating bloc continues to operate in a number of multilateral fora. Although newly independent, many SIDS played an active role in the NIEO negotiations. The issues and particularities of SIDS rose to the fore during the NIEO movement, partly as a result of the move towards 'soft' political issues such as trade, the environment and development.[47] Jacobsen et al conducted a series of interviews in 1976 with negotiators involved in the NIEO and found that

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42 See UN General Assembly Resolutions: 'Permanent Sovereignty Over Natural Resources' (A/5217/1962); 'Declaration on the Establishment of a New International Economic Order', (A/RES/S-6/3201 (1974)); and 'Charter of Economic Rights and Duties of States (A/RES/29/3281/1974).

43 Karin Mickelson, 'Rhetoric and Rage: Third World Voices in International Legal Discourse', 16 *Wisconsin International Law Journal* (1997–1998) 353–420 at 362.

44 *Ibid*. at 362.

45 See <http://www.unctad.org>.

46 Stephen Zamora, 'Voting in International Economic Organizations', 75 *American Journal of International Law* (1980) 566–608 at 580. UNCTAD was established in 1964 and works to promote 'development-friendly integration of developing countries into the world economy'. For more information on UNCTAD, see <http://www.unctad.org>.

47 Campling, *supra* note 9, at 239.

CARICOM[48] negotiators scored highly in coordination of bargaining positions.[49] The authors themselves found this surprising given the new and relatively weak central institution of CARICOM, and surmise that CARICOM states may have sent a greater number of negotiators with a higher level of experience and rank to the negotiations.[50] Part of the NIEO involved the agreement of non-reciprocal access to developed country markets, and SIDS concluded a number of such agreements, including the Lomé Convention,[51] Caribbean Basin Initiative[52] and the Canada Caribbean Trade Agreement (or CARIBCAN).[53,54] SIDS were also successful in establishing a unit in UNCTAD in order to sustain focus on issues particular to island developing states.[55] Mickelson argues that developing countries have subsequently used their natural resources as 'a Southern bargaining chip'[56] to achieve their economic goals by leveraging protection of their natural resources for greater gains in economic justice or human rights.[57] SIDS have aligned their national interests with the international environmental movement, establishing a link between their future as states with environmentalism.[58]

The UNCLOS negotiations became one of the major battlefields upon which this shifting geopolitical transition was shaped. Developing countries were acutely aware that they had not been involved in the formation of the early theories of the law of the sea.[59] Developing countries wanted to stop developed countries from monopolizing natural resources in the global commons.[60] In relation to the law of the sea, this

[48] The Caribbean Community, or CARICOM, is a regional coalition of Caribbean states which was established by the original Treaty of Chaguaramus Establishing the Caribbean Community, signed on 4 July 1973. Most of the states in CARICOM agreed to pursue further integration through the CARICOM Single Market and Economy, established in the Revised Treaty of Chaguaramus Establishing the Caribbean Community, signed in July 2001. For more information on CARICOM see <http://www.caricom.org/>.

[49] Harold K Jacobson, Dusan Sidjanski, Jeffrey Rodamar and Alice Hougassian-Rudovich, 'Revolutionaries or Bargainers? Negotiations for a New International Economic Order' 35 *World Politics* (1983) 335–367 at 353–355.

[50] *Ibid*. at 335.

[51] ACP-EEC Convention of Lomé, Lóme, 28 February 1975, in force 1 April 1976; amended and renewed later three times.

[52] For more information, see <http://www.ustr.gov/trade-topics/trade-development/preference-programs/caribbean-basin-initiative-cbi> (visited 5 August 2013).

[53] For more information, see CARICOM Secretariat, Office of Trade Negotiations, 'CARICOM-CANADA', available at <http://www.crnm.org/index.php?option=com_content&view=article&id=51&Itemid=121> (visited 5 August 2013).

[54] Wendell A. Samuel, 'Small Island Economies in the New International Environment' 48 *Social and Economic Studies, Special Monetary Studies Issue* (1999) 15–189 at 158–159.

[55] Philippe Hein, 'Small island developing States: origin of the category and definition issues' in UNCTAD, 'Is a special treatment of small island developing States possible?' (UNCTAD, 2004), available at <http://unctad.org/en/docs/ldc20041_en.pdf> (visited 18 October 2013) at 4–5.

[56] Mickelson, 'Rhetoric and Rage', *supra* note 43, at 388.

[57] *Ibid*. at 388.

[58] Peter Prows, 'A Mouse Can Roar: Small Island States, the United Nations, and the End of Free-For-All Fishing on the High Seas', 19 *Colorado Journal of International Environmental Law and Policy* (2008) 1–48 at 7.

[59] M. Johanne Picard, 'International Law of Fisheries and Small Developing States: A call for the Recognition of Regional Hegemony', 31 *Texas International Law Journal* (1996) 317–342 at 318.

[60] See Shackleford, 'Was Selden Right?', *supra* note 37, at 20.

meant negotiating for an equitable sharing of ocean resources. This desire motivated the request by Arvid Pardo, the permanent representative of Malta to the United Nations, and national of an island state, to declare the seabed '*res communes*'; to be exploited for the benefit of mankind as a whole.[61]

A major part of the UNCLOS negotiations involved the economic issue of access to, and the mining of, ocean resources, and this conflict illustrated the principles and tensions involved in the NIEO. The international tussle over access to and the right to exploit marine resources stemmed in part from the discovery of manganese nodules and other marine resources like pelagic clay, oil and other venous deposits. Manganese nodules, approximately the size and shape of two to four inch potatoes, contain within them over 37 metals, and had to be mined from the sea floor. The international seabed authority (ISA) was established through Article 156 of UNCLOS to mine the seabed through a mechanism called the Enterprise. Control over the Enterprise was a contentious issue during the negotiation of UNCLOS, with developed countries arguing for direct access to mining rights for private, multinational companies, and developing countries preferring international, collective ownership through the Enterprise to ensure developed countries did not monopolize ocean resources.[62] Developing countries on the whole considered the nodules to be the common heritage of mankind, a central concept in the NIEO.[63] The position of the G-77 on this issue was led by Latin America which argued for a strong seabed agency, and the G-77 position on the ISA hardened in part due to the ongoing NIEO negotiations.[64] SIDS participated in this debate, with Guyana being part of the developing country mineral producing states along with Brazil, Chile, Peru, Zaire and Zambia.[65] SIDS also assumed leadership roles in the conference negotiations, with Tommy Koh from Singapore even assuming the role of Conference President.[66]

One of the legacies of UNCLOS III was the division of the oceans into zones, most notably into an extended[67] twelve nautical mile territorial sea, and the creation of a two hundred nautical mile exclusive economic zone or EEZ. SIDS participated

[61] There were a number of negotiating blocs which exerted their own agendas in the negotiations, including archipelagic states, strait states, and landlocked and geographically disadvantaged states. See the 'Declaration of Principles Governing the Seabed and Ocean Floor', UNGA Res. 2749 (1970), and Shackleford, 'Was Selden Right?', *supra* note 37, at 20.

[62] Ultimately, the parties agreed that private companies would undertake mining activities supervised by the Enterprise with the transfer of technology from developed countries. The ISA was later deregulated in the 1994 New York Implementing Agreement to UNCLOS III to reflect this agreement (see Shackleford, 'Was Selden Right?', *supra* note 37, at 26) and the discovery of land-based sources of nickel proved easier and therefore more feasible to source, thereby reducing the importance and role of the Enterprise.

[63] Richard J. Payne and Jamal R. Nassar, 'The New International Economic Order at Sea', 17 *The Journal of Developing Areas* (1982) 31–50 at 43.

[64] Robert L. Friedheim and William J. Durch, 'The International Seabed Authority and the New International Economic Order', 31 *Restructuring Ocean Regimes: Implications of the Third United Nations Conference on the Law of the Sea* (1977) 343–384, at 343 and 374–376.

[65] *Ibid.* at 358.

[66] Prows, 'A Mouse Can Roar', *supra* note 58, at 6.

[67] Previously, the territorial sea had been generally considered to extend for three nautical miles.

fully in the UNCLOS III conference, partly because by 1982 the majority of SIDS had achieved political independence. Prior to 1982, all independent Caribbean SIDS (except Cuba) participated in the 1974 Conference in Caracas, Columbia, to prepare for the next UNCLOS round of negotiations. Two years prior to this, Caribbean SIDS had also participated at the Specialized Conference of Caribbean Countries Concerning the Problems of the Sea, which resulted in the Declaration of Santo Domingo.[68] This Declaration established the concept of the patrimonial seas, with an EEZ separate and apart from a territorial sea.[69] However, the concept of a patrimonial EEZ was not always fully supported by Caribbean SIDS. In particular, Jamaica argued for the concept of a matrimonial sea, allowing geographically disadvantaged states to fish in what would become the EEZs of other states.[70] Chutkan notes that although Haiti and Trinidad and Tobago signed the Santo Domingo Declaration, Barbados and Jamaica (because of their concerns about loss of access to fishery resources) did not sign the Declaration and instead attempted to assert rights for geographically disadvantaged and landlocked states, in conjunction with other non-SIDS.[71] This group only achieved limited success by the inclusion of Articles 69 and 70 of UNCLOS (which address landlocked and geographically disadvantaged states respectively).

Slade explains that the majority of SIDS had specific aspirations for UNCLOS III, including:

- no limitation on the size of a country's EEZ by reference to its land size or population; and
- that every island would be granted a territorial sea and EEZ.[72]

Slade explains that SIDS justified these demands by the fact that they required large marine areas to compensate for their lack of territorial land space.[73] SIDS were successful in achieving their main negotiation goals, with large marine EEZs made available to be granted to relatively small countries under UNCLOS III. However,

[68] Declaration of the Specialized Conference of Caribbean Countries Concerning Problems of the Sea, Santo Domingo de Guzmán, Dominican Republic, 1972, Doc. CCM/RC/5 (1972). Documents from this Conference are reproduced in 66 *The American Journal of International Law* (1972) 918–920.

[69] Noelle Chutkan, 'Comments CARICOM and The Law of the Sea: The Case for Extending CARICOM to Fishing in the Caribbean', *Emory Journal of International Dispute Resolution* (1987) 385–424 at 394.

[70] In describing the 'patrimonial sea', the Declaration of Santo Domingo provides, *inter alia*, that '[t]he coastal State has sovereign rights over the renewable and non-renewable natural resources, which are found in the waters, in the seabed and in the subsoil of an area adjacent to the territorial sea called the patrimonial sea', but that within this zone (which, when combined with the territorial sea, should not exceed a maximum of 200 nautical miles) 'ships and aircraft of all States, whether coastal or not, should enjoy the right of freedom of navigation and overflight with no restrictions other than those resulting from the exercise by the [c]oastal State of its rights within the area'. In contrast, the application of a 'matrimonial sea' approach would allow other states to access a coastal state's EEZ not only for the purposes of air and maritime navigation, but also to exploit natural resources.

[71] *Ibid*. at 394.

[72] Tuilona Neroni Slade, 'The Making of International Law: The Role of Small Island States' 17 *Temple International and Comparative Law Journal* 531 (2003) 531–544 at 534–535.

[73] *Ibid*. at 535.

Chutkan argues that not all Caribbean SIDS fully supported the concept of an EEZ.[74] Carnegie explains that these SIDS may have acquiesced to larger coalition concerns of the G-77.[75]

Developing countries on the whole supported the concept of an EEZ, and this may have contributed to the success of the initiative. In a demonstration of Caribbean-Pacific coalition building, archipelagic states, including The Bahamas, Fiji, the Philippines and Indonesia, formed a negotiation group to assert archipelagic claims and were particularly successful in obtaining generous baseline delimitations.[76] Some SIDS, particularly in the Caribbean, where there exists an uneven geographic distribution of fish, were disadvantaged by this new regime as they were excluded from traditional fishing areas which now fell under the EEZ of another state.[77] However, the majority of SIDS appear to have been satisfied with UNCLOS' delimitation of the world's oceans. Most SIDS saw the achievement of patrimonial EEZs as a 'win' in the UNCLOS negotiations as it significantly extended their resource bases. In fact, Aqorau notes that Pacific states' land mass accounts for only two per cent of their EEZs.[78] Enforcing jurisdiction over their EEZs and complying with the obligations of UNCLOS for sustainable management of ocean resources, however, has been a more challenging prospect for SIDS. As a result of the establishment of EEZs, SIDS have been largely left on their own to enforce jurisdiction over their EEZs and ensure the sustainable use of ocean resources therein. In order to combat domestic capacity constraints in this regard, SIDS in the Caribbean and Pacific have, to differing extents, turned to regional coalition formation to achieve these ends.

Caribbean SIDS attempted to establish a regional fisheries policy through CARICOM,[79] the main regional body which was established in 1973. A regional fisheries policy, however, has been resisted by a number of CARICOM states. Instead, Caribbean SIDS, along with the countries that border the Gulf of Mexico, Atlantic Ocean and Caribbean Sea, have instituted a Caribbean Environment Programme (CEP), which is a regional seas programme for the wider Caribbean region, administered under the auspices of the UNEP Regional Seas Programme.[80] While the CEP focuses on oil pollution, land-based sources of pollution, and the protection of marine areas through the Cartagena Convention on the Protection of the Wider

[74] Chutkan, 'Comments CARICOM and The Law of the Sea', *supra* note 69 at 394.
[75] A. R. Carnegie, 'The Law of the Sea: Commonwealth Caribbean Perspectives' 36(3) *Social and Economic Studies* (1987) 99–117 at 104.
[76] *Ibid.* at 104.
[77] See Chutkan, 'Comments CARICOM and The Law of the Sea', *supra* note 69, at 391. The author provides examples of regional exclusion of Jamaican fishermen from traditional fishing grounds off the Honduran coast, and Cuban fishermen being excluded from fishing in what are now Bahamian waters.
[78] Transform Aqorau, 'Illegal Fishing and Fisheries Law Enforcement in Small Island Developing States: The Pacific Islands Experience', *International Journal of Marine and Coastal Law* (2000) 37–64 at 38.
[79] See *supra* note 48.
[80] For more information on CEP, see <http://www.cep.unep.org> and for more information about the UNEP Regional Seas Programme, see <http://www.unep.org/regionalseas/>.

Caribbean Sea[81] and its three Protocols,[82] it does not establish a regional fisheries policy. The CARICOM Fisheries Resource Assessment and Management Program (CFRAMP), established in 1991, led to the establishment of the Caribbean Regional Fisheries Mechanism (CRFM) in 2003. The CRFM has three institutional aspects; a ministerial council, the Caribbean Fisheries Forum and a technical unit/secretariat. The CRFM promotes the sustainable development of fisheries resources in the region.[83] CARICOM has also initiated a project to develop a regional environmental policy.[84] However, strong regional collaboration supporting regional institutions in fisheries management, price setting, a common external tariff (excluding the CSME), marketing standards, and equal access to ports have been difficult to implement as states with generous EEZs in the region tend toward safeguarding their domestic resources, and away from regionalism.

Pacific SIDS have, arguably, been more successful at establishing regional fisheries policies and institutions through the political grouping of 16 independent and self-governing states in the Pacific Islands Forum, established in 1971.[85] Ninety per cent of the commercially valuable tuna fisheries in the Pacific are taken by vessels from distant water fishing nations (DWFNs) like Japan, Korea, Taiwan and the United States.[86] The migratory nature of the resource and the vessels make it difficult for these small states to monitor fishing limitations imposed by domestic permits. As a result, in 1979, the Pacific Island Forum Fisheries Agency (FFA) was established to collect and disseminate data, establish management procedures, draft model legislation and provide processing, marketing and technical information for the sustainable harvesting of regional tuna fisheries.[87] The FFA also developed Harmonized Minimum Terms and Conditions of Access for Foreign Fishing Vessels,[88] and in 1983

[81] Cartagena Convention on the Protection of the Wider Caribbean Sea, Cartagena, 24 March 1983, in force 11 October 1986, <http://www.cep.unep.org/cartagena-convention/text-of-the-cartagena-convention>.

[82] Protocol Concerning Co-operation in Combating Oil Spills in the Wider Caribbean Region, Cartagena, 24 March 1983, in force 11 October 1986; Protocol Concerning Specially Protected Areas and Wildlife (SPAW) in the Wider Caribbean Region, Kingston, 18 January 1990, in force 18 June 2000; Protocol Concerning Pollution from Land-Based Sources and Activities, Oranjestad, 6 October 1999, in force 13 August 2010; all available at <http://www.cep.unep.org/cartagena-convention>.

[83] See <http://www.caricom-fisheries.com/>.

[84] See CARICOM-CIDA trade and competitiveness project, environment sub-component, available at <http://www.nepa.gov.jm/documents/tor-to-savingram.pdf> (visited 1 August 2013).

[85] The Pacific Islands Forum was originally established as the South Pacific Forum in 1971, but changed its name in 2000. It currently has 16 member states, which are Australia, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Republic of Marshal Islands, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. The Forum also includes associate and observer member states. For more information, see <http://www.forumsec.org> (visited 5 March 2013).

[86] See Aqorau, 'Illegal Fishing and Fisheries', *supra* note 78, at 38.

[87] The FFA was founded through the South Pacific Forum Fisheries Agency Convention (Honiara, 10 July 1979, in force 9 August 1979) and currently has 17 member states, Australia, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu. For more information on the FFA, see <http://www.ffa.int> (visited 5 March 2013).

[88] For the text of the Convention, see <http://www.ffa.int/system/files/HMTC%20FFC77%20Approved.pdf> (visited 5 March 2013).

established the Regional Register of Foreign Fishing Vessels[89] which holds and makes available information on these vessels. In 1993 the Niue Treaty on Co-operation in Fisheries Surveillance and Law Enforcement in the Pacific Region[90] was established to extend surveillance and enforcement activities between territorial seas and EEZs of neighbouring Pacific states.[91] These efforts serve as examples of the sharing of sovereignty between these nations for enforcement.

The 2000 Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC or the Honolulu Convention)[92] between Pacific Island nations and DWFNs established a Scientific Commission, Compliance Committee and required vessel monitoring systems on all DWFN vessels.[93] As Larocque states, the Honolulu Convention provides a mechanism for smaller states to more effectively enforce conservation measures on larger DWFNs.[94] Pacific SIDS, particularly through the FFA, have combined resources for better management of their ocean resources.

These examples of regional coordination, particularly among Pacific SIDS, demonstrate continued attempts by SIDS to form coalitions not only to negotiate effectively, but to attempt to effectively enforce the 'wins' they gained in these negotiations through regional collaboration for management of the resources within their EEZs. Negotiations in other multilateral arenas, like climate change, have delivered a more mixed measure of success for SIDS.

5 AOSIS in the UNFCCC negotiations

Climate change is anticipated to have dramatic negative effects for SIDS. These include increased air temperatures, reduced fresh water resources, sea level rise, rising water temperatures, ocean acidification, and increased hurricane intensity and storm surges. The IPCC *Climate Change 2007: Synthesis Report* (2008) states that for SIDS some of the expected effects are that sea level rise will exacerbate storm surge, erosion and other coastal hazards, threatening vital infrastructure.[95] In addition, erosion of

[89] For more information on vessel registration at the FFA, see <http://www.ffa.int/vessel_registration/howto> (visited 5 March 2013).

[90] Niue Treaty on Cooperation in Fisheries Surveillance and Law Enforcement in the South Pacific Region, Honiara, 9 July 1992, in force 20 May 1993, 32 *International Legal Materials* (1993) 136.

[91] See Aquorau, 'Illegal Fishing and Fisheries', *supra* note 78, at 54.

[92] Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, Honolulu, 5 September 2000, in force 19 June 2004, available at http://www.wcpfc.int/key-documents/convention-text (visited 5 March 2013).

[93] Japan and Korea have not joined the Convention on the basis that they are not parties to the 1995 Straddling Stocks Agreement.

[94] Emily E. Larocque, 'The Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean: Can Tuna Promote Development of Pacific Island Nations?', 4 *Asian-Pacific Law & Policy Journal* (2003) 83–120 at 85.

[95] Intergovernmental Panel on Climate Change, *Climate Change 2007: Synthesis Report* (2008), available at <http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf> (visited 5 March 2013) at 52. It is worth

beaches and coral bleaching is expected to affect local resources, as will increased invasion of non-native species due to higher temperatures. By mid-century water resources are anticipated to become insufficient to meet local demand during the dry seasons.[96] Climate change is also expected to have adverse economic, and therefore developmental, effects for SIDS. Although there are few regional studies on the economic impact of climate change, a 2008 study by Bueno et al estimated the costs to the Caribbean of global inaction on climate change at US$22 billion annually by 2050 and US$46 billion annually by 2011 for the region, representing between 10 per cent and 22 per cent of the region's GDP based on 2004 GDP results.[97]

Anticipated vulnerability to climate change led SIDS to form the Alliance of Small Island States (AOSIS) as a distinct negotiating bloc within the UNFCCC negotiations. As scientific concern over climate change mounted, a number of SIDS convened a Small State Conference on Sea Level Rise in the Maldives in 1989,[98] which resulted in the Malé Declaration on Global Warming and Sea Level Rise.[99] AOSIS was subsequently formed during the Second World Climate Conference in 1990 by 24 states.[100] AOSIS currently has 40 members and four observer states.[101]

AOSIS operates with no formal budget, charter or secretariat, and works primarily through its member states' diplomatic missions to the United Nations in New York.[102] Its membership represents approximately one-quarter of developing states.[103] AOSIS itself is a member of the Group of 77, or G-77 and China,[104] negotiating bloc, but not all of its members are part of that bloc. Some AOSIS members are LDCs, and some are also members of the ALBA (Bolivarian Alliance of Latin American coun-

noting that the IPCC predictions in Assessment Report 4 for sea level rise are conservative as they exclude uncertainties in climate carbon-cycle feedbacks and the full effects of future changes in ice sheet flow. These are expected to be addressed by the IPCC in *Assessment Report 5*, due to be published between 2013–2014.

96 *Ibid.* at 52.

97 Ramón Bueno, Cornelia Herzfeld, Elizabeth A. Stanton and Frank Ackerman, *The Caribbean and Climate Change: The Costs of Inaction* (2008), available at <http://ase.tufts.edu/gdae/Pubs/rp/Caribbean-full-Englowres.pdf> (visited 5 March 2013) at 2. See also the Economic Commission of Latin America and the Caribbean, *The Economics of Climate Change in the Caribbean* (2011), available at <http://www.eclac.org/portofspain/noticias/paginas/0/44160/Final_Caribbean_RECC_Summary_Report%5B1-3%5D.pdf> (visited 5 August 2013) which provides more recent and sectoral breakdowns of costs. See also Lisa Benjamin, 'Climate Change and Caribbean Small Island States: The State of Play', 16 *The International Journal of Bahamian Studies* (2010) 78–91.

98 Although not a formal conference website, materials from the conference are available at <http://www.islandvulnerability.org/slr1989.html> (visited 5 March 2013).

99 A copy of the declaration is available at <http://www.islandvulnerability.org/slr1989/declaration.pdf> (visited 28 December 2012).

100 See <http://www.aosis.org>.

101 Taken from <http://www.aosis.org/members> (visited 5 March 2013).

102 *Ibid*.

103 Betzold, 'Borrowing Power', *supra* note 11, at 3.

104 The Group of 77 was first formed in 1964, and at its first Ministerial Meeting of the Group of 77, in Algiers (Algeria) in October 1967, adopted the Charter of Algiers. The G-77 is the largest intergovernmental negotiating group at the United Nations. For more information, see <http://g77.org/doc/> (visited 5 March 2013).

tries) negotiating bloc. As a result, AOSIS' membership reflects the diverse nature and interests of SIDS.

AOSIS as a bloc faces distinct disadvantages in the UNFCCC negotiations. Its primary disadvantage is that its member states are in need of drastic emissions cuts by other negotiating parties, but themselves have no substantial emissions to leverage, nor deep pockets to fund technology transfer or adaptation activities. Despite this disadvantage, AOSIS has managed, particularly in the early stages of the UNFCCC negotiations, to secure negotiation 'wins' for its member states.[105]

In the early stages of the negotiations on climate change, AOSIS' first Chairman, Robert van Lierop, was appointed to the Intergovernmental Negotiating Committee's Bureau.[106] This early appointment provided AOSIS with an opportunity to shape the drafting of the UNFCCC. AOSIS was influential in the negotiations by securing most of its 12 objectives in the final Convention, including a preambular reference to the unique problems of SIDS, the inclusion of the precautionary approach in Article 3(3), and the goal of stabilization of GHGs in Article 4(2) of the Convention.[107] AOSIS also employed 'first mover advantage' by putting forward the first draft of the Kyoto Protocol in 1994, and the final 1997 Kyoto Protocol was based on this AOSIS draft.[108]

Betzold notes that AOSIS achieved these successes by employing a number of negotiation strategies, including using a vulnerability discourse, isolating obstructionist parties, and being open to third party assistance.[109] For example, AOSIS has benefited from collaborations with NGOs such as the Foundation for International Environmental Law and Development, which provide technical expertise and increased manpower. AOSIS' success has also been attributed to its sense of unity, strong lead-

[105] For a fuller summary of the history of AOSIS and of SIDS discourse in international negotiations see Jenny Grote, 'The Changing Tides of Small Island States Discourse – A Historical Overview of the Appearance of Small Island States in the International Arena', 43 *Verfassung und Recht in Ubersee* (VRU) (2010), available at <http://www.vrue.nomos.de/fileadmin/vrue/doc/Aufsatz_VRUE_10_02.pdf> (visited 5 March 2013).

[106] Chasek, 'Margins of Power', *supra* note 13, at 132.

[107] For a detailed analysis of the achievement of the AOSIS objectives, see John Ashe, 'The Role of the Alliance of Small Island States (AOSIS) in the Negotiation of the United Nations Framework Convention on Climate Change (UNFCCC)', 23 *Natural Resources Forum* (1999) 209–220. The other objectives included a preambular reference that participation in the negotiations would not prejudice existing rights under international law, a commitment to immediate and significant cuts in GHGs, impact assessments of proposed activities, and reference to the polluter pays principle. See *ibid*. at 212–215.

[108] Farhana Yamin and Joanna Depledge, *The International Climate Change Regime A guide to Rules, Institutions and Procedures* (Cambridge University Press, 2004) at 38. The Kyoto Protocol to the United Nations Framework Convention on Climate Change is currently the only protocol agreed under the Convention, and includes binding targets for some countries, and flexible mechanisms to achieve those targets. Although AOSIS put forward the initial draft of the Protocol, the agreed document took several years of negotiation and did not include all of the provisions included in the first draft.

[109] Betzold describes process based strategies as including first mover advantage, for example by AOSIS putting forward the first draft of the Kyoto Protocol. See Betzold 'Borrowing Power', *supra* note 11, at 1, 6, 7 and 8.

ership and an evolving consciousness in the international community of its members' plight.[110] AOSIS has built a substantial amount of expertise among its negotiators, with several assuming leadership positions within the UNFCCC.[111]

AOSIS continues to be a major player in the UNFCCC negotiations, and has built a significant reputation amongst the negotiatiors. Despite this, it has consistently struggled to achieve one of its primary goals (a goal shared by other vulnerable states but not always shared by large developing states): legally binding and significant emissions cuts from large emitting countries. Recently AOSIS has focused on establishing a financial mechanism to help fund its members' adaption to climate change. The most recent form of this mechanism is the Green Climate Fund (GCF),[112] formally agreed in COP16 in 2010, with SIDS securing representation on the GCF Board and transitional committee of the fund.[113] Both the Copenhagen Accord[114] and COP16 decisions also include a review of the two degree Celsius goal in 2015,[115] including in relation to an alternative 1.5 degree Celsius goal which AOSIS has long argued is necessary. In the 2012 COP18 negotiations, AOSIS was instrumental in the COP decision to establish institutional arrangements, such as an institutional mechanism on loss and damage.[116]

Despite these successes, there is a general reluctance among many industrialized countries to commit to deep emissions cuts unless all major economies do the same. This has been exemplified by Canada, Japan and the United States refusing to sign up to the second commitment period of the Kyoto Protocol, agreed at COP18 in Doha in 2012. This reluctance leaves AOSIS negotiators in a difficult and often frustrating position. However, a small survey of AOSIS negotiators in 2010–2011 demonstrated that most AOSIS members at that time were satisfied with the performance of their negotiating bloc.[117] Although the survey did not ask respondents to comment on why they were satisfied with the alliance, this satisfaction may be due to their understanding of the significant resistance by some developed nations and large developing states to agree to binding emission cuts. The G-77 negotiating bloc

[110] W. Jackson Davis, 'The Alliance of Small Island States (AOSIS): the International Conscience', 2 *Asia-Pacific Magazine* (May 1996) 17–22 at 18.

[111] For example, since 2009, John Ashe from Antigua and Barbuda has been Chairman of the Ad Hoc Working Group on Further Commitments under the Kyoto Protocol (AWG-KP), and in 2012 Diane Black Layne, of Antigua and Barbuda (also a representative of the Alliance of Small Island States, AOSIS), was selected as Chair of the Standing Committee on Finance under the UNFCCC.

[112] See <http://gcfund.net/home.html>.

[113] 'The Cancum Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention', Decision 1/CP.16 (2011), para's 103 and 109.

[114] 'Copenhagen Accord', Decision 2/CP.15, in Report of the Conference of the Parties on its 15th sess., UN Doc. FCCC/CP/2009/11/Add.1 (2010), Addendum.

[115] This meaning the goal of limiting global temperature rise to no more than 2 degrees above pre-industrial levels.

[116] 'Approaches to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects to climate change to enhance adaptive capacity', Decision 3/CP.18 (2013), para 9.

[117] See Benjamin,'The Role of AOSIS', *supra* note 28, at 129–130.

includes states which are members of OPEC, whose interests are almost diametrically opposed to those of AOSIS, and so forming strategic alliances with states within the G-77 is not always possible. Respondents' satisfaction may also be attributed to an acknowledgement of the capacity constraints experienced by SIDS. These types of capacity constraints are also felt by SIDS in the negotiating forum of the World Trade Organization.

6 SIDS in the World Trade Organization negotiations: the Doha Development Round

The World Trade Organization (WTO), along with its multilateral trade agreements, was established in 1995 at the end of the Uruguay Round of negotiations, but its predecessor, the General Agreement on Tariffs and Trade (GATT) began much earlier in 1947. The idea of the WTO (then conceived of as the International Trade Organization) was established at the Bretton Woods Conference in New Hampshire, United States, in 1944, with the aim of pursuing free trade through the reduction of tariffs on the import of goods through successive trade rounds.[118] The GATT was based on the philosophies of Adam Smith and David Ricardo, being neo-liberal ideologies of economic capitalism and comparative advantage. As Afilalo and Patterson argue, Smith and Ricardo 'posited that states would maximize their wealth by unilaterally eliminating import restrictions'.[119]

As a result, GATT was established primarily to correct the market failures of the inter-war period,[120] and was based on the principles of non-discrimination, national treatment, most-favoured nation,[121] market access and the elimination of non-tariff barriers. Although originally GATT members were primarily developed countries, many developing countries participated in the Uruguay Round negotiations, where the WTO was agreed. The Uruguay Round was based on the 'Grand Bargain' that industrialized countries would move more manufacturing to lower wage countries, thereby assisting in their development.[122]

Many developing countries, including many SIDS, joined the WTO in 1995, but some became dissatisfied with the regime as it failed to assist their developmental agendas directly. Wiener criticizes the regime as follows:

[118] Some of the major GATT trade negotiation rounds include the Dillon Round from 1960–1961, the Kennedy Round from 1965–1967, the Tokyo Round from 1973–1979, and the Uruguay Round from 1986–1994. For more information on the trade rounds, see WTO, 'GATT trade rounds', <http://www.wto.org/english/thewto_e/whatis_e/tif_e/fact4_e.htm#rounds> (visited 5 March 2013).

[119] Ari Afilalo and Dennis Patterson, 'Statecraft, Trade and the Order of States', 6 *Chicago Journal of International Law* (2005–2006) 725–759 at 737.

[120] *Ibid*. at 739.

[121] Which principle means that no nation may be discriminated against in trade – in other words, that all nations are given 'most favoured' status.

[122] William A. Lovett, 'Bargaining Challenges and Conflicting Interests: Implementing the Doha Round', 17 *American University of International Law Review* 951 (2001–2002) 951–1002 at 952–953.

> [t]he result of institutionalized global trade rules and semi-regular ministerial summits has been a bifurcated agenda whereby developed countries and well-established trade blocs negotiate highly self-satisfying trade policies while the developing world scrambles to interject a development agenda that presently appears incompatible with existing policies.[123]

Lewis explains the disconnect: that the WTO originally focused only on market access and not on development directly. She comments that this approach 'reflects an underlying assumption that the rising tide will raise all boats – that liberalizing markets alone will make all WTO members better off'.[124] While this strategy inevitably worked for many countries,[125] it did not for others, particularly LDCs. In preparation for the 1999 Seattle Ministerial Conference, CARICOM SIDS joined the developing country strategy of 'review, repair and reform' of the Uruguay Round agreements. This new strategy by developing states contributed to the collapse of the Seattle Ministerial Conference, and to a proposal for a new development round. This ultimately led to the creation of the Doha Development Round which began in November 2001, and negotiations under the Doha Round continue in 2013. Lewis comments that this round was initiated in part to provide 'a form of payback to the LDCs and poorer developing countries for their concessions made in the Uruguay Round negotiations'.[126] The Doha Ministerial Declaration of 14 November 2001 explains its impetus as follows:

> [i]nternational trade can play a major role in the promotion of economic development and the alleviation of poverty. We recognize the need for all of our peoples to benefit from the increased opportunities and welfare gains that the multilateral trading system generates. The majority of WTO members are developing countries. We seek to place their needs and interests at the heart of the Work Programme adopted in this Declaration.[127]

The Doha negotiation round is one of the largest and longest trade rounds in WTO history. The trade round has faced a number of hurdles for a variety of reasons, and the talks collapsed in 2003, were suspended in 2006, and collapsed again in 2008.[128] Many developing countries see the Doha Round as an opportunity to remove the

[123] Jason Wiener, 'World Trade Organization's Identity Crisis: Institutional Legitimacy and Growth Potential in the Developing World', 2 *Manchester Journal of International Economic Law* (2005) 54–71 at 55.

[124] Meredith Kolsky Lewis, 'WTO Winners and Losers: The Trade and Development Disconnect', 39 *Georgia Journal of International Law* (2007–2008) 165–198 at 165.

[125] The US gross national product (GNP) expanded by more than 50 per cent between 1993–2000. See Lovett, 'Bargaining Challenges and Conflicting Interests', *supra* note 122, at 954. Global poverty rates have declined, with an estimated 200–500 million fewer poor in 2000 than in 1970 – see Christina R. Sevilla, 'The WTO Doha Development Agenda: What is at Stake', 25 *Berkeley Journal of International Law* (2007) 425–433 at 430.

[126] Lewis, 'WTO Winners and Losers', *supra* note 124, at 168.

[127] Doha Ministerial Declaration, UN Doc. WT/MIN(01)/DEC/1 (2001), available at <http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm> para 2 (visited 5 February 2013).

[128] Sungjoon Cho, 'The Demise of Development in the Doha Round Negotiations' 45 *Texas International Law Journal* (2009–2010) 573–602 at 579.

old, unfair protectionism enjoyed by the developed countries (particularly in the area of agricultural subsidies) that has led to issues that were not resolved in the Uruguay Round.[129] Developed countries, particularly the EU member states and the United States, are reluctant to remove these historic subsidies without obtaining new concessions from developing countries, and this has erected significant hurdles in the negotiations.

Developing countries account for 73 per cent of the membership of the WTO, and negotiate primarily through the G-77 and China negotiating bloc.[130] The WTO negotiating forum is based on consensus, with one country having one vote. However, in reality, this voting 'consensus' is subject to the economic power of the countries involved, and SIDS have the potential to be marginalized in the negotiations as they represent less than one per cent of world trade.[131] SIDS have joined the negotiating bloc of small vulnerable economies, or SVEs, but still struggle to have their voices heard.[132] Fiji's Trade Minister, Isimeli Bose, summarized his frustrations as follows:

> [w]e are told in a forum such as this that we are all equal and we have a level playing field. However, when I consider my inability to influence opinion, to mobilize razor-sharp executives who lobby convincingly on our behalf, to stage-manage the debate, then I realize that there is no level playing field in trade, and some are indeed more equal than others.[133]

The SVE negotiating bloc was created in preparation for the Singapore Ministerial Meeting in 1996, and consistently advocates for preferential treatment for African, Caribbean, and Pacific (or ACP) countries. The GATT established the Generalized System of Preferences (or GSP) in 1971, which allowed developed countries the discretion to grant preferences to developing countries. However, Gunewardene argues that this was mainly used by developed countries, particularly the United States, to reward their allies and punish their political opponents.[134] The GSP was established

[129] *Ibid*. at 582; and Susan C. Schwab, 'After Doha: Why the Negotiations are Doomed and What We Should Do About It', 90 *Foreign Affairs* (2011) 104–117 at 106.

[130] Sonia E. Rolland, 'Developing Country Coalitions at the WTO: In Search of Legal Support', 48 *Harvard International Law Journal* (2007) 483–552 at 487.

[131] Barbara von Tigerstrom, 'Small Island Developing States and International Trade: Special Challenges in the Global Partnership for Development', 6 *Melbourne Journal of International Law* (2005) 402–436 at 413.

[132] SVEs are economies which account for only a small fraction of world trade. See WTO, 'Briefing note: Small, Vulnerable Economies', available at <http://www.wto.org/english/thewto_e/minist_e/min11_e/brief_svc_e.htm> (visited 5 March 2013). See also the WTO work programme on SVEs, Doc. WT/L/447 (2002).

[133] See WTO, Ministerial Conference, Singapore, 9–13 December 1996, Fiji, Statement by the Honourable Mr. Isimeli Bose Minister for Commerce, Industry, Trade and Public Enterprises, Doc. WT/MIN(96)/ST/54 (1996), available at <http://www.wto.org/english/thewto_e/minist_e/min96_e/st54.htm> (visited 28 December 2012).

[134] Roshani M. Gunewardene, 'GATT and the Developing World: Is a New Principle of Trade Liberalization Needed?' 15 *MD Journal of International Law and Trade* (1991) 45–68 at 50.

more formally after the Tokyo Round of negotiations in 1979 through the decision on 'Differential and More Favourable Treatment, Reciprocity and Fuller Participation of Developing Countries' (the Enabling Clause).[135]

In 2001, the Decision on Implementation-Related Issues and Concerns[136] helped extend special and differential treatment (S&DT) through the Enabling Clause to SVEs, although the S&DT regime is generally regarded as weak. LDCs have managed to be recognized institutionally through the formation of the WTO Subcommittee on LDCs in the Committee on Trade and Development,[137] and Rolland argues that SIDS should also be given a similar institutional home.[138] A WTO work programme on SVEs[139] was established on 5 March 2002, largely as a result of efforts by SIDS. SIDS had called for a review of existing S&DT mechanisms to determine their efficacy in light of the special needs and concerns of small economies. CARICOM SIDS in particular had highlighted the specific characteristics of small, vulnerable economies, and advocated for a programme that would lower levels of obligations, provide exemptions from commitments in certain areas, apply flexibility in certain disciplines, and provide access to mediation, technical assistance and training.[140] These requests contributed to the establishment of a work programme on small economies, designed to specifically address the special needs and concerns of SIDS.[141]

Structural inequalities and capacity constraints make it difficult for SIDS to implement their WTO obligations or benefit from the WTO dispute resolution system, and limit their ability to participate in the WTO negotiations. Many SIDS do not have a mission at the WTO headquarters in Geneva, or if they do it is very small.[142] Despite some efforts to combat structure capacity constraints, the WTO has resulted in an erosion of historic preferential trading arrangements which benefited SIDS, particularly trading preferences instituted by EU countries to assist their former colonies. The removal of these trading preferences has further compounded SIDS' financial constraints. A 2010 UNDP Discussion Paper states that in 2009 14

[135] Decision L/4903 of 28 November 1979, available at <http://www.wto.org/english/docs_e/legal_e/enabling1979_e.htm> (visited 17 February 2013).

[136] Decision of 14 November 2001, Doc. WT/MIN(01)/17.

[137] For more information, see WTO, 'The Sub-Committee on Least-Developed Countries', available at <http://www.wto.org/english/tratop_e/devel_e/dev_sub_committee_ldc_e.htm> (visited 17 February 2013).

[138] Rolland, 'Developing Country Coalitions', *supra* note 130, at 513.

[139] Doc. WT/L/447 (2002).

[140] Arnold McIntyre, 'CARICOM and the WTO', 49 *Social and Economic Studies* (2000) 83–112, at 101.

[141] See also SIDS communications to the Committee on Trade and Development on the Work Programme for Small Economies, such as Docs WT/COMTD/SE/W/13/Rev.1 (2005), WT/COMTD/SE/W/14 (2005), WT/COMTD/SE/W/16/Rev.2 (2005), WT/COMTD/SE/W/12 (2005), WT/COMTD/SE/W/20 (2006), WT/COMTD/SE/W/15/Rev.2 (2006) and WT/COMTD/SE/W/18/Rev.2 (2006).

[142] von Tigerstrom, 'Small Island Developing States', *supra* note 131, at 425. In an attempt to combat these constraints, the WTO helped to establish the Pacific Island Forum Representative Office in Geneva which provides assistance to Pacific Island trade officials through technical advice and assistance, training, supporting attendance by officials at WTO meetings, and assistance with access to aid for trade capacity building programmes. The office is shared by representatives from the Organization of Eastern Caribbean States.

SIDS had debt-to-GDP ratios in excess of 60 per cent, and eight SIDS registered debt-to-GDP ratios in excess of 100 per cent.[143] Many of the heavily indebted SIDS are in the Caribbean. These high levels of debt can be explained by trade preference erosion and declines in traditional exports, as well as lax fiscal policies.[144] The degrading fiscal situation of SIDS makes their efforts in the WTO negotiations even more pressing. In an effort to create a cohesive voice across a variety of trade negotiations, the Caribbean region established the Caribbean Regional Negotiating Machinery (CRNM), now known as the Office of Trade Negotiations (OTN).[145] The OTN's goal is to ensure that Caribbean countries are not impeded by changes in global trading regimes, and it pursues a central negotiating platform of securing special and differential treatment for smaller economies.[146]

Although historically not a multilateral environmental regime, the WTO trading rules have had significant environmental effects on ocean resources. It is estimated that three-quarters of fish resources are under threat, and over the past few decades trade has accounted for over 50 per cent of the value of fisheries production.[147] In 1996, 90 per cent of fisheries subsidies were provided by six developed countries and a regional entity,[148] including Canada, Chinese Taipei (Taiwan), the EU, Japan, South Korea and the US. The Committee on Trade and the Environment took up the issue of fisheries subsidies with the US formally introducing the issue in the Seattle Ministerial Conference. The informal coalition 'Friends of Fish', formed in 1998, has continued to push for a separate Annex to the Agreement on Subsidies and Countervailing Duties (ASCM) specifically to deal with fisheries subsidies.[149] This group argues that fisheries subsidies lead to both overcapacity, considered a trade distorting effect, and overexploitation, which is largely considered an environmental issue. The Doha Round negotiations include efforts to discipline existing fishing subsidies through the Negotiating Group on Rules. The Friends of Fish group was successful in including in the 2001 Doha Ministerial Decision a statement that parties would clarify and improve WTO disciplines on fisheries subsidies.[150] The Hong Kong Ministerial Declaration in 2005 also noted broad agreement that disciplines on subsidies in the fisheries sector should be strengthened, with special attention being paid to the importance of the sector to developing countries and LDCs.[151] Some authors have

[143] 'Achieving Debt Sustainability and the MDGs in SIDS', UNDP Discussion Paper (2010), available at <http://www.undp.org/content/undp/en/home/librarypage/mdg/achieving-debt-sustainability/> (visited 5 August 2013) at 4.

[144] *Ibid*, at 4. The report notes that many Caribbean SIDS have also turned to international and domestic capital markets to finance development, whereas Pacific countries owe a high proportion of their public debt burdens to multilateral and bilateral creditors.

[145] See <http://www.crnm.org/>.

[146] *Ibid*.

[147] ICTSD Project on Fisheries and Trade and Sustainable Development 'Fisheries, International Trade and Sustainable Development' (2006) at ix and 1.

[148] *Ibid.* at 62

[149] This negotiation group is fluid, but its members usually include Iceland, New Zealand, Australia, Chile, Peru, the Philippines, Norway and the US.

[150] Doha Ministerial Declaration, UN Doc. WT/MIN(01)/DEC/1 (2001), *supra* note 127.

[151] WT/MIN(05)/DEC (2005), Annex D, para. 9.

argued that this negotiating issue is an attempt to reform the WTO's negative reputation on environmental issues.[152]

Fishing subsidies can have a tremendous impact on global fisheries, leading to destructive fishing practices and overcapacity of fishing fleets. O'Shea notes that

> [b]ecause destructive fishing practices and fleet overcapacity are enabled by government subsidies, the World Trade Organization (WTO) Agreement on Subsidies and Countervailing Measures (SCM) may be one of the best tools available for stopping overfishing. Though it may seem strange to tackle conservation issues through a trade agreement, the WTO offers something that most international forums can only dream of – an effective enforcement mechanism.[153]

Most WTO members have agreed to discipline fishing subsidies, and are negotiating on the basis of a 'traffic light' approach.[154] This suggested approach, which is a combination of a number of member state proposals, would prohibit 'red light' subsidies which contribute to overcapacity, remove 'dark amber' subsidies which are presumed to have detrimental environmental effects unless governments can prove otherwise, and allow 'green light' subsidies which would be used to scrap old fishing vessels or modernize them to make them more environmentally friendly, and retrain fishermen.[155] The negotiations on fisheries subsidies, however, have been heated, with some WTO members arguing that fisheries subsidies are not subsidies at all,[156] and that including a separate fisheries annex to the ASCM, which includes non-trade concerns such as overexploitation, is not appropriate for the WTO and may lead to fragmentation of the subsidies regime, and possibly the WTO itself.[157]

SIDS have been active in these negotiations, and have made a number of submissions both as the SVE and in collaboration with other, larger, states such as India. SIDS have argued that fisheries generate a tremendous amount of revenue for SVEs, and argue for three areas to be exempted from any subsidy disciplines:

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[152] Eric A Bilsky, 'Conserving Marine Wildlife Through World Trade' 30 *Michigan Journal of International Law* (2008–2009) 599–641 at 628.

[153] Brook Glass O'Shea, 'Watery Grave: Why International and Domestic Lawmakers Need to do More to Protect Oceanic Species from Extinction', 17 *Hastings NW Journal of Environmental Law and Policy* (2011) 191–232 at 205.

[154] Derek J. Dostel, 'Global Fisheries Subsidies Will the WTO Reel in Effective Regulations?', 26 *University of Pennsylvania Journal of International Economic Law* (2005) 815–840 at 828.

[155] The definitions vary between proposals of the United States, the EU and several other nations. See *ibid*. at 829–830.

[156] Some member states and authors have argued that government to government access fee payments do not provide a subsidy to the fishing industry, and that it may be difficult to prove the production distorting effects of a subsidy, thereby making it difficult to prove injury to a member state. See WTO, 'Access Fees in Fisheries Subsidies Negotiations – Communication from the ACP Group', Doc. TN/RL/W/209 (2007) at para's 2 and 9. See also ICTSD Project on Fisheries and Trade and Sustainable Development, *supra* note 150, at 75.

[157] Seung Wha Chang, 'WTO Disciplines on Fisheries Subsidies: A Historic Step Towards Sustainability?' 6 *Journal of International Economic Law* (2003) 879–921 at 918.

- revenue generation from access fees from DWFN;
- domestic and foreign fisheries export-related operations in EEZs to support domestic processing facilities; and
- artisanal fishing within the territorial sea and EEZ to supply both domestic and international markets.[158]

Fisheries subsidies present a development bind for SIDS. They provide a significant amount of revenue through fees from access agreements, particularly for Pacific SIDS. SIDS have based their argument to retain fees from access agreements on, in particular, Articles 56, 61 and 62 of UNCLOS, which require states to allow access to any surplus of marine resources to other states. SIDS also want to reserve policy space to develop their own domestic fisheries industries in the future. In addition, artisanal fisheries provide food security, reduce poverty, and form part of the culture and way of life of these states. However, fisheries subsidies also make it difficult for domestic fleets to compete with highly subsidized DWFN fleets, and have meant that SIDS have not been able to fully exploit their own fisheries through domestic industries. Fisheries subsidies also contribute to overexploitation, and may lead to the depletion of fisheries stocks in the EEZs of these nations, which will have dramatic long term consequences for development. In addition, artisanal fisheries, while not as destructive as highly industrialized fishing, can also lead to discarded bycatch[159] and can employ unsustainable techniques such as bleaching and dynamiting. In addition, for SIDS to argue to retain fees from access agreements which may contribute to unsustainable fishing, while arguing for loss and damage to fisheries industries from slow onset events due to climate change, may be deemed to be contradictory as unsustainable fishing practices may reduce the resiliency of ocean resources to climate change.

SIDS have attempted to align this tension between economic development needs and sustainable fisheries by arguing for S&DT for their three areas of concerns, particularly on the basis that their share of global marine wild capture is less than 0.1 per cent.[160] SIDS also highlight the need for technical assistance and capacity building from developed countries in the area of sustainable fisheries.[161] Schorr notes that this is largely a problem of sequencing for SIDS; Governments should dedicate more investment to data collection and sustainable management of fisheries, but poverty

[158] 'Architecture on Fishries Subsidies Disciplines, paper from Antigua and Barbuda, Barbados, Dominican Republic, Fiji, Grenada, Guyana, Jamaica, Papua New Guinea, St. Kitts and Nevis, St. Lucia, Solomon Islands, Trinidad and Tobago', Doc. TN/RL/GEN/57/Rev.2 (2005).

[159] Peckham et al, 'Small-scale Fisheries Bycatch Jeopardizes Endangered Pacific Loggerhead Turtles' 2 *PLOS One* (2007) 7–12.

[160] 'Textual Proposal for Additional Flexibilities for Small and Vulnerable Economies Under Article III of the Proposed Draft Chair's Text on Fisheries Subsidies. Communication from the Small and Vulnerable Economies', Doc. TN/RL/GEN/162.Rev.1 (2011).

[161] 'S&DT in the Fisheries Subsidies Negotiations: Views of the Small, Vulnerable Economies. Communication from Antigua and Barbuda, Barbados, Cuba, Dominican Republic, El Salvador, Fiji, Guyana, Honduras, Jamaica, Mauritius, Nicaragua, Papua New Guinea, and Solomon Islands', Doc. TN/RL/W/210/Rev.2 (2007) at para. A.

alleviation and development demands make this difficult.[162] He notes that S&DT provisions can help to alleviate this sequencing issue by eliminating high risk classes of subsidies to artisanal fisheries through sunset clauses, and providing equal investment in sustainable fisheries management, and improving technology transfer and development assistance.[163]

7 Conclusion

SIDS have operated across a variety of multilateral negotiating fora, achieving a level of success in those individual negotiations that far exceeds the capacities and size of these states. SIDS have managed to win gains through the pooling of resources into negotiating blocs and regional institutions within particular negotiation forums. Particularly in the UNCLOS III negotiations (1973–1982), SIDS were successful in expanding their jurisdictions significantly by securing the right to claim large EEZs, often far in excess of the relative size of their territories, by forming strategic alliances with other states, including non-SIDS, with similar issues. SIDS have since struggled to enforce jurisdiction over their marine resources, particularly fishing rights, although the Honolulu Convention demonstrates collective activity in enforcement by Pacific SIDS against much larger distant water fishing nations.

SIDS also won significant gains in the UNFCCC negotiations, particularly in the early stages of the negotiations. Later stages of this negotiation have proved more challenging for SIDS, particularly because of an existing deadlock between industrialized and large developing states regarding binding emissions reductions. Perhaps because of this deadlock, AOSIS has spent significant negotiating resources on securing adequate, predictable and additional financing from developed states to assist SIDS in adaptation activities. These efforts contributed to the establishment of new financial institutions such as the Green Climate Fund, and most recently an agreement to establish institutional arrangements to address loss and damage from slow onset events such as sea level rise. However, a future challenge for SIDS will be to ensure not only appropriate levels of funding commitments, but actual payments of, and access to, appropriate levels of financing in these newly established mechanisms. The WTO negotiations have also proved challenging for SIDS, partly due to the philosophical underpinnings of the trading regime.

It appears that SIDS have struggled to make progress in multilateral negotiations, such as the UNFCCC and the Doha Development Agenda (DDA) of the WTO, where distributive economic issues are involved, and where their interests are not

[162] David K Schorr, 'Artisanal Fishing: Promoting Poverty Reduction and Community Development Through New WTO Rules on Fisheries Subsidies. An Issues and Options Paper', UNEP Economics and Trade Branch (2005), available at <http://www.unep.ch/etb/events/pdf/AFSchoor.pdf> (visited 5 August 2013) at 25–26.

[163] *Ibid*. at 26.

fully aligned with those of large developing states. SIDS have also struggled to secure adequate capacity-building, financing and technical assistance under multilateral agreements. In this regard, SIDS have worked to ensure special and differential treatment of their members within particular negotiation fora. The OTN machinery has been largely successful at establishing a coordinated negotiating forum for Caribbean SIDS on the issue of trade, and these states remain actively involved in negotiations on climate change and fishing subsidies within individual negotiating fora. In some instances, SIDS have begun to coordinate their trade and environmental efforts, both domestically and regionally, to ensure coherent negotiating strategies across different multilateral fora, but more work needs to be done in this area. Efforts on domestic and regional 'coalition building' across multilateral negotiation fora should become a priority equal to coalition building within individual negotiation fora.

Multilateral negotiations, while complex and costly, have provided significant opportunities for SIDS to pursue and seek areas of agreement regarding global environmental commons. Despite their significant capacity constraints, SIDS have worked hard to take advantage of these opportunities. However, the gains achieved by SIDS through the UNCLOS III negotiations by the attainment of large EEZs for SIDS may be lost if more progress is not made in the UNFCCC and Doha Development Round negotiations.

Success in the Doha Development Round in the area of the elimination of fishing subsidies will also have important ramifications for the health and availability of marine resources. Once one fishery resource is depleted, it is likely that subsidized vessels from DWFNs will move further into unexploited or underexploited fishing areas in the developing world, making it difficult for SIDS to sustain existing fishing industries, and develop their own fishing capacities.[164]

Climate change may have devastating impacts on resources, infrastructure and consequentially the development potential for these states, and in some instances may threaten the existence of some islands. Coral reefs are important resources for SIDS as they act as protective barriers for beaches and coasts, and act as nurseries for crustaceans and fish.[165] Coral reefs are under significant threat from climate change and unsustainable fishing practices. There have been a number of coral bleaching events in the Caribbean, and recent studies suggest that 80 per cent of coral reefs in the Caribbean may have been lost in the last twenty years.[166] Fish is the second most important source of protein in the Caribbean region after poultry.[167] In addition, the Brander et al study suggests that Caribbean reefs have higher values than reefs in any

[164] Alice Mattice, 'The Fisheries Subsidies Negotiation in the WTO: A win-win-win for trade and the environment and sustainable development', 34 *Golden Gate University Law Review* (2004) 586 at 576.
[165] Benjamin 'Climate Change', *supra* note 97, at 84.
[166] United Nations Environmental Programme, Caribbean Environment Outlook (UNEP, 2009), available at <http://www.unep.org/geo/pdfs/Caribbean_eo_final.pdf> (visited 6 March 2013) at 7.
[167] *Ibid.* at 60.

other region studied,[168] as they support the important fishing and tourism industries in the region. If the long term predictions of climate change are accurate, many SIDS may disappear under rising sea levels. It is unclear whether disappeared states would still be able to lay claim to their EEZs, even as deterritorialized states.[169] However, climate change does not appear in any of the proposals put forward by SVEs on fisheries subsidies in the DDA negotiations, despite the significant threats that it poses to the survival not only of fisheries but ocean resources generally. While this is understandable as the WTO does not officially deal with environmental issues specifically, trade and climate change are beginning to overlap at the multilateral levels and coherent positions across these areas should be developed.

As a result, it is important for SIDS to take into account the cross-implications of several fora of multinational negotiations for their marine resources. Gains in one arena of ocean resource negotiations must be supported by adequate capacity-building and financial mechanisms, and by gains in other arenas, such as climate change and trade. To this end, domestic coalition building through national cross-departmental negotiating mechanisms (across trade and environmental portfolios, for example) may assist already overstretched negotiators, as well as continuing to coordinate existing regional mechanisms and negotiating platforms through the use of existing regional negotiating blocs. This will assist SIDS in developing cohesive environmental and development outcomes in the area of ocean governance. In addition, further inter-agency discussion at the domestic level, as between Ministries of Finance and Ministries of the Environment, will assist in the sharing of experience and expertise in order to develop more consistent international positions and implementation of decisions.

At the regional level, more support for regional fisheries management organizations and developing and strengthening interagency mechanisms, as across the OTN and the Caribbean Community Climate Change Centre, may also assist international negotiators. Collaborations such as these may also help to identify areas of funding across regional trade agreements, such as the CARIFORUM EU-EPA, and international agreements under the WTO and the UNFCCC to assist in capacity building and technical assistance in ocean governance. For example, the recent CARICOM OTN Consensus on Trade and Climate Change under Consultations on DDA in March 2012 discussed the overlapping issues of trade and climate change, bringing together regional WTO DDA and UNFCCC negotiators.

At the multilateral level, highlighting synergies across trade and climate change which contribute to the decline of ocean resources can also strengthen the arguments for

[168] Luke M. Brander, Katrin Rehdanz, Richard S. J. Tol, Pieter J. H. van Beukering, *The Economic Impact of Ocean Acidification on Coral Reefs*, ESRI working paper no. 282 (2009), available at <http://www.esri.ie/UserFiles/publications/20090218113337/WP282.pdf> (visited 8 March 2013) at 6.

[169] Lilian Yamamoto and Miguel Esteban, 'Vanishing Island States and Sovereignty' 53 *Ocean and Coastal Management* (2010) 1–9 at 4.

S&DT needed for SIDS for sustainable ocean governance and development of sustainable fisheries industries. For example, the new institutional arrangements for loss and damage under UNFCCC could highlight the implications of loss of fisheries industries for SIDS due to both slow onset events which are compounded by unsustainable fishing practices. The upcoming 2014 Third International Conference on SIDS presents an opportunity to examine the positions of SIDS, with a focus on thematic issues such as ocean governance, across multiple negotiating fora, and to develop recommendations for more coherent institutional mechanisms to assist negotiators, as well as to develop mutually supportive environmental and development outcomes in ocean governance.

Marine Biodiversity and Fisheries Governance: An overview

Michael Kidd[1]

Here lies the concept, MSY.
It advocated yields too high,
And didn't spell out how to slice the pie.
We bury it with the best of wishes,
Especially on behalf of fishes. …[2]

1 Introduction

Oceans are full of biodiversity. They contain more phyla than exist on land,[3] and 45 per cent of known phyla exist only in the ocean.[4] Scientists estimate that there may be up to 10 million species in the ocean,[5] and there is a variety of ecosystems (such as coral reefs and seagrass meadows) that do not exist on land. From an anthropocentric perspective, oceans are critical for human life: the obvious source of benefit for humans is as a source of protein from fishing. According to the Food and Agriculture Organization of the United Nations (FAO),[6]

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[2] Poem by Peter Larkin, quoted in Charles Clover, *The End of the Line: How Overfishing Is Changing the World and What We Eat* (Ebury Press, 2004) at 90. The poem concludes with the couplet 'We don't know yet what will take its place,/But hope it's as good for the human race/R.I.P.'. See Peter A. Larkin, 'An Epitaph for the Concept of Maximum Sustainable Yield', 106 *Transactions of the American Fisheries Society* (1977) 1–11 at 10; available at <http://www.fishsec.org/wp-content/uploads/2011/04/22.-Larkin_Epitaph_Max_Sust_Yield.pdf> (visited 18 October 2013).

[3] Robin Kundis Craig, 'Protecting International Marine Biodiversity: International Treaties and National Systems of Marine Protected Areas', 20 *Journal of Land Use and Environmental Law* (2005) 333–369 at 340.

[4] *Ibid*.

[5] J. Frederick Grassle and Nancy J. Maciolek, 'Deep-sea Species Richness: Regional and Local Diversity Estimates from Quantitative Bottom Samples', 139 *The American Naturalist* (1992) 313–341 at 336.

[6] See <http://www.fao.org>.

> [c]apture fisheries and aquaculture supplied the world with about 148 million tonnes of fish in 2010 (with a total value of US$217.5 billion), of which about 128 million tonnes was utilized as food for people, and preliminary data for 2011 indicate increased production of 154 million tonnes, of which 131 million tonnes was destined [to be used] as food.[7]

Moreover, 'marine algae and other marine plants are responsible for 50 to 75 per cent of the oxygen in the atmosphere'.[8] In 1997, Costanza estimated that the value of ecosystem services[9] for the open ocean was US$8.4 trillion per year; and for the coastal biome US$12.6 trillion per year.[10]

Marine biodiversity is not only important as a source of food and oxygen production. Marine phytoplankton produces half of the oxygen in the earth's atmosphere and the organic matter that sustains the food web up to fish and marine mammals. The ocean also acts as a carbon sink; currently, the ocean absorbs approximately 30 percent of the carbon dioxide emitted to the atmosphere from human activities.[11] Marine biodiversity provides travel and tourism benefits and important ecosystem services such as maintenance of water quality and flood control. Scientists have shown that loss of marine biodiversity adversely affects the provision of ecosystem goods and services.[12]

It goes without saying that fishing is a consumptive activity and that several threats to marine biodiversity come from fishing: overfishing; destructive fishing and illegal, unregulated and unreported (IUU) fishing. Other threats include climate change,[13] eutrophication (excessive eutrophication can lead to hypoxic or 'dead zones'),[14] habitat destruction, invasive alien species,[15] ocean acidification,[16] and pollution.

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7 FAO, *The State of World Fisheries and Aquaculture 2012* (FAO, 2012) at 3. About two-thirds of these figures are from the oceans (the remainder being inland fisheries).

8 Craig, 'Protecting International Marine Biodiversity', *supra* note 3, at 341–342.

9 The concept of 'ecosystem services' provides a way to measure the value to humankind of biological diversity and natural resources by assigning monetary values to them.

10 Robert Costanza et al, 'The Value of the World's Ecosystem Services and Natural Capital', 387 *Nature* (1997) 253–260 at 256. See also Craig, 'Protecting International Marine Biodiversity', *supra* note 3, at 342.

11 World Green, 'The Ocean as Carbon Sink: A Double-edged Sword' available at <http://www.worldgreen.org/home/wg-feature-articles/8163-the-ocean-as-carbon-sink-a-double-edged-sword.html> (visited 22 September 2013).

12 B. Worm et al, 'Impacts of Biodiversity Loss on Ocean Ecosystems', 314 *Science* (2007) 787–790.

13 William W. Cheung et al, 'Shrinking of Fishes Exacerbates Impacts of Global Ocean Changes on Marine Ecosystems', 3 *Nature Climate Change* (2013) 254–258. See Damian Carrington, 'Fish to Shrink by up to a Quarter due to Climate Change, Study Reveals', *The Guardian* of 30 September 2012, available at <http://www.theguardian.com/environment/2012/sep/30/fish-shrink-climate-change> (visited 22 September 2013).

14 Craig, 'Protecting International Marine Biodiversity', *supra* note 3, at 346.

15 See, for example, Ashley L. Erickson, 'Out of Stock: Strengthening International Fishery Regulations to Achieve a Healthier Ocean', 34 *North Carolina Journal of International law and Commercial Regulation* (2008) 281–323 at 285–6.

16 See, for example, William C. G. Burns, 'A Voice for the Fish? Climate Change Litigation and Potential Causes of Action for Impacts under the United Nations Fish Stocks Agreement', 48 *Santa Clara Law Review* (2008) 605–647 at 620.

The primary focus of this paper is the threat posed to marine biodiversity by fishing. In this regard, one of the key interventions required to address marine biodiversity loss (by requiring sustainable fishing) is effective fisheries governance. In this paper, the meaning of fisheries governance will be considered. This will be followed by consideration of the international legal regime relating to fisheries and some of the major problems sought to be addressed by international legal and policy efforts. This is followed by a brief discussion of several of these initiatives. First, however, the current state of the world's fisheries is considered, in order to put the governance matters into context.

2 The world's fisheries: the context

As indicated above,[17] the total fish produced from capture and aquaculture in 2010 was 148.5 million tonnes. The oceans produced 78.9 million tonnes from capture and 19.3 million tonnes from aquaculture.[18] According to the FAO, in 2010, 'fishers, fish farmers and those supplying services and goods to them would have assured the livelihoods of about 660–820 million people, or about 10–12 percent of the world's population'.[19]

This employment figure is important not only for the obvious reason of threat to livelihoods from fisheries collapse, but also because it indicates the political importance of the fisheries sector. Also in 2010, the total number of fishing vessels worldwide was estimated to be 4.36 million (3.23 million of which are marine vessels; 69 per cent of which are engine-powered).[20] Fisheries do not only constitute a huge global business; it almost goes without saying that fishing is vitally important for food security in many parts of the world: 'fish provides about 3.0 billion people with almost 20 per cent of their average per capita intake of animal protein, and 4.3 billion people with about 15 per cent of such protein'.[21]

Given the sheer size of the global fishing enterprise, it is not surprising that there is severe pressure on fish stocks. The FAO has observed that

> [t]he fraction of fully exploited stocks, which produce catches that are very close to their maximum sustainable production and have no room for further expansion and require effective management to avoid decline, … [is] 57 percent in 2009. About 29.9 percent of stocks are overexploited, producing lower yields than their biological and ecological potential and in need of strict management plans to restore their full and sustainable productivity … The remaining 12.7

17 FAO, *The State of World Fisheries*, *supra* note 7.
18 *Ibid*. at 3.
19 *Ibid*. at 46.
20 *Ibid*. at 47.
21 *Ibid*. at 84.

> percent of stocks were non-fully exploited in 2009, and these are under relatively low fishing pressure and have some potential to increase their production although they often do not have a high production potential and require proper management plans to ensure that any increase in the exploitation rate does not result in further overfishing.[22]

Moreover,

> [m]ost of the stocks of the top ten species, which account in total for about 30 percent of world marine capture fisheries production, are fully exploited and, therefore, have no potential for increases in production, while some stocks are overexploited and increases in their production may be possible if effective rebuilding plans are put in place.[23]

3 Fisheries governance: the institutions

The FAO data makes it clear that allowing the status quo to continue in relation to the world's fisheries will have severe negative impacts on marine biodiversity (with the attendant consequences of such decline), not to mention highly damaging effects on humanity and people's livelihoods. The rebuilding of overexploited stocks requires 'effective management plans',[24] which are also necessary in order to prevent other stocks becoming overexploited. In short, fisheries need to become sustainable, and the 'key determinant of sustainability is governance – the "sum of the legal, social, economic and political arrangements used to manage fisheries …" – including the incentives that promote marine conservation'.[25] If we consider governance to involve, in essence, a process of making decisions that are part of managerial, political and legal processes, and that grant privileges and powers, then 'good governance depends on how these decisions are made, implemented and executed'.[26]

An important question to be asked for fisheries governance is 'who governs fisheries?' There are numerous bodies involved in fisheries governance, from those that provide the most general of management approaches to those that implement the detail of management decisions on board fishing vessels. The following list is not necessarily completely comprehensive, but it provides a good idea of the plethora of governance bodies and the potential for overlap and lack of coordination.

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[22] *Ibid*. at 11–12.
[23] *Ibid*. at 12.
[24] *Ibid*. at 13.
[25] R. Quentin Grafton et al, 'Positioning Fisheries in a Changing World', 32 *Marine Policy* (2008) 630–634 at 631, quoting R. Hilborn et al, 'Institutions, Incentives and the Future of Fisheries', 360 *Philosophical Transactions of the Royal Society of London—Series B: Biological Sciences* (2005) 47–57.
[26] Loretta Feris, 'The Role of Good Environmental Governance in the Sustainable Development of South Africa', 13 *Potchefstroom Electronic Law Review* (2010) 73–99 at 75.

The United Nations General Assembly (UNGA) has adopted numerous resolutions relating to the oceans and marine environment, dating back to 1968.[27] In what is possibly the most well-known UNGA resolution in this regard, the UNGA decided to convene (under United Nations auspices) an intergovernmental conference on straddling stocks and highly migratory fish stocks.[28] This conference subsequently adopted the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (referred to as the Straddling Stocks Agreement or Fish Stocks Agreement).[29]

Following, *inter alia*, the Johannesburg Plan of Implementation of 2002[30] in relation to the achievement of sustainable fisheries, the UNGA passes annual resolutions relating to sustainable fisheries, which include (but are not confined to) the role played by the Straddling Stocks Agreement.[31] In 1999, the UNGA established the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (the Consultative Process or ICP)[32]

> in order to facilitate the annual review by the [UNGA], in an effective and constructive manner, of developments in ocean affairs and the law of the sea by considering the report of the Secretary-General on oceans and the law of the sea and by suggesting particular issues to be considered by it, with an emphasis on

[27] Philippe Sands, *Principles of International Environmental Law* (2nd ed., Cambridge University Press, 2003) 81. In 1968, at its 23rd session, the UNGA adopted resolutions on the 'exploitation and conservation of living marine resources' (UNGA Res. 2413 (1968)) and 'international cooperation on questions related to oceans' (UNGA Res. 2414 (1968)).

[28] UNGA Res. 47/192 (1993). This resolution directed the conference to '(a) identify and assess existing problems related to the conservation and management of [straddling stocks and highly migratory fish stocks]; (b) Consider means of improving fisheries cooperation among States; [and] (c) Formulate appropriate recommendations', and to complete its work by the 49th session of the UNGA. (See also UNGA Res. 48/194 (1994) and UNGA Res. 49/123 (1995), in which the UNGA noted the progress made by the UN Conference on Straddling Stocks and Highly Migratory Fish Stocks and approved the convening of additional sessions thereof; and UNGA Res. 50/24 (1995), in which the UNGA welcomed the opening for signature of the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, emphasized the importance of the Agreement's early entry into force and effective implementation, and called upon states to sign and ratify or accede to the Agreement and to consider applying it provisionally.)

[29] Agreement for the Implementation of the Provisions of the UN Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, New York, 4 August 1995, in force 11 December 2001, 34 *International Legal Materials* (1995) 1542, <http://www.un.org/Depts/los/convention_agreements/texts/fish_stocks_agreement/CONF164_37.htm> (visited 24 September 2013).

[30] Plan of Implementation of the World Summit on Sustainable Development, UN Doc. A/CONF.199/20 (2002).

[31] See United Nations Division for Ocean Affairs and Law of the Sea website containing a full list of relevant resolutions, available at <http://www.un.org/depts/los/general_assembly/general_assembly_resolutions.htm> (visited 9 September 2013).

[32] See <http://www.un.org/depts/los/consultative_process/consultative_process.htm> (visited 9 September 2013).

> identifying areas where coordination and cooperation at the intergovernmental and inter-agency levels should be enhanced.[33]

The UN Division for Ocean Affairs and Law of the Sea (UNDOALOS)[34] is also relevant, in that it has amongst its core functions the provision of advice, studies, assistance and research on the implementation of the United Nations Convention on the Law of the Sea (UNCLOS).[35, 36]

The Food and Agriculture Organization of the United Nations is heavily involved in fisheries governance. It has a Department of Fisheries and Aquaculture,[37] and a subsidiary body of the FAO Council, the Committee on Fisheries (COFI),[38] which was established in 1965. According to the FAO, COFI

> presently constitutes the only global inter-governmental forum where major international fisheries and aquaculture problems and issues are examined and recommendations addressed to governments, regional fishery bodies, NGOs, fishworkers, FAO and international community, periodically on a world-wide basis. COFI has also been used as a forum in which global agreements and non-binding instruments were negotiated … The two main functions of COFI are to review the programmes of work of FAO in the field of fisheries and aquaculture and their implementation, and to conduct periodic general reviews of fishery and aquaculture problems of an international character and appraise such problems and their possible solutions with a view to concerted action by nations, by FAO, inter-governmental bodies and the civil society.[39]

The FAO produces a biannual publication called *The State of World Fisheries and Aquaculture*, the latest volume being that for 2012. In 1995, the FAO Conference adopted the FAO Code of Conduct for Responsible Fisheries,[40] discussed further below.

The International Maritime Organization (IMO)[41] is involved in fisheries governance with respect to the safety of fishing vessels and crew.[42] Although this is not directly aimed at conservation of marine biodiversity, there are correlations. The IMO is also

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33 'Sectoral theme: oceans and seas', UNGA Res. 54/33 (1999).
34 See <http://legal.un.org/ola/div_doalos.aspx>.
35 United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, in force 16 November 1994, 21 *International Legal Materials* (1982) 1261.
36 See UN, 'The Division for Ocean Affairs and the Law of the Sea, its functions and activities', available at <http://www.un.org/depts/los/doalos_activities/about_doalos.htm> (visited 9 September 2013).
37 See <http://www.fao.org/fishery/en>.
38 See <http://www.fao.org/fishery/about/cofi/en/> (visited 24 September 2013).
39 *Ibid*.
40 Available at <http://www.fao.org/docrep/005/v9878e/v9878e00.HTM> (visited 24 September 2013).
41 See <http://www.imo.org>.
42 See IMO, 'Fishing vessel safety', available at <http://www.imo.org/OurWork/Safety/Regulations/FishingVessels/Pages/Default.aspx> (visited 9 September 2013).

involved in the Joint FAO/IMO ad hoc Working Group on IUU Fishing and Related Matters, and is assisted by the FAO on the implementation of the Torremolinos Protocol.[43] The Protocol deals with the safety of fishing vessels and could become a useful tool in combating IUU fishing.[44] The IMO also has an initiative designating Particularly Sensitive Sea Areas, which was adopted in 2005.[45]

The International Sea-bed Authority (ISA)[46] is a body that was established under UNCLOS.[47] The ISA is the organization through which state parties are to organize and control activities in the Area,[48] particularly with a view to administering the resources of the Area.[49] The primary function of the ISA is, therefore, the regulation of activities relating to mining in the Area. Although this means that the ISA is not directly involved in decision-making in respect of fisheries, it is evident that any decisions made regarding the mineral exploitation on the seabed have the potential to affect (probably negatively) marine biodiversity.

Another UN body, the Intergovernmental Oceanographic Commission (IOC)[50] of the United Nations Educational, Scientific and Cultural Organization (UNESCO),[51] is the

> body for ocean science, ocean observatories, ocean data and information exchange, and ocean services such as Tsunami warning systems. Its mission is to promote international cooperation and to coordinate programmes in research, services and capacity building to learn more about the nature and resources of the oceans and coastal areas, and to apply this knowledge to improved management, sustainable development and protection of the marine environment and the decision making processes of States.[52]

[43] The Torremolinos International Convention for the Safety of Fishing Vessels, Torremolinos, 2 April 1977, superseded by the 1993 Torremolinos Protocol, Torremolinos, 2 April 1993, not yet in force. See also the Cape Town Agreement of 2012 on the Implementation of the Provisions of the 1993 Protocol relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977, Cape Town, 11 October 2012, not yet in force.

[44] FAO Committee on Fisheries (COFI), 'Recent Major Developments with Regard to Combating Illegal, Unreported and Unregulated (IUU) Fishing', Doc. COFI/2012/8 (2012), available at <http://www.fao.org/cofi/24009-0a96899a508a649f0223b99cb5c02e27f.pdf> (visited 11 September 2013).

[45] See Marko Berglund, 'Protection of Marine Biodiversity in Areas beyond National Jurisdiction', in Ed Couzens and Tuula Honkonen (eds), *International Environmental Lawmaking and Diplomacy Review* 2008, University of Eastern Finland – UNEP Course Series 8 (University of Eastern Finland, 2009) 55–64 at 58.

[46] See <http://www.isa.org.jm/en/home>.

[47] Article 156 of UNCLOS.

[48] 'The Area' is defined in Article 1 of UNCLOS as 'the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction'.

[49] Article 157.

[50] See <http://ioc-unesco.org/>.

[51] See <https://en.unesco.org/>.

[52] IOC website, available at <http://ioc-unesco.org/> (visited 10 September 2013).

The IOC is involved in several marine management activities, including integrated coastal area management and the Global Coral Reef Monitoring Network.[53]

The secretariats of several multilateral environmental agreements (MEAs) would be involved, directly or indirectly, with management of marine biodiversity. Obvious examples are the International Whaling Commission,[54] and the secretariats of the Convention on International Trade in Endangered Species of Fauna and Flora (CITES),[55] the Bonn Convention on Migratory Species,[56] the Convention on Wetlands of International Importance (Ramsar Convention)[57] and the Convention on Biological Diversity.[58]

The governance institutions that are among the most directly involved in management of marine biodiversity are the regional fishery bodies (RFBs). There are about 50 RFBs currently, about half of which are regional fisheries management organisations (RFMOs). RFBs are mechanisms 'through which States or organizations that are parties to an international fishery agreement or … arrangement work together towards the conservation, management and/or development of fisheries'.[59] It is the mandates of such bodies that determine whether they are RFMOs or not. Some RFBs have advisory or scientific (research) mandates, whereas those with management mandates are RFMOs. The latter 'adopt fisheries conservation and management measures that are binding on their members'.[60] Well-known examples of RFMOs are the International Commission for the Conservation of Atlantic Tunas (ICCAT)[61] and the Northwest Atlantic Fisheries Organization.[62] The Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR)[63] is often characterized as an RFMO, although, strictly speaking, it is not: it is a conservation treaty, under which conservation does not exclude rational use.[64] Examples of RFBs

[53] See <http://gcrmn.org/>.

[54] International Convention for the Regulation of Whaling, Washington D.C., 2 December 1946, in force 10 November 1948, 161 *United Nations Treaty Series* 72.

[55] Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington DC, 3 March 1973, in force 1 July 1975, 993 *United Nations Treaty Series* 243; <http://www.cites.org>.

[56] Convention on the Conservation of Migratory Species of Wild Animals, Bonn, 23 June 1979, in force 1 November 1983, 19 *International Legal Materials* (1980) 15; <http://www.cms.int>.

[57] Convention on Wetlands of International Importance, Ramsar, 2 February 1971, in force 21 December 1975, 11 *International Legal Materials* (1972), 963; <http://www.ramsar.org>.

[58] Convention on Biological Diversity, Rio de Janeiro, 5 June1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822; <http://www.biodiv.org>.

[59] FAO, 'What are Regional Fishery Bodies', available at <http://www.fao.org/fishery/topic/16800/en> (visited 10 September 2013). See also Willa Kalaidjian, 'Fishing for Solutions: the European Union's Fisheries Partnership Agreements with West African Coastal States and the Call for Effective Regional Oversight in an Exploited Ocean', 24 *Emory International Law Review* (2010) 389–431 at 423–424; Elisa Ann Clark, 'Strengthening Regional Fisheries Management – An Analysis of the Duty to Cooperate' 9 *New Zealand Journal of Public and International Law* (2011) 223–245.

[60] FAO, 'What are Regional Fishery Bodies', *ibid*.

[61] See <http://www.iccat.int/en/>.

[62] See <http://www.nafo.int/>.

[63] Convention on Conservation of Antarctic Marine Living Resources, Canberra, 20 May 1980, in force 7 April 1982, 19 *International Legal Materials* (1980) 841.

[64] See Ewan McIvor, 'Looking South: Antarctic Environmental Governance', in Ed Couzens and Tuula

that are not RFMOs are the Caribbean Regional Fisheries Mechanism[65] and the Latin American Organization for Fisheries Development.[66]

The United Nations Environment Programme (UNEP) Regional Seas Programme[67] was established in 1974, following on from impetus created by the 1972 United Nations Conference on the Human Environment (UNCHE) in Stockholm. The Regional Seas Programme 'aims to address the accelerating degradation of the world's oceans and coastal areas through the sustainable management and use of the marine and coastal environment, by engaging neighbouring countries in comprehensive and specific actions to protect their shared marine environment'.[68] There are currently more than 143 countries participating in 13 such programmes, such as the Eastern African programme[69] (through the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, 1985[70]) and the Mediterranean programme.[71] The programmes operate through Regional Action Plans which are 'the substantive part of each Regional Sea Programme … designed to link assessment of the marine environment and the causes of its deterioration, with response actions for management and development of the marine and coastal environment'.[72] The Mediterranean Action Plan,[73] which was the first adopted in 1975,[74] 'has since become a model for other regions'.[75] With regionalization of international environmental law becoming an increasingly important trend, the Regional Seas Programme is one of the main examples of this within the marine environment sphere.[76]

The Global Environment Facility (GEF)[77] has as two of its focal areas biodiversity and international waters. The GEF's operational strategy goal for international waters is to 'assist states, through support through projects, to cooperate, set joint action

Honkonen (eds), *International Environmental Lawmaking and Diplomacy Review* 2008, University of Eastern Finland – UNEP Course Series 8 (University of Eastern Finland, 2009) 139–152 at 144.

65 See <http://www.caricom-fisheries.com/>.

66 See <http://www.oldepesca.com/> (in Spanish).

67 See <http://www.unep.org/regionalseas/>.

68 UNEP Regional Seas Programme, 'About', available at <http://www.unep.org/regionalseas/about/default.asp> (visited 10 September 2013).

69 See <http://www.unep.org/regionalseas/programmes/unpro/easternafrica/>.

70 Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, Nairobi, 21 June 1985, in force 30 May 1996, available at <http://www.unep.org/NairobiConvention/The_Convention/Protocols/Convention_Text.asp> (visited 13 February 2009).

71 See <http://www.unep.org/regionalseas/programmes/unpro/mediterranean/>.

72 P. Akiwumi and T. Melvasalo, 'UNEP's Regional Seas Programme: Approach, Experience and Future Plans', 22 *Marine Policy* (1998) 229–234 at 230.

73 See UNEP Regional Seas Programme, 'Mediterranean', available at <http://www.unep.org/regionalseas/programmes/unpro/mediterranean/>.

74 UN Doc. UNEP/WG.2/5INF.3 (1975).

75 Sands, *Principles of International Environmental Law*, *supra* note 27, at 400.

76 Julien Rochette and Raphaël Billé, 'ICZM Protocols to Regional Seas Conventions: What? Why? How?', 36 *Marine Policy* (2012) 977–984 at 977.

77 See <http://www.thegef.org>.

priorities, and implement such joint actions'.[78] One of the specific ocean projects that the GEF has funded is the Large Marine Ecosystems project, involving five UN agencies, several countries and non-governmental organizations (NGOs) 'to assist 110 countries in Africa, Asia, Latin America and eastern Europe in carrying forward LME Projects'.[79] The GEF is also funding the Areas Beyond National Jurisdiction (ABNJ) Programme.[80]

Finally, coastal states are very important players in the marine biodiversity sphere, having sovereignty in their territorial waters and exclusive economic zones (EEZs). Hoel and Kvalvik[81] describe the 'centrepiece' of UNCLOS as being 'the right of coastal states to establish 200 nautical miles (371 km) EEZs where they have sovereign rights over the natural resources'.[82] Since individual states usually allocate fishing rights within their waters, fisheries governance within individual states is a critical influence on marine biodiversity.

Having identified most of the players within the field of marine biodiversity and fisheries governance, the next aspect to be considered is the law relating to marine biodiversity and fisheries conservation (and exploitation).

4 Fisheries governance: the legal instruments

4.1 Hard law

The legal instruments governing fisheries internationally can be divided into 'hard law' (i.e. legally binding) and 'soft law', which is explained below.

According to Sands,

> [t]he main objective of international law for fisheries conservation has been to establish a framework for international co-operation towards the management and conservation of fisheries and marine living resources which is built upon two

[78] Matti Nummelin, 'The Global Environment Facility: A Brief Introduction to the GEF and Its International Waters Focal Area', in Ed Couzens and Tuula Honkonen (eds), *International Environmental Law-making and Diplomacy Review* 2008, University of Eastern Finland – UNEP Course Series 8 (University of Eastern Finland, 2009) 133–138 at 137.

[79] Kenneth Sherman, 'Adaptive Management Institutions at the Regional Level: The Case of Large Marine Ecosystems', *Ocean and Coastal Management* (2013, in press). See also IW:Science, *Synopsis Report of the Large Marine Ecosystems and the Open Ocean Working Group* (2012), available at <http://www.thegef.org/gef/sites/thegef.org/files/publication/LMEOO%20SYN%20Final.pdf> (visited 10 September 2013).

[80] See <http://www.thegef.org/gef/ABNJ> (visited 19 September 2013).

[81] Alf Håkon Hoel and Ingrid Kvalvik, 'The Allocation of Scarce Natural Resources: The Case of Fisheries', 30 *Marine Policy* (2006) 347–356 at 348.

[82] In terms of Art's 55–57 of UNCLOS.

related obligations: international research and scientific co-operation, and international regulation.[83]

Since oceans are (broadly) divided into the high seas (the ocean area beyond national jurisdiction (or the 'Area' in terms of UNCLOS[84])) and marine areas within national jurisdiction, it is important to recognize that governance and regulation of fishing in the two areas will be different. Clearly, regulation of fishing in the high seas must be based on international agreement. This distinction is reflected, as Sands points out,[85] in the fact that Agenda 21[86] distinguishes between two programme areas in relation to the conservation and sustainable use of marine living resources: one for the high seas[87] and one for areas under national jurisdiction, including the exclusive economic zone.[88]

The United Nations Convention on the Law of the Sea of 1982, which entered into force in 1994, contains principles relating to the protection of the marine environment which are 'considered by many states to reflect generally applicable principles or rules of customary law'.[89] One of the principal environmental objectives of the UNCLOS is to conserve and manage marine living resources. It is beyond the scope of this paper to examine UNCLOS in detail, but it contains a number of provisions addressing protection of the marine environment. Part XII of UNCLOS is headed 'Protection and preservation of the marine environment' and includes the obligation on states 'to protect and preserve the marine environment'.[90] Article 193 provides that states have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment.[91]

With regard to the exclusive economic zone (EEZ),[92] the coastal state has 'sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the sea-

[83] Sands, *Principles of International Environmental Law*, *supra* note 27, at 560.
[84] See, *supra* note 48.
[85] *Ibid*.
[86] Agenda 21, UN Conference on Environment and Development, Rio de Janeiro, 13 June 1992, UN Doc. A/CONF.151/26/Rev.1 (1992), available at <http://www.un.org/esa/dsd/agenda21/>.
[87] *Ibid*. at para's 17.44 to 17.88.
[88] *Ibid*. at para's 17.69 to 17.95.
[89] Sands, *Principles of International Environmental Law*, *supra* note 27, at 396.
[90] Article 192.
[91] Article 193 is a formulation of Principle 21 of the Stockholm Declaration; see Declaration of the United Nations Conference on the Human Environment (UNCHE), Stockholm, 16 June 1972, UN Doc. A/CONF.48/14/Rev.1 (1973), 11 *International Legal Materials* (1972) 1416. Principle 21 has been repeated in many subsequent international instruments, to the extent that it may probably safely be considered to be a rule of international customary law.
[92] According to UNCLOS, the EEZ is 'an area beyond and adjacent to the territorial sea, subject to the specific legal regime established in [Part V of UNCLOS], under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of '[UNCLOS]' (Art. 55) and it 'shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured' (Art. 57).

bed and of the seabed and its subsoil' and jurisdiction as provided for in the relevant provisions of the Convention with regard to the protection and preservation of the marine environment.[93] Article 61, while giving coastal states the power to determine allowable catch of living marine resources in their EEZs, also imposes a duty on such states to ensure that there is not overexploitation of such resources. Article 61(3) requires that conservation and management measures shall be designed to

> maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield, as qualified by relevant environmental and economic factors, including the economic needs of coastal fishing communities and the special requirements of developing States, and taking into account fishing patterns, the interdependence of stocks and any generally recommended international minimum standards, whether subregional, regional or global.

The calculation of maximum sustainable yield is an aspect that is discussed below, particularly in the light of the apparent failure to consider the 'sustainable' requirement in many states' determination of catch limits.

There are several other provisions relevant to fisheries in the EEZ[94] and continental shelf,[95] discussion of which is beyond the scope of this paper.

UNCLOS also deals with fishing on the high seas.[96] Article 87, in providing for freedom of the high seas (subject to the requirements of UNCLOS and rules of international law), specifies that this includes freedom of fishing, subject to states having due regard for the interests of other states in their exercise of the freedom of the high seas, and also with due regard for the rights under this Convention with respect to activities in the Area. The Convention also places duties on states with respect to conservation of marine living resources in the high seas. Article 119 provides that states must, in determining total allowable catch and other conservation measures,

> (a) take measures which are designed, on the best scientific evidence available to the States concerned, to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield, as qualified by relevant environmental and economic factors, including the special requirements of developing States, and taking into account fishing patterns, the interdependence of stocks and any generally recommended international minimum standards, whether subregional, regional or global;
> (b) take into consideration the effects on species associated with or dependent upon harvested species with a view to maintaining or restoring populations of

[93] Article 56(1).
[94] Articles 62–68, inclusive.
[95] See Art. 77.
[96] See also Art's 116–118, inclusive.

such associated or dependent species above levels at which their reproduction may become seriously threatened.

In addition to the extensive conservation requirements in the Convention itself, the the UN Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks was adopted in 1995, and came into force in December 2001. The Agreement primarily (although not exclusively) applies to fish stocks in areas beyond national jurisdiction, and requires states that are carrying out fishing on the high seas to take a number of specified measures, which could, in summary, be described as scientifically-informed sustainable utilization of fish stocks in accordance with the precautionary approach.[97]

In addition to the multilateral fisheries instruments discussed above, numerous regional fisheries bodies have regulatory measures provided for by treaties between member states. A further level of regulation is found at national level. States are required to implement domestically their obligations in terms of international law, particularly UNCLOS, but there is little consistency in how states provide for this in national legislation.[98] One example is the Marine Living Resources Act[99] in South Africa, which provides, inter alia, for a regime for the allocation of fishing rights, taking into account not only factors relating to sustainable management of the fisheries but also redress of previously racially-skewed rights allocation practices. Another example is the Fisheries Act of New Zealand, 1996.[100] New Zealand is widely regarded as having one of the most progressive fishing regimes internationally,[101] and the Fisheries Act explicitly states its purpose to be 'to provide for the utilisation of fisheries resources while ensuring sustainability'.[102]

In addition to national laws, there are also supranational laws, or laws of confederations of states such as the European Union (EU). The EU has a Common Fisheries Policy (CFP),[103] which includes fishing rules (relating to fishing effort, catch limits and technical measures). At the time of writing, the CFP is undergoing reform, with a view to introducing more sustainable fishing practices.[104]

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97 Article 5.

98 Patricia Birnie and Alan Boyle, *International Law & the Environment* (2nd ed., Oxford University Press, 2002) 664.

99 Act 18 of 1998.

100 Act No. 88 of 1996.

101 See Clover, *The End of the Line*, *supra* note 2, at 115.

102 Fisheries Act, s 8(1). 'Ensuring sustainability' means:
(a) Maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations; and
(b) Avoiding, remedying, or mitigating any adverse effects of fishing on the aquatic environment (s 8(2)).

103 See <http://ec.europa.eu/fisheries/cfp/>.

104 BBC, 'Deal reached on reform of EU fisheries policy' (30 May 2013), available at <http://www.bbc.co.uk/democracylive/europe-22715912> (visited 10 September 2013).

4.2 Soft law

Soft law consists of instruments such as 'codes of practice, recommendations, guidelines, resolutions, declaration of principles, [and] standards'[105] that are not strictly 'binding' in a legal sense. Yet, it is 'characteristic' of soft law instruments that

> they are carefully negotiated, and often carefully drafted statements, which are in many cases intended to have some normative significance despite their non-binding, non-treaty form. There is at least an element of good faith commitment, an expectation that they will be adhered to if possible, and in many cases, a desire to influence the development of state practice and an element of law-making intention and progressive development. Thus they may provide good evidence of *opinio juris*, or constitute authoritative guidance on the interpretation or application of a treaty, or serve as agreed standards for the implementation of more general treaty provisions or rules of customary law. Like law-making treaties, such instruments can accordingly be vehicles for focusing consensus on rules and principles, and for mobilizing a consistent, general response on the part of states.[106]

There are several soft law instruments relevant to international fisheries governance, in addition to the 'hard law' instruments discussed above.

Probably the most important soft law instrument is the FAO Code of Conduct on Responsible Fisheries, [107] adopted in 1995. According to the Code, it is

> global in scope, and is directed toward members and nonmembers of FAO, fishing entities, sub regional, regional and global organizations, whether governmental or non-governmental, and all persons concerned with the conservation of fishery resources and management and development of fisheries, such as fishers, those engaged in processing and marketing of fish and fishery products and other users of the aquatic environment in relation to fisheries, [and it] provides principles and standards applicable to the conservation, management and development of all fisheries. It also covers the capture, processing and trade of fish and fishery products, fishing operations, aquaculture, fisheries research and the integration of fisheries into coastal area management.

The Code, although its implementation is not adequate, has been described as follows:

[105] Birnie and Boyle, *International Law & the Environment*, *supra* note 98, at 25.
[106] *Ibid*.
[107] FAO Code of Conduct on Responsible Fisheries, available at <http://www.fao.org/docrep/005/v9878e/v9878e00.HTM> (visited 10 September 2013), Art's 1.1 and 1.2.

> the FAO has managed to establish a modern and influential normative framework and collection of best practices which provides the basis for functional cooperation and management efforts of many important actors in fisheries governance at various levels of governance and across functional divides.[108]

Within the framework of the Code, various international plans of action (IPOAs) have been developed by the COFI. The IPOAs are voluntary instruments which apply to all states and entities and to all fishers. There are currently four IPOAs: the IPOA for Incidental Catch of Seabirds in Longline Fisheries; IPOA for Conservation and Management of Sharks; IPOA for the Management of Fishing Capacity (all endorsed by the FAO Council in 2000); and IPOA to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU, endorsed by the FAO Council in 2001).[109]

In 2003, the UNGA adopted a resolution which (inter alia) urged states to 'take all necessary steps to implement the [IOPA-IUU] including through relevant regional and subregional fisheries management organizations and arrangements'.[110] According to George, the 'standards in the [Code]/ IPOAs are referred to as "soft law" legally characterised as non-binding but are the best sustainable practices in fisheries governance available to all RFMOs'.[111]

The discussion here of the various governance institutions and legal instruments, both legally binding and 'soft law' instruments (although the latter may well be politically binding),[112] is not aimed at providing a comprehensive explanation of the different bodies and instruments. The purpose behind setting these out is to indicate that, at least on paper, there is a comprehensive framework of governance structures with an elaborate set of legal and related instruments aimed at conservation of marine biodiversity and, in particular, sustainable fisheries. Given the existence of these, how is one to explain the fact, as set out earlier in this paper on the basis of FAO statistics,[113] that the majority of fish stocks in our oceans are either fully- or overexploited?

[108] Jürgen Friedrich, 'Legal Challenges of Nonbinding Instruments: The Case of the FAO Code of Conduct for Responsible Fisheries', 9 *German Law Journal* (2008) 1539–1564 at 1561.
[109] For more information, see <http://www.fao.org/fishery/code/ipoa/en> (visited 25 September 2013).
[110] 'Oceans and the law of the sea', UNGA Res 57/141 (2003).
[111] Mary George, 'Fisheries Protections in the Context of the Geo-political Tensions in the South China Sea' 43 *Journal of Maritime Law and Commerce* (2012) 85–128 at 106.
[112] See *ibid*.
[113] See above, chapter 2.

5 Fisheries governance and unsustainable fishing: why?

5.1 Introduction

It would be tempting to suggest that the reason for the state of fishing stocks being as threatened as they are is because there is a small minority of fishers, effectively unregulated by their flag states,[114] who are plundering the oceans, while the majority are complying with rules and policies that are scientifically sound and ensuring sustainable utilization of resources. It is clear, however, that this is not the case. While the rogue fisher, engaged in IUU fishing, is undoubtedly a problem both on the high seas and in states' territorial waters, there are undoubtedly significant problems with 'legal' fishing practices in many parts of the world. These challenges will both be considered here, in the context of how fisheries governance can address the problems. It should be borne in mind, however, that the purpose of the discussion is simply to introduce the problems in some detail and raise some possible answers, without providing a definitive analysis of cause and effect.

5.2 Illegal, unreported and unregulated (IUU) fishing

'Illegal fishing' refers to activities

> conducted by national or foreign vessels in waters under the jurisdiction of a State, without the permission of that State, or in contravention of its laws and regulations; [or] conducted by vessels flying the flag of States that are parties to a relevant regional fisheries management organization but operate in contravention of the conservation and management measures adopted by that organization and by which the States are bound, or relevant provisions of the applicable international law; or in violation of national laws or international obligations, including those undertaken by cooperating States to a relevant regional fisheries management organization. [115]

'Unreported fishing' refers to fishing activities

> which have not been reported, or have been misreported, to the relevant national authority, in contravention of national laws and regulations; or under-

[114] According to Art. 91 ('Nationality of ships') of UNCLOS:

> 1. [e]very State shall fix the conditions for the grant of its nationality to ships, for the registration of ships in its territory, and for the right to fly its flag. Ships have the nationality of the State whose flag they are entitled to fly. There must exist a genuine link between the State and the ship'; and '2. [e]very State shall issue to ships to which it has granted the right to fly its flag documents to that effect'.

According to Art. 92 ('Status of ships') '1. [s]hips shall sail under the flag of one State only …'.

[115] FAO, *International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* (FAO, 2001), available at <ftp://ftp.fao.org/docrep/fao/012/y1224e/y1224e00.pdf> (visited 11 September 2013), at 2.

> taken in the area of competence of a relevant regional fisheries management organization which have not been reported or have been misreported, in contravention of the reporting procedures of that organization.[116]

'Unregulated fishing' refers to fishing activities

> in the area of application of a relevant regional fisheries management organization that are conducted by vessels without nationality, or by those flying the flag of a State not party to that organization, or by a fishing entity, in a manner that is not consistent with or contravenes the conservation and management measures of that organization; or in areas or for fish stocks in relation to which there are no applicable conservation or management measures and where such fishing activities are conducted in a manner inconsistent with State responsibilities for the conservation of living marine resources under international law.[117]

According to Agnew et al,

> [t]aking the total estimated value of illegal catch losses and raising by the proportion of the total world catch analysed in this paper, lower and upper estimates of the total value of current illegal and unreported fishing losses worldwide are between $10 bn and $23.5 bn annually, representing between 11 and 26 million tonnes.[118]

If one compares these numbers with the total catch (excluding aquaculture) estimated by the FAO,[119] the total IUU catch is between 10 and 27 per cent of the total catch.

In the report of the 30th session of the FAO Committee on Fisheries (COFI) of July 2012 entitled *Recent Major Developments with Regard to Combating Illegal, Unreported and Unregulated (IUU) Fishing*,[120] the COFI reported on current 'major global initiatives including port State measures, flag State performance and development of a comprehensive global record of fishing vessels, refrigerated transport vessels and supply vessels'.[121]

[116] *Ibid*.
[117] *Ibid*. at 2–3. Note that certain unregulated fishing may take place in a manner which is not in violation of applicable international law, and may not require the application of measures envisaged under the IPOA.
[118] David J. Agnew et al, 'Estimating the Worldwide Extent of Illegal Fishing', 4 *PLoS ONE* e4570 (2009) 1–8, available at <http://www.plosone.org/article/info:doi/10.1371/journal.pone.0004570> (visited 11 September 2013).
[119] FAO, *The State of World Fisheries*, *supra* note 7, at 3.
[120] COFI, 'Recent Major Developments', *supra* note 44.
[121] *Ibid.* at 1.

The FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing[122] was adopted in November 2009. Requiring 25 ratifications, the current status is that 23 states have signed the agreement, while only three have ratified it. Given the extreme difficulty of physical policing of the oceans (particularly the high seas), the idea behind the Port State Measures Agreement is to close access to markets for the illegally caught fish by preventing their landing in ports.[123] Article 2 provides that the object of the agreement is to 'prevent, deter and eliminate IUU fishing through the implementation of effective port State measures, and thereby to ensure the long-term conservation and sustainable use of living marine resources and marine ecosystems'.

The Agreement requires parties to apply the provisions in respect of vessels not flying its flag,[124] and requires designation of specific ports where vessels may enter.[125] The agreement regulates the entry into ports of vessels, and the crux is in Article 9(4), which provides that

> when a Party has sufficient proof that a vessel seeking entry into its port has engaged in IUU fishing or fishing related activities in support of such fishing, in particular the inclusion of a vessel on a list of vessels having engaged in such fishing or fishing related activities adopted by a relevant regional fisheries management organization in accordance with the rules and procedures of such organization and in conformity with international law, the Party shall deny that vessel entry into its ports.[126]

Where a vessel has already entered one of a party's ports, the latter is required to 'deny, pursuant to its laws and regulations and consistent with international law … that vessel the use of the port for landing, transshipping, packaging and processing of fish that have not been previously landed and for other port services' if the party finds that the vessel does not have valid and applicable authorization to engage in fishing activities required by either its flag state or by a coastal state in respect of areas under the latter's national jurisdiction.[127] The same applies if 'the Party receives clear evidence that the fish on board was taken in contravention of applicable requirements of a coastal State' or if the flag state does not confirm within a reasonable period of time, on the request of the port state, that the fish on board was taken in accordance

[122] FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, Rome, 22 November 2009, not yet in force; available at <http://www.fao.org/fileadmin/user_upload/legal/docs/1_037t-e.pdf> (visited 26 September 2013).

[123] See Judith Swan, 'Port State Measures to Combat IUU Fishing: International and Regional Developments', 7 *Sustainable Development Law & Policy* (2006) 38–43.

[124] Article 3.

[125] Article 7.

[126] Article 9(5) provides that a Party may allow entry into its ports of such a vessel 'exclusively for the purpose of inspecting it and taking other appropriate actions in conformity with international law which are at least as effective as denial of port entry in preventing, deterring and eliminating IUU fishing and fishing related activities in support of such fishing'.

[127] Article 11(1)(a) and (b).

with applicable requirements of a relevant regional fisheries management organization.[128] Similarly, denial of port services must apply if the party has 'reasonable grounds to believe that the vessel was otherwise engaged in IUU fishing or fishing related activities in support of such fishing'.[129]

Article 20 requires party states to encourage vessels flying their flag to use ports of states applying this Agreement,[130] and to encourage non-parties to become parties and to apply the provisions of the Agreement.[131] The idea behind the Agreement is sound – if vessels that have been involved in IUU fishing cannot land their catches, then any incentive to be involved in such activities will be removed.[132] Of course, any chain is only as strong as its weakest link, and unless there is comprehensive application of the agreement across the board, IUU fishers will avoid ports complying with the Agreement and find those that are not applying these rules. Moreover, there will be challenges for implementation. It will be very difficult for many states, particularly those with capacity and resource constraints, to apply these requirements in a watertight manner. For this reason, the Agreement provides for capacity-building for developing states.[133] The Agreement is still in its early days and is some way off coming into effect, but if there is eventually reasonably comprehensive coverage, cutting off the markets ought to prove to be a very effective way of reducing IUU fishing, although not without its challenges.

In addition to port state measures, COFI has also highlighted the role of flag state performance. In February 2013, the FAO reported the adoption of the Voluntary Guidelines for Flag State Performance,[134] which had been under discussion for about five years. The guidelines will be presented to the COFI for endorsement at its next session in June 2014. The guidelines 'recommend approaches to encourage and help flag States comply with their international duties and obligations regarding the flagging and control of fishing vessels, as well as possible actions in response to non-compliance'.[135] As with the port state measures, technical assistance and capacity building are envisaged.

[128] Article 11(1)(c) and (d).
[129] Article 11(1)(e).
[130] Article 20(3).
[131] Article 23.
[132] See Ryan Cantrell, 'Finding Nemo . . . and Eating Him: The Failure of the United Nations to Force Internalization of the Negative Social Costs That Result from Overfishing', 5 *Washington University Global Studies Law Review* (2006) 381–402 at 402.
[133] Art. 21.
[134] Available at <ftp://ftp.fao.org/FI/DOCUMENT/tc-fsp/2013/VolGuidelines_adopted.pdf> (visited 26 September 2013).
[135] FAO, 'FAO voluntary guidelines for flag state performance adopted' (28 February 2013), available at <http://biodiversity-l.iisd.org/news/fao-voluntary-guidelines-for-flag-state-performance-adopted/> (visited 12 September 2013). See also FAO press release: 'International guidelines take aim at illegal fishing (IUU)', available at <http://www.fao.org/news/story/en/item/170570/icode/> (visited 13 September 2013).

The third 'major initiative' pursued by COFI in respect of IUU fishing is the development of a comprehensive global record of fishing vessels, refrigerated transport vessels and supply vessels. The FAO has expressed the necessity for this as follows:

> One of the greatest obstacles faced by fisheries authorities and regional fisheries management organizations as they seek to detect and eradicate IUU fishing, is a lack of access to even basic information on fishing vessel identification, ownership, control and activity.
> …
> This provides easy passage for the criminals backing IUU fishing because their vessels can move about at will, change flag and identity, and vary the owner and operator details so that legitimate authorities find it virtually impossible to track them.
> …
> The recommendations that have been developed are designed to create a Global Record that will remove this lack of transparency and strongly complement existing tools and measures available to combat IUU fishing by providing a single web-based portal through which information such as vessel identification, capability, capacity, history, ownership and activity can be easily accessed.[136]

It is clear from the discussion above that the international community has taken some significant steps in order to counteract IUU fishing, with some regional successes already evident.[137] IUU fishing is, however, like most criminal activities, not easy to eradicate. Most of the measures that are intended to apply internationally will take some time to be fully effective, and the success of the 'campaign' will only become evident in due course.

5.3 'Legal' fishing and its effect on fish stocks

Whereas IUU fishing is a major problem, possibly a larger driver in reduction of fish stocks is decision-making by states and RFMOs in respect of allowable catch limits. Once these decisions are made, then fish capture within such limits would not amount to IUU fishing – it would be legal. Often, however, the decisions in respect of such catch limits are of dubious worth, or are made in dubious circumstances, leading to adverse effects – sometimes devastating – on fish stocks. Space does not allow a comprehensive survey of such practice, but some (admittedly selective) examples can illustrate the problem.

[136] FAO, 'Shining a spotlight on illegal fishing' (22 November 2010), available at <http://www.fao.org/news/story/en/item/47812/icode/> (visited 22 September 2013).

[137] See Rachel Baird, 'CCAMLR Initiatives to Counter Flag State Non-Enforcement in Southern Ocean Fisheries', 36 *Victoria University of Wellington Law Review* (2005) 733–755.

Weak scientific advice led to Canada's Department of Fisheries and Oceans setting catch limits in the Grand Banks fishery off Newfoundland that were so unsustainable that the fishery collapsed in 1992. According to Clover,

> [t]he Grand Banks is the textbook case of failure in fisheries science. An army of scientists in one of the world's richest and most advanced nations managed to destroy one of the richest fisheries in the world, while convincing themselves for a decade that they were doing no such thing. The Newfoundland cod collapse was the nightmare that shook the world out of its complacent assumption that the sea's resources were renewable and being managed in an enlightened manner.[138]

The Grand Banks case is considered an example of bad science. More often, however, the problem is that scientists' findings are not taken into account by decision-makers, who are more swayed by political factors than by the sustainability of the catch limit to be set. Research has shown that there is a pervasive failure by fisheries decision-makers to heed science and allocations are often set above scientifically-recommended levels, which is, of course, unsustainable.[139]

One of the more impressive failures is the relatively recent example of the International Commission for the Conservation of Atlantic Tunas (ICCAT) in 2008.[140] That year, ICCAT scientists recommended setting the tuna quota at not more than 15 000 tonnes per year.[141] This stemmed from a report from ICCAT's own scientific committee, published on 3 October 2008, which, according to the NGO WWF,[142] was 'its most damning assessment yet of the state of eastern Atlantic bluefin tuna'.[143] This report indicated that 'actual annual catch is likely double total allowable catch (61 000 tonnes as opposed to 28 500 tonnes) and over four times the level deemed sustainable by the scientists' and 'that only 36 [per cent] of the fragile spawning biomass is left compared to 30 years ago'.[144] This review report labeled the eastern Atlantic bluefin tuna fishery an 'international disgrace' and a 'travesty of fisheries management'.[145] The WWF reported that the experts recommended that ICCAT carry out an 'immediate closure of the fishery … until a management plan is put in place that follows scientific advice, including the closure of all key spawning areas (of

[138] Clover, *The End of the Line*, *supra* note 2, at 95.

[139] Bethan C. O'Leary et al, 'Fisheries Mismanagement', 62 *Marine Pollution Bulletin* (2011) 2642–2648.

[140] International Convention for the Conservation of Atlantic Tunas, Rio de Janeiro, 14 May 1966, in force 21 March 1969; < http://www.iccat.int/en/>.

[141] Richard Black, 'EU condemned on "tuna mockery"', BBC News of 25 November 2008, available at <http://news.bbc.co.uk/2/hi/science/nature/7746965.stm> (visited 19 September 2013).

[142] See, generally, <http://worldwildlife.org/>.

[143] WWF, 'Why are urgent, radical measures necessary to ensure the survival of Mediterranean and East Atlantic Bluefin tuna?' (October 2008), available at <http://www.ngo.grida.no/wwfneap/Publication/Submissions/OSPAR2008/WWF_MASH08_BFT_Annex3.pdf> (visited 19 September 2013).

[144] *Ibid*.

[145] WWF, '"Travesty of fisheries management" – close bluefin tuna fishery, say independent experts' (10 September 2008), available at <http://mediterranean.panda.org/?145002/Travesty-of-fisheries-management-close-bluefin-tuna-fishery-say-independent-experts> (visited 19 September 2013).

which the Balearic Sea is the most important)'.[146] The following year, the BBC reported that ICCAT advisers said stocks were probably less than 15 per cent of their original size. It was reported that the ICCAT scientists recommended closing the fishery,[147] yet the decision was made to set quotas at 13 500 tonnes.[148]

This (and other examples) indicate that the phenomenon of political decision-makers ignoring science is a fundamental problem of fisheries management. Scientific uncertainty is also a contributor. Scientists may, in some cases, be employed by the decision-making bodies and it would not be a surprising conclusion for this to lead to the recommendations being fashioned to suit the decision-makers.

At least part of the reason for bad decisions being made appears to be the application of the concept of 'maximum sustainable yield' (MSY).[149] Some of the problems with MSY, often a victim of scientific uncertainty,[150] are that it ignores the size and age of the animal being taken and its reproductive status, and it focuses solely on the species in question, ignoring the damage to the ecosystem caused by the designated level of exploitation and the issue of bycatch. Many conservation biologists regard the concept as misguided.[151] Legović and Geček, for example, argue that fishers 'complying with the directive to reach MSY will, as a rule, end up exterminating [certain fish] populations'[152] and they call for the urgent withdrawal of all legal systems that advocate MSY in ecosystems.[153]

Another contribution to pressure (legal yet unsustainable) being placed on fisheries is fishing subsidies. According to the FAO, for 2003, '"harmful" subsidies, acting primarily to perpetuate overfishing, were estimated at US$16.2 billion out of a total of US$27 billion a year globally'.[154] The extent of subsidies is graphically illustrated by Clover, who indicates that, in 1999, Japan offered US$2.5 billion in fishing subsidies (which amounts to 24 per cent of value of landings), the EU handed out US$1.16 billion (17 per cent value of landings), and the USA US$1.1 billion (30 per cent).[155]

146 WWF, 'Why are urgent', *supra* note 143.
147 Black, 'EU condemned', *supra* note 141.
148 ICCAT Press release: 'ICCAT fortifies its management of bluefin tuna fisheries' (16 November 2009), available at <http://www.iccat.int/Documents/Meetings/COMM2009/PressReleaseCom2009-ENG.pdf> (visited 19 September 2013).
149 Clover, *The End of the Line*, *supra* note 2, at 90–91.
150 Kathryn J. Mengerink, 'The Pew Oceans Commission Report: Navigating a Route to Sustainable Seas', 31 *Ecology Law Quarterly* (2004) 689–718 at 715.
151 See Benoit Mesnil, 'The Hesitant Emergence of Maximum Sustainable Yield (MSY) in Fisheries Policies in Europe', 36 *Marine Policy* (2012) 473–480.
152 Tarzan Legović and Sunčana Geček, 'Impact of Maximum Sustainable Yield on Independent Populations', 221 *Ecological Modelling* (2010) 2108–2111 at 2110.
153 *Ibid*. at 2111.
154 FAO, *The State of World Fisheries*, *supra* note 7, at 200, quotes omitted.
155 Clover, *The End of the Line*, *supra* note 2, at 115.

The FAO reference to 'harmful' subsidies draws on the work by Sumailia et al,[156] who distinguish between three different types of subsidies: 'beneficial' or 'good'; 'capacity-enhancing' or 'bad'; and 'ambiguous' or 'ugly' subsidies.[157] 'Beneficial' subsidies are those that 'lead to investment in natural capital assets'[158] (examples are fisheries management programmes and services; fisheries research and development; and marine protected areas). Capacity-enhancing (the 'harmful' subsidies referred to in the FAO quote above) are

> subsidy programs that lead to disinvestments in natural capital assets such that the fishing capacity develops to a point where resource overexploitation makes it impossible to achieve maximum sustainable long-term benefits. The aggregate impact of subsidies that enhance overcapacity and overfishing through artificially increased profits is to further stimulate effort and compound resource overexploitation problems. Capacity-enhancing subsidies include all forms of capital inputs and infrastructure investments from public sources that reduce cost or enhance revenue.[159]

Examples of this include boat construction, renewal and modernization programmes; fishery development projects and support services; and foreign access agreements; fishing port construction and renovation programmes; fuel subsidies; and price and marketing support, processing and storage infrastructure programmes.

'Ambiguous subsidies' are programmes whose impacts are undermined – 'they may lead to either investment or disinvestment in fishery resources'.[160] While these subsidies may lead to positive benefits, they may have negative impacts, including resource exploitation. They include fisher assistance programmes; rural fisher community development programmes; and vessel buyback programmes.

The FAO[161] also referred to a study by Heymans et al,[162] which simulated subsidy impacts in North Sea Fisheries and showed that 'while removing subsidies might reduce total catch and revenue, overall profitability would increase, as would the total biomass of commercially important species'.

Overall, subsidies contribute to overcapacity and hence overfishing, and this has been widely recognized. The WSSD Plan of Implementation (2002),[163] the Millennium

[156] U. Rashid Sumaila et al, 'A Bottom-up Re-estimation of Global Fisheries Subsidies', 12 *Journal of* Bioeconomics (2010) 201–225.
[157] *Ibid*. at 203.
[158] *Ibid*.
[159] *Ibid*. at 204.
[160] *Ibid*. at 206.
[161] FAO, *The State of World Fisheries*, *supra* note 7, at 200.
[162] Johanna J. Heymans et al, 'The Impact of Subsidies on the Ecological Sustainability and Future Profits from North Sea Fisheries', 6 *PLoS ONE* e20239 (2011), available at <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0020239> (visited 19 September 2013).
[163] Paragraph 30 aims at achievement of sustainable fisheries, and 30(f) provides: '[e]liminate subsidies that

Ecosystem Assessment,[164] and the Rio+20 Outcomes Document 'The Future We Want'[165] are examples.

In 2001, the World Trade Organization (WTO), having recognized that fisheries subsidies are problematic, decided that 'participants shall also aim to clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries'.[166] This decision, however, is part of the so-called 'Doha Round' negotiations which broke down in 2008, and progress since then has been slow.

This section of the chapter has provided a taste of the types of practices, none of which would qualify as IUU fishing, which contribute significantly to overfishing and unsustainable use of marine resources. The question which follows is: what governance measures can be adopted or improved in order to address both legal and illegal fishing practices?

6 Improved fisheries governance

As discussed earlier in the chapter, there are many different governance institutions involved in marine resources (and especially fisheries) management. There is clearly room for improvement in the operations of many of these bodies. RFMOs, in particular, are often involved at the 'coalface' of fisheries management and are frequently the bodies that make decisions on allocations (see, for example, the ICCAT example cited above). RFMOs, for all of their successes, suffer from a variety of shortcomings, and criticism has been leveled at them in respect of aspects such as

> length of time spent in negotiating agreements, lack of adequate resources, scientific data and catch statistics, limited decision-making authority, minimal enforce-

contribute to illegal, unreported and unregulated fishing and to over-capacity, while completing the efforts undertaken at WTO to clarify and improve its disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries'.

[164] Millennium Ecosystem Assessment, *Ecosystems and Human Well-being: Biodiversity Synthesis* (World Resources Institute, 2005), available at <http://www.unep.org/maweb/documents/document.354.aspx.pdf> (visited 26 September 2013) at 95, where it is stated that

> [s]ubsidies on fisheries, apart from their distributional impacts, affect the management of resources and their sustainable use by encouraging overexploitation of the resource, thereby worsening the common property problem present in fisheries. Although some indirect subsidies, such as payments for the withdrawal of individual transferable harvest quotas, could have a positive impact on fisheries management, the majority of subsidies have a negative effect.

[165] Rio+20 Outcomes Document 'The Future We Want' (2012), available at <http://www.uncsd2012.org/content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf> (visited 30 March 2013) para. 173.

[166] World Trade Organization Ministerial Declaration, Doc. WT/MIN(01)/DEC/1 (2001), para. 28. See Derek J. Dostal, 'Global Fisheries Subsidies: Will the WTO Reel in Effective Regulations?', 26 *University of Pennsylvania Journal of International Economic Law* (2005) 815–839.

> ment capability of nation States against vessels flying their flag, and against the illegal actions by nationals of States not members or not participating, non compliance by members with all the requirements, restrictive and reactive, rather than pro-active, approaches to management, and the inclusion of 'opt-out' clauses allowing members to pick and choose what regulations suit their interests.[167]

Their 'limited success' suggests the need for a 'radical overhaul to [their] law-making and enforcement processes'.[168] Sands suggests that there are eight areas in which such processes may be improved:[169]

1. There needs to be an improvement in the availability of reliable (scientific) information on which to base management decision.
2. The manner in which total allowable catches are determined must be based on 'objective scientific criteria' and, if needs be, economic needs ought to be afforded secondary importance.
3. Restructuring of larger bodies' institutional arrangements may result in better quota allocations.
4. Emphasis on the setting of quantitative limits should be replaced by increased focus on regulatory measures subject to port enforcement and new techniques for limiting fisheries participation, both geographically and in respect of particular activities.
5. Provision for majority-vote decision-making to block 'lone dissenters'.
6. Improvement of domestic enforcement of fisheries obligations.
7. Issue of membership needs to be addressed to allow maximum participation by states in the legislative and enforcement process.
8. The use of international licensing and radar surveillance systems needs to be extended to improve monitoring.

In addition to improving existing arrangements, which often boils down to improving implementation and enforcement, there is also possible merit in changing emphases at a more 'macro' level. For example, the concept of MSY or single-species based fisheries practices have been increasingly questioned,[170] as pointed out earlier, and there are possible alternative approaches to fisheries allocations that may be more sustainable. For example, increasing emphasis is being placed on the ecosystem approach to fisheries, illustrated, for example, by the CCAMLR.[171] It can be defined as follows: 'an ecosystem approach to fisheries (EAF) strives to balance diverse societal objectives, by taking account of the knowledge and uncertainties of biotic, abiotic

[167] Montserrat Gorina-Ysern, 'World Ocean Public Trust: High Seas Fisheries after Grotius - Towards a New Ocean Ethos?', 34 *Golden Gate University Law Review* (2004) 645–714 at 683-684.
[168] Sands, *Principles of International Environmental Law*, *supra* note 27, at 587.
[169] *Ibid*.
[170] See Eric A. Bilsky, 'Conserving Marine Wildlife through World Trade Law', 30 *Michigan Journal of International Law* (2009) 599–642.
[171] See above, text corresponding to note 64. See Philip Bender, 'A State of Necessity: IUU Fishing in the CCAMLR Zone', 13 *Ocean and Coastal Law Journal* (2008) 233–280 at 235.

and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries'.[172]

Similar to EAF is the concept of Ecosystem-Based Fisheries Management (EBFM).[173] Such an approach, according to the FAO, 'represents a move away from management systems that focus only on the sustainable harvest of target species to a system that also considers the major components in an ecosystem, and the social and economic benefits that can be derived from their utilization'.[174] It has been suggested that

> [t]he compelling need for conservation of all ecosystem services, beyond the sustainability of individual target stocks alone, is now recognized and broadly accepted by the international community with the result that the ecosystem approach to fisheries (EAF) has gradually occupied the centre stage in our efforts to maintain the long-term sustainability of fisheries and to rebuild marine ecosystems.[175]

While there is evidence that this approach is finding favour at the planning level at least, implementation appears to be somewhat slow.[176]

Although a much wider concept than fisheries management per se, integrated coastal zone management (ICZM) may entail fisheries management aspects, but, as the name suggests, considered in a way that is integrated with other coastal dynamics.[177]

A further governance tool that can play an important role in conservation of marine species is use of marine protected areas, which is a form of ecosystem-based management.[178] Scientists 'increasingly recommend marine protected areas (MPAs), marine reserves, and national systems of MPAs and marine reserves as the best means of preserving and restoring marine biodiversity'.[179] The CBD's Aichi Biodiversity Targets provide in Target 11 for MPAs to constitute 10 per cent of coastal and marine areas (both within and outside national jurisdiction) by 2020.[180] The scale of this task is

[172] FAO, *Fisheries Management. 2. The Ecosystem Approach to Fisheries*, FAO Technical Guidelines for Responsible Fisheries No. 4, Suppl. 2 (2003), available at <http://www.fao.org/docrep/005/y4470e/y4470e06.htm#bm06> (visited 19 September 2013).

[173] E. K. Pikitch et al, 'Ecosystem-based Fishery Management' 305 *Science* (2004) 346–347.

[174] FAO, *The State of World Fisheries*, *supra* note 7, at 135.

[175] Yimin Ye, Kevern Cochrane and Yongson Qiu, 'Using Ecological Indicators in the Context of an Ecosystem Approach to Fisheries for Data-limited Fisheries', 112 *Fisheries Research* (2011) 108–116 at 108.

[176] FAO, *The State of World Fisheries*, *supra* note 7, at 140–141.

[177] See Agenda 21, 'Integrated management and sustainable development of coastal and marine areas, including exclusive economic zones Programme Area' (para's 17.3–17.17).

[178] Randall S. Abate, 'Marine Protected Areas as a Mechanism to Promote Marine Mammal Conservation: International and Comparative Law Lessons for the United States', 88 *Oregon Law Review* (2009) 255–309 at 258.

[179] Craig, 'Protecting International Marine Biodiversity', *supra* note 3, at 360.

[180] Target 11 reads:

> [b]y 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved

evident if one considers that the current coverage is just over one per cent. In 2010, according to the IUCN, 5 850 MPAs covered 4.21 million km^2, amounting to 1.17 per cent of total area.[181]

7 Conclusion

It is evident that there are several governance measures that can be adopted and pursued in order to address both IUU fishing and bad decision-making in fisheries management. Ultimately, however, states will have to want to do something about the crisis in fisheries stocks.

Many of the pressures on fisheries, as pointed out above, are not caused by IUU fishers but by states ignoring science and preferring politically attractive alternatives. It is too late to decide to cut back on catching fish when it is no longer possible to catch them, as in the Grand Banks example. When it comes to IUU fishing, it appears that potential efforts to address this will only be really effective if there are no gaps in the system. As long as there are ports willing to accept illegal catches and markets willing to purchase them, IUU fishing will continue. It is clear that there are many flag states that are exercising minimal responsibility over vessels flying under their flags, and until this is tightened up, efforts to address IUU fishing will continue to be difficult.

Increasing commitment by states to address IUU fishing, by, for example, adopting the Port State Measures Agreement are to be welcomed; but those states that are serious about addressing the problem will have to exert whatever pressure they can on other states in order to ensure that potential gaps in the system are kept to a minimum.

The Aichi Target 6 puts this discussion into perspective and constitutes the challenge that states have to face up to:

> [b]y 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape.

[181] IUCN, *Global Ocean Protection: Present Status and Future Possibilities* (IUCN, 2010), available at <http://data.iucn.org/dbtw-wpd/edocs/2010-053.pdf> (visited 27 September 2013) 28.

Ocean-based Geoengineering and International Law

Tuomas Kuokkanen[1]

1 Introduction

Problem-solving in international environmental law is often demanding. To begin with, the concept of a problem is not necessarily a black-and-white issue but depends on a particular context. There are usually no one-size-fits-all solutions. Furthermore, once a specific problem has been dealt with, a new problem may meanwhile have emerged.[2] These types of issues appear to relate to many current environmental problems. One topical such issue is climate-related geoengineering.[3]

Geoengineering refers to a range of techniques that have been proposed to address negative impacts of climate change without actually reducing greenhouse gas emissions.[4] Geoengineering techniques have been divided into two groups: carbon diox-

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[2] See Tuomas Kuokkanen, 'The Problem-solving Role of International Environmental Law', in Tuula Kolari and Ed Couzens (eds), *International Environmental Lawmaking and Diplomacy Review 2007*, University of Joensuu – UNEP Course Series 7 (University of Joensuu, 2008) 3–19.

[3] For discussion, see Tuomas Kuokkanen and Yulia Yamineva, 'Regulating Geoengineering in International Environmental Law', Carbon and Climate Law Review (2013) (forthcoming), Ralph Bodle, 'Climate Law and Geoengineering', in Erkki Hollo, Michael Mehling and Kati Kulovesi (eds), *Climate Change and the Law* (Springer, 2013) 447–470; Catherine Redgewell, 'Geoengineering the Climate: Technological Solutions to Mitigation – Failure or Continuing Carbon Addiction', 2 *Carbon and Climate Law Review* (2011) 178–189, at 188; Daniel Bodansky, 'Governing Climate Engineering: Scenarios for Analysis', Discussion Paper for the Harvard Project on Climate Agreements (2011), available at <http://belfercenter.ksg.harvard.edu/files/bodansky-dp-47-nov-final.pdf> (visited 4 July 2013).

[4] See Royal Society, *Geoengineering the Climate: Science, Governance and Uncertainty*, RS Policy Document 10/09 (2009) 1 ('Geoengineering, or the *deliberate large-scale manipulation of the planetary environment to counteract anthropogenic climate change*, has been suggested as a new potential tool for addressing climate change.'); Bodle, 'Climate Law and Geoengineering', *supra* note 3, at 447.

ide removal (CDR) and solar radiation management (SRM) techniques.[5] While CDR techniques seek to remove CO_2 from the atmosphere, SRM approaches aim to reflect a certain portion of the Sun's light and heat back into the space. Carbon capture and storage is not usually defined as a geoengineering technique.[6]

Both SRM and CDR techniques may take place in ocean space or have an impact on the marine environment.[7] Such ocean-based techniques include ocean fertilization, maritime cloud albedo enhancement and ocean based weathering.[8] Ocean fertilization means the enrichment of nutrients in marine environments with the intention of stimulating plant production, and consequently removing CO_2 from the atmosphere, resulting in the deposition of carbon in the deep ocean.[9] While enhancing maritime cloud albedo refers to increasing the concentration of cloud-condensation nuclei over ocean areas with the aim of increasing the reflection of solar radiation,[10] ocean based weathering means increasing the rate by which CO_2 is removed from the atmosphere by adding alkaline minerals.[11]

Geoengineering appears to be an ambiguous issue. On the one hand, it represents a potential tool for climate change management; but, on the other hand, it may cause adverse environmental impacts. Moreover, geoengineering is politically controversial as the issue may interfere in a negative manner with the ongoing climate negotiations. There are also political concerns over the possibility that some powerful states might use geoengineering unilaterally. In view of these various considerations, geoengineering is currently regarded merely as a potential 'Plan B'.

This paper considers various issues relating to geoengineering. First, the current status of international law in relation to geoengineering is examined. Thereafter, the paper explores the nature of problem-solving in relation to geoengineering, and considers different regulatory and management options. Finally, the paper discusses governance issues.

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5 See Royal Society, *Geoengineering the Climate*, *supra* note 4, at ix and 1.

6 For discussion on carbon capture and storage (CCS) see, for instance, Ian Havercroft, Richard Macrory and Richard B. Stewart (eds), *Carbon Capture and Storage. Emerging Legal and Regulatory Issues* (Hart Publishing, 2011).

7 For discussion see, for example, Karen N. Scott, 'The Day After Tomorrow: Ocean CO_2 Sequestration and the Future of Climate Change, 18 *Georgetown International Environmental Law Review* (2005) 57–108; Melissa Eick, 'A Navigational System for Uncharted Waters: The London Convention and London Protocol's Assessment Framework on Ocean Iron Fertilization', 46 *Tulsa Law Review* (2010) 351–378; Randall S. Abate and Andrew B. Greenlee, 'Sowing Seeds Uncertain: Ocean Iron Fertilization, Climate Change and the International Environmental Law Framework', 27 *Pace Environmental Law Review* (2010) 555–598; James Edward Peterson, 'Can Algae Save Civilization? A Look at Technology, Law, and Policy Regarding Iron Fertilization of the Ocean to Counteract the Greenhouse Effect', 6 *Colorado Journal of International Environmental Law and Policy* (1995) 61–108.

8 See 'Regulatory Framework for Climate-related Geoengineering Relevant to the Convention on Biological Diversity', UN Doc. UNEP/CBD/SBSTTA/16/INF.29 (2012) at 29.

9 See 'Impacts of climate-related geoengineering on biological diversity', UN.Doc. UNEP/CBD/SBSTTA/16/INF/28 (2012) at 4.

10 *Ibid* at 20.

11 *Ibid.* at 21.

2 Current international environmental law

2.1 Applicable law

At the international level, legally binding measures have not to date been adopted for the direct regulation of geoengineering. However, there are a number of international conventions and rules of customary law that could apply to geoengineering techniques.

Regarding ocean-based geoengineering, several treaty provisions are applicable. First of all, the 1982 United Nations Convention on the Law of the Sea (UNCLOS)[12] sets out a comprehensive legal framework[13] for the activities conducted in ocean space. For example, UNCLOS contains specific provisions on the rights and obligations in different maritime zones, protection and preservation of the marine environment, navigation and marine scientific research.[14]

Second, there are many global and regional marine conventions which have been concluded in addition to, or on the basis of, UNCLOS.[15] For example, there are a number of regional marine conventions[16] as well as conventions dealing with specific sources of marine pollution, such as marine pollution incidents,[17] pollution by

[12] United Nations Convention on the Law of the Sea (UNCLOS), Montego Bay, 10 December 1982, in force 16 November 1994, 21 *International Legal Materials* (1982) 1261. So far, the Convention has been complemented by two implementing agreements: the 1994 Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, New York, 28 July 1994, in force 28 July 1996, 33 *International Legal Materials* (1994) 1309; and the Agreement for the Implementation of the Provisions of the UN Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, New York, 4 August 1995, in force 11 December 2001, 34 *International Legal Materials* (1995) 1542, <http://www.un.org/Depts/los/convention_agreements/texts/fish_stocks_agreement/CONF164_37.htm> (visited 20 July 2013).

[13] To underline the importance of the UNCLOS, Koh, the President of the Third United Nations Conference on the Law of the Sea, has described the Convention as 'a constitution for the oceans which will stand the test of time'. See Remarks by T. B. Koh, reproduced in UN, *The Law of the Sea: Official Text of the UNCLOS with Annexes and Index* (United Nations, 1983) xxxiii.

[14] See, for instance, part II (territorial sea and contiguous zone); part V (exclusive economic zone); part VII (high seas); part XII (protection and preservation of the marine environment); part XIII (marine scientific research).

[15] Part XII of UNCLOS (Art's 192–237), dealing with the protection and preservation of the marine environment, requires parties to establish further rules, regulations and procedures on the protection of the marine environment. A large number of complementary agreements include more specific substantive provisions on marine issues than UNCLOS itself. See UN Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, *Obligations of States Parties under the United Nations Convention on the Law of the Sea and Complementary Instruments* (United Nations, 2004), available at <http://www.un.org/depts/los/doalos_publications/publicationstexts/E.04.V.5.pdf> (visited 7 July 2013).

[16] See, for instance, UNEP Regional Seas Programme, <http://www.unep.org/regionalseas> (visited 7 July 2013).

[17] See International Convention on Oil Pollution Preparedness, Response and Co-operation, London, 30 November 1990, in force 13 May 1995, <http//www.imo.org>; and the Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, London, 15 March 2000, in force 14 June 2007, <http//www.imo.org>.

dumping[18] and vessel-based pollution.[19] All of these agreements may also be relevant in relation to specific geoengineering techniques. Moreover, there are many other environmental agreements (for example, those relating to air protection,[20] biodiversity[21] and space issues[22]) which could also be relevant.

In addition to treaty law, general principles of law and rules of customary international law would be applicable. For example, states have a duty to prevent transboundary pollution[23] and to carry out an environmental impact assessment for all large-scale projects that may have significant adverse impacts in a transboundary context.[24] In case of violation of a legally binding obligation, the state responsibility doctrine[25] would be applicable. Furthermore, states could have recourse to dispute settlement procedures.

2.2 Steps taken so far

So far, only two international regimes have taken steps to regulate geoengineering techniques specifically. Namely, these steps have been taken by the parties to the London Dumping Convention and to the 1996 Protocol thereto (LC/LP);[26] and the parties to the Convention on Biological Diversity (CBD).[27]

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[18] See Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 13 November 1972, in force 30 August 1975, 11 *International Legal Materials* (1972) 1294; 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 7 November 1996, in force 24 March 2006, <http://www.imo.org>.

[19] See International Convention for the Prevention of Pollution from Ships, 1973, first signed 2 November 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), adopted 17 February 1978. The combined instrument entered into force on 2 October 1983, 12 *International Legal Materials* (1973) 1319, <http://www.imo.org> (visited 7 July 2013).

[20] See Convention on Long-Range Transboundary Air Pollution, Geneva, November 13 1979, in force 16 March 1983, 18 *International Legal Materials* (1979) 1442, <http://www.unece.org/env/lrtap/>; and Protocols relating thereto.

[21] See Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, <http://www.biodiv.org>.

[22] See Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and other Celestial Bodies, London, Moscow, Washington, 27 January 1967, 610 *United Nations Treaty Series* 205.

[23] According to customary international law, states have an obligation to ensure that activities within their jurisdiction or control do not cause damage to the environment or areas beyond national jurisdiction. This principle dates back to the Roman law principle *sic utere tuo ut alienum*. The principle has been referred to in several decisions by the International Court of Justice as well as in several conventions and declarations.

[24] See *Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, I.J.J. Reports (2010), para's 204–206.

[25] See, for example, James Crawford, *International Law Commission's Articles on State Responsibility: Introduction, text and commentaries* (Cambridge University Press, 2003).

[26] See *supra* note 17. For the time being, the LC and LP are applied in parallel. Eventually, the LP will replace the LC. See UN Doc. UNEP/CBD/SBSTTA/16/INF.29 (2012), *supra* note 8, at 30.

[27] Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, <http://www.cbd.int> (visited 7 July 2013).

The LC/LP is in a process of elaborating 'a global, transparent and effective control and regulatory mechanism for ocean fertilization activities and other activities that fall within the scope of the LC and LP and have the potential to cause harm to the marine environment'.[28] In 2008, parties to the LC/LP adopted a resolution in which they agreed 'that, given the present state of knowledge, ocean fertilization activities other than legitimate scientific research should not be allowed'.[29] Two years later, the parties adopted an assessment framework to make decisions on which activities qualify as 'legitimate scientific research'.[30] In 2013, Australia, Nigeria, and South Korea jointly proposed amendments to the Protocol (LP) which would formally extend the Protocol's remit beyond ocean fertilization to include other possible forms of marine geoengineering.[31]

In 2010, parties to the CBD adopted a decision which affirms the approach taken by the LC/LP on ocean fertilization. The decision includes a definition of 'geoengineering'[32] and addresses geoengineering in general, stating that no climate-related geoengineering, with the exception of small scale research, should take place until certain conditions are met.[33] In 2012, the parties to the CBD adopted a new decision on geoengineering, which mainly confirms the 2010 decision.[34]

[28] See IMO, 'Climate Change and the London Convention and Protocol', available at <http://www.imo.org/blast/blastDataHelper.asp?data_id=31012&filename=21643LondonConventionclimatechangeTEDwebversion.pdf> (visited 4 July 2013).

[29] Resolution LC-LP.1 (2008) on the Regulation of Ocean Fertilization, para. 8.

[30] Resolution LC-LP.2 (2010) on the Assessment Framework for Scientific Research Involving Ocean Fertilization.

[31] See Australian Government, 'Australia working to protect the international marine environment', press release, 16 May 2013, available at <http://www.environment.gov.au/minister/archive/burke/2013/mr20130516.html> (visited 4 July 2013).

[32] See CBD decision X/33 (2010):

> [w]ithout prejudice to the future deliberations of the definition of geoengineering activities, understanding that any technologies that deliberately reduce solar insolation or increase carbon sequestration from the atmosphere on a larger scale that may affect biodiversity (excluding carbon capture and storage from fossil fuels when it capturers carbon dioxide before it is released into the atmosphere) should be considered as forms of geoengineering which are relevant to the Convention on Biological Diversity until a more precise definition can be developed. It is noted that solar insolation is defined as a measure of solar radiation energy received on a given surface area in a given hour and that carbon sequestration is defined as the process of increasing the carbon content of a reservoir/poll other than the atmosphere.

[33] 'Biodiversity and climate change', CBD decision X/33 (2010).

[34] 'Climate-related geoengineering', CBD decision XI/20 (2012).

3 Regulatory and management aspects relating to geoengineering techniques

3.1 Geoengineering: a third generation environmental problem?

In order to provide a basis from which better to understand the concept of geoengineering and the questions relating thereto, this chapter will first briefly examine the evolution of international environmental law from the point of view of solving and managing environmental problems.

International environmental cooperation began to develop in the 1960s and 1970s. As a response to various adverse impacts, in particular transboundary pollution, states began to develop responsive actions and establish joint institutions. To characterize new environmental problems, a distinction between biosphere and technosphere was introduced. While 'biosphere' refers to the natural world, 'technosphere' refers to the man-made world of tools.[35] The two worlds had moved out of balance and were in conflict.[36] Therefore, the new task set by states during the early 1970s was to issue regulations for activities in the technosphere so as to protect the biosphere and thus the human environment.[37]

In the 1980s and 1990s, while states were still struggling with their traditional pollution problems, new types of environmental concerns also emerged. Attention was drawn to 'megathreats' such as climate change,[38] depletion of the ozone layer[39] and loss of biodiversity.[40] To draw a distinction between these new environmental problems and traditional pollution problems, the new problems were called 'second generation' environmental problems.[41] At the same time, it was recognized that the former distinction between the biosphere and technosphere appeared to be too rigid, and that the dichotomy between man and his environment was rather a fiction.

Gradually, international policy-makers began to view the relationship between man and nature from a different perspective. Nature came to be seen as a global ecosystem

[35] See, for instance, Lynton K. Caldwell, *In Defence of Earth: International Protection of the Biosphere* (Indiana University Press, 1972) 31–52.

[36] Barbara Ward and René Dubos, *Only One Earth. The Care and Maintenance of a Small Planet* (Penguin, 1972) 47.

[37] Tuomas Kuokkanen, *International Law and the Environment: Variations on a Theme* (Kluwer Law International, 2002) 142.

[38] See United Nations Framework Convention on Climate Change, New York, 9 May 1992, in force 21 March 1994, 31 *International Legal Materials (*199) 849, 1992, <http://www.unfccc.int>, Art. 1(2) ("'Climate change" means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods').

[39] Convention on the Protection of the Ozone Layer, Vienna, 22 March 1985, in force 22 September 1988, 26 *International Legal Materials* (1985) 1, Preamble ('*Aware* of the potentially harmful impact on human health and the environment through modification of the ozone layer').

[40] See the Preamble of the 1992 Biodiversity Convention ('*Conscious also* of the importance of biological diversity for evolution and for maintaining life sustaining systems of the biosphere …').

[41] See Andronico A. Adene, *International Environmental Law Digest. Instruments for International Responses to Problems of Environment and Development 1972–1992* (1993) 3.

which also encompassed human beings.[42] Rather than simply focusing on the protection of the environment, the new approach began to deal with environmental problems in ecological terms. To that end, environmental problems were seen as interactions between the planet's non-living and living realms. By placing humanity in the natural order, there was no longer a need to make an artificial distinction between biosphere and technosphere. The climate system, for example, was determined as 'the totality of atmosphere, hydrosphere, biosphere and geosphere and their interaction'.[43] A new task for environmental policy was to manage dynamic interactions, including the human impact, so that they would not cause adverse effects.

Against this background, geoengineering techniques appear to represent new types of issues. While geoengineering techniques are aimed at managing climate change, some of these techniques could cause marine and other pollution problems, have an adverse effect on the ozone layer or reduce biodiversity. Paradoxically enough, an attempt to manage a second generation problem could cause both first generation and second generation problems. Geoengineering can, thus, be characterized as a mixture between first and second generation problems or, if you like, a 'third generation' environmental problem.

3.2 Geoengineering from a regulatory and management perspective

In relation to the first generation environmental problems, international policy-makers adopted a primarily regulatory approach. The purpose was to regulate various activities in order to protect the environment from pollution problems. For example, various prohibitions were issued to ban harmful activities. In addition, emission standards and quality limits were set to prevent environmental pollution.[44]

Along with the emergence of the second generation problems, the focus shifted towards risk management. First, the new approach shifted the focus from reaction to anticipation. For instance, attention was extended to dynamic ecological processes, such as climate change, which involve threats. In order to justify anticipative action, policy-makers introduced the precautionary principle, in terms of which lack of scientific information should not be used as a reason to postpone taking environmental policy measures.[45]

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[42] For example, the World Charter for Nature accepted a comprehensive approach to the relationship between man and nature by declaring as follows: 'Mankind is a part of nature and life depends on the uninterrupted functioning of natural systems which ensure the supply of energy and nutrients ...'. See World Charter for Nature, UNGA Res. 37/7 (1982), Preamble. See also the Preamble of the Rio de Janeiro Declaration on Environment and Development (UN Declaration on Environment and Development, Rio de Janeiro, 14 June 1992, UN Doc. A/CONF.151/5/Rev.1 (1992), 31 *International Legal Materials* (1992) 876) ('*Recognizing* the integral and interdependent nature of the Earth, our home ...'.)

[43] See the Climate Change Convention, Art. 1(3).

[44] See Kuokkanen, *International Law and the Environment*, *supra* note 37, 135–169.

[45] 1992 Climate Change Convention, Art. 3(3):

> [t]he Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of

Second, the new approach was more realistic than earlier approaches in so far as it recognized that it is not possible to *solve* all environmental problems and that the focus should rather be on the *management* of problems.[46] The following statement, made in 1987 by the World Commission on Environment and Development in its report *Our Common Future*, reflects the changed paradigm: '[t]his new reality, from which there is no escape, must be recognized – and managed'.[47]

Against this background, geoengineering appears controversial and ambiguous. It is controversial in the sense that, on the one hand, it can be regarded as a management technique; that is, a tool that can be used against climate change as a second generation problem. On the other hand, it can be considered a potential problem that should itself be regulated and managed. It is ambiguous in the sense that its nature is not clear. For instance, in relation to the precautionary principle, one could either argue that the precautionary principle would justify the application of certain geoengineering techniques; or one could argue that those geoengineering techniques which could potentially have an adverse effect on the environment should not be implemented.[48]

3.3 Geoengineering as a governance issue

Several environmental agreements were concluded and a number of environmental institutions were established as a response to the first generation problems. Such agreements dealt with the protection of the marine environment from various sources, such as the dumping of waste and other matter at sea.

Subsequently, environmental regimes emerged as a tool through which to exercise environmental management. For example, several framework agreements, such as the UN Framework Convention on Climate Change and the Convention on Biological Diversity, were concluded. Gradually, the proliferation of environmental agreements and increased specialization has led to fragmentation, which in certain instances may have led to inefficient or even conflicting results.[49] In order to enhance

full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible costs…

[46] For example, Helga Nowotny pointed out that environmental threats could not be solved 'in the accustomed way – if ever at all', and that it was necessary to switch the rhetoric, as she put it, 'from solving problems to managing them'. See Helga Nowotny, 'A New Branch of Science, Inc', in Harvey Brooks and Cherster L. Cooper (eds), *Science for Public Policy* (Pergamon Press, 1987) 61–76, at 71.

[47] World Commission on Environment and Development, *Our Common Future* (1987) 1.

[48] See Bodle, 'Climate Law and Geoengineering', *supra* note 3 at 460 ('The precautionary principle embodies the core arguments both for and against geoengineering').

[49] See Tuomas Kuokkanen, 'Relationships between Multilateral Environmental Agreements and Other Agreements', in Tuula Honkonen and Ed Couzens (eds), *International Environmental Law-making and Diplomacy Review* 2011, University of Eastern Finland – UNEP Course Series 11 (University of Eastern Finland, 2013) 19–32. See also Louis J. Koze, 'Fragmentation of International Environmental Law: An Ocean Governance Case Study' in Ed Couzens and Tuula Honkonen (eds), *International Environmental*

cooperation and synergies, regime interaction has recently gained more and more support in both practice and theory.[50] It is common, for example, for multilateral environmental regimes to cooperate with regimes that are operating in the same field. For instance, the UNFCCC and the CBD both engage in a wide range of cooperative activities with other conventions and bodies.[51]

Turning to geoengineering, one can first ask whether a new treaty should be concluded to regulate geoengineering. On reflection, it appears that a new treaty would not be a viable option. First, the objective of the treaty would not be clear as geoengineering activities could either be promoted or limited. This controversial starting point would make it difficult to regulate and manage geoengineering. Second, given the existing applicable treaty provisions and rules of customary international law, there is no urgent need to regulate geoengineering. If there is a need to regulate specific geoengineering techniques, such as ocean fertilization,[52] this could be done through an existing regime, such as the LC/LP.

This said, there is a concern that, given the ambivalent and controversial nature of geoengineering, the currently applicable rules and possible future rules could lead to unclear or conflicting results. Such an outcome could be due to specialized regimes which each have their own scope of application. One could identify a number of potential conflicts. For example, attempts to cool the climate through geoengineering techniques might lead to a conflict with regimes protecting air quality, the ozone layer, biological diversity and the marine environment.

Law-making and Diplomacy Review 2008, University of Joensuu – UNEP Course Series 8 (University of Eastern Finland, 2009) 11–30.

50 For a comprehensive discussion, see Margaret A. Young (ed.), *Regime Interaction in International Law. Facing Fragmentation* (Cambridge University Press, 2012).

51 For a comprehensive discussion on the CBD, see, for instance, 'Cooperation with other conventions and international organizations and initiatives', Note by the Executive Director, UN Doc. UNEP/CBD/COP/10/17 (2010). With regard to environmental agreements, such activities include cooperation with the third Rio Convention, this being the United Nations Convention to Combat Desertification (UN Convention to Combat Desertification in Countries Experiencing Serious Drought and or Desertification, Particularly in Africa, Paris, 17 June 1994, in force 26 December 1996, 33 *International Legal Materials* (1994) 1309, <http://www.unccd.int>). In addition, the CBD cooperates with the five other biodiversity-related conventions through the Liaison Group of Biodiversity-related Conventions. The object of the Liaison Group is to explore options for enhancing synergies, avoid duplication of efforts and improve the coherent implementation of the biodiversity-related conventions. Moreover, the CBD has cooperation with other relevant conventions and agreements. Such cooperation includes, for example, cooperation with the UNEP Regional Seas Conventions in connection with the work on marine and coastal biodiversity.
For more information on the UNEP Regional Seas Programme, see <http://www.unep.org/regionalseas> (visited 21 July 2012).

52 See Rio+20 Outcome Document 'The Future We Want' (2012), available at <http://www.uncsd2012.org/content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf> (visited 30 March 2013), para. 167: '[w]e stress our concern about the potential environmental impacts of ocean fertilization. In this regard, we recall the decisions related to ocean fertilization adopted by the relevant intergovernmental bodies, and resolve to continue addressing with utmost caution ocean fertilization, consistent with the precautionary approach'. See also <http://www.un.org/en/sustainablefuture>.

For this reason, it would be important to seek to preserve the coherence[53] of the legal system by avoiding ineffective fragmentation.[54] This could be done by clustering multilateral environmental agreements (MEAs)[55] and by enhancing synergies among them.[56] One recent example to this effect is the synergies process among the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal,[57] Rotterdam Convention on Prior Informed Consent[58] and the Stockholm Convention on Persistent Organic Pollutants.[59] The process led first to the establishment of an ad hoc joint working group among the Basel, Rotterdam and the Stockholm Conventions[60] and, subsequently, to extraordinary simultaneous meetings of the Conferences of the Parties (COPs) of the three Conventions.[61] By way of analogy, it would be important that appropriate

[53] See Nele Matz-Lück, 'Norm Interpretation across International Regimes: Competences and Legitimacy', in Young, *Regime Interaction*, *supra* note 50, 201–234, at 205–209. See also United Nations Secretary-General's High-level Panel on Global Sustainability, *Resilient People, Resilient Planet: A Future worth Choosing* (United Nations, 2012), available at <http://www.un.org/gsp/report> (visited 11 March 2012), para 220: 'Accountability and coherence at the international level are also indispensible for advancing sustainable development'. See also Rio+20 Outcome Document, *supra* note 52, at para. 76:

> [t]he world leaders committed to resolve to strengthen the institutional framework for sustainable development, which will, *inter alia*: …(c) underscore the importance of interlinkages among key issues and challenges and the need for a systematic approach to them at all relevant levels; (d) enhance coherence, reduce fragmentation and overlap and increase effectiveness, efficiency and transparency, while reinforcing coordination and cooperation…'.

[54] See, for example, Harro van Asselt, 'Managing the Fragmentation of International Climate Law', in Erkki J. Hollo et al, *Climate Change and the Law*, *supra* note 3, 329–357. See also 'Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law', Report of the Study Group of the International Law Commission, finalized by Martti Koskenniemi, The Erik Castén Institute Report 21/2007.

[55] For discussion, see, for instance, Kong Xiangwen, 'Clustering of MEAs', in Marko Berglund (ed.), *International Environmental Law-making and Diplomacy Review* 2004, University of Joensuu – UNEP Course Series 1 (University of Joensuu, 2005) 207–209; Kerstin Stendahl, 'Clustering of MEAs – Lessons Learned, Rio+20 and Beyond, in Tuula Honkonen and Ed Couzens (eds), *International Environmental Law-making and Diplomacy Review 2011*, University of Joensuu – UNEP Course Series 11 (University of Joensuu, 2013) 59–70.

[56] For discussion, see Cam Carruthers, 'Does the World Need a Super-COP? Integrated Global Decision-Making for Sustainable Development', in Marko Berglund (ed.), *International Environmental Law-making and Diplomacy Review* 2004, University of Joensuu – UNEP Course Series 1 (University of Joensuu, 2005) 211–223; Kerstin Stendahl, 'Enhancing Cooperation and Coordination among the Basel, Rotterdam and Stockholm Conventions', in Tuula Kolari and Ed Couzens (eds), *International Environmental Lawmaking and Diplomacy Review 2007*, University of Joensuu – UNEP Course Series 7 (University of Joensuu, 2008) 127–141.

[57] Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Basel, 22 March 1989, in force 5 May 1992, 28 *International Legal Materials* (1989), <http://www.basel.int>.

[58] Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, Rotterdam, 11 September 1998, in force 24 February 2004, <http://www.pic.int>.

[59] Convention on Persistent Organic Pollutants, Stockholm, 22 May 2011, in force 17 May 2004, 40 *International Legal Materials* (2001) 532, <http://www.pops.int>.

[60] 'Cooperation and coordination between the Basel, Rotterdam and Stockholm Conventions', Basel Convention Decision VIII/8 (2007); 'Cooperation and coordination between the Rotterdam, Basel and Stockholm Conventions', Rotterdam Convention Decision RC-3/8 (2006).

[61] The first simultaneous extraordinary meetings of the Conferences of the Parties of the three Conventions were held in Bali, Indonesia in 2010 while the second round of simultaneous COPs was held in Geneva in May 2013.

cooperation among competent regimes take place in connection with geoengineering issues.

4 Conclusions

Geoengineering appears to be an example of a complex, ambivalent, fragmented and controversial problem. For some, geoengineering appears to be a possible solution; while for others it is rather a problem itself. In view of these fundamentally different starting points, the regulatory and management options for addressing geoengineering are likewise ambiguous and controversial.

This does not, however, mean that it would not be reasonable or rational to try to regulate or manage geoengineering techniques. First, there are already a number of treaties and customary law rules which would be applicable. This is, for instance, the case with regard to ocean-based geoengineering, in relation to which many treaty provisions and customary rules are applicable. As to the possible future rules, it would be logical to operate through existing regimes as opposed to concluding a completely new agreement. For instance, steps have already been taken to start to regulate ocean fertilization. Lastly, it would be important to avoid fragmentation, to aim at synergy and interaction among different regimes, and to preserve coherence of the international environmental legal system. Such regime cooperation, in particular among the CBD, LC/LP and UNFCCC, would be important also in relation to regulating and managing ocean based geoengineering.[62]

Overall, international environmental law and future law-making is not necessarily able to provide one universal normative answer to geoengineering. Rather, the legal and policy position depends on context. Indeed, geoengineering techniques and their potential adverse effects require contextual problem solving and management through environmental regulations and regimes.

[62] See the account of the simulation exercise by Cam Carruthers in Part IV of the current *Review*.

Planning the Marine Area Spatially – A Reconciliation of Competing Interests?

Niko Soininen[1]

1 Introduction[2]

Protection of the marine environment is increasingly becoming a problem as more and more people and industries compete for limited marine space and the ecosystem services provided by the marine environment. The finite nature of resources is causing conflicts among human uses (human–human conflicts) as well as conflicts between human uses and the environment (human–environment conflicts). These conflicts have mostly been dealt with reactively instead of proactively, and a holistic view which would take into account all the aspects and sectors of marine governance has been lacking.[3] This has led many scholars to argue that the present situation of conflicts between human uses and between humans and the environment is caused by *a failure in the governance of the marine environment*.[4]

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3 Charles Ehler and Fanny Douvere, *Marine Spatial Planning. A Step-by-Step Approach toward Ecosystem-based Management*, Manual and Guides No. 53, IOCAM Dossier No. 6 (UNESCO, 2009), available at <http://unesdoc.unesco.org/images/0018/001865/186559e.pdf> (visited 12 May 2013) at 19. See on the conflicts also Deborah Peel and Greg M. Lloyd, 'The Social Reconstruction of the Marine Environment. Towards Marine Spatial Planning?' 75 *Town Planning Review* (2004) 357–378 at 366. However, Peel and Lloyd are quite critical of whether there is even a real consensus on what the nature of the marine problem is or how it should be addressed.

4 See, for example, L. B. Crowder, G. Osherenko, O. R. Young, S. Airamé, E. A. Norse, N. Baron, J. C. Day, F. Douvere, C. N. Ehler, B. S. Halpern, S. J. Langdon, K. L. McLeod, J. C. Ogden, R. E. Peach, A.

Marine Spatial Planning (MSP)[5] is a relatively new instrument designed to aid in this regard. According to a popular description, MSP is 'a process of analyzing and allocating parts of three-dimensional marine spaces (or ecosystems) to specific uses or objectives, to achieve ecological, economic, and social objectives that are usually specified through a political process'.[6] What MSP is promising, then, is a new process, which takes into account all the sectors related to the governance of marine issues and allocates marine space both geographically and temporally for different purposes (interests), which are deemed politically desirable.[7]

In recent years, the aims and instruments of MSP have been widely discussed and developed throughout the world. However, although many scholars agree on several general characteristics of MSP, no uniform definition of the aims of MSP or consensus on the specific characteristics of MSP has emerged.[8] In trying to answer this challenge, the purpose of this paper is threefold. Firstly, the aim is to identify the goals that MSP should serve. Secondly it is to study the characteristics of MSP that have been suggested by commentators as necessary to achieve these goals and analyze critically some of these characteristics. The final aim is to evaluate whether one of the main goals of MSP (namely, the goal of reconciling conflicting interests) can be achieved in reality. This will be assessed by considering four existing MSP systems.

A. Rosenberg, and J. A. Wilson, 'Resolving Mismatches in U.S. Ocean Governance', 313 *Science* (2006) 617–618; Pew Oceans Commission, *America's Living Oceans: Charting a Course for Sea Change. Arlington* (2003), available at <http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Protecting_ocean_life/env_pew_oceans_final_report.pdf> (visited 12 May 2013); U.S. Commission on Ocean Policy, *An Ocean Blueprint for the 21st Century*, Final Report of the U.S. Commission on Ocean Policy to the President and Congress (2004); S. J. Hall, 'U.S. Ocean Policy: A Blueprint for the Future' 47 *Environment* (2005) 41–43; Robin Kundis Craig, *Comparative Ocean Governance. Place-Based Protections in an Era of Climate Change* (Edward Elgar Publishing, 2012) at 1–2.

5 Most commonly, MSP is referred to as marine spatial planning but the Commission of the European Union, for instance, uses the concept of maritime spatial planning to refer to the same instrument. See, for instance, COM (2008) 791 final 25 November 2008, 'Roadmap for Maritime Spatial Planning: Achieving Common Principles in the EU' at 2: 'The term *maritime* spatial planning is favoured over *marine* spatial planning to underline the holistic cross-sectoral approach of the process.' See also European Commission, *Maritime Spatial Planning*, available at <http://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning/index_en.htm> (visited 9 January 2013). See also on the conceptual differences between the EU and other parts of the world, Hermanni Backer, 'Trans-boundary Maritime Spatial Planning: a Baltic Sea Perspective', 15 *Journal of Coastal Conservation* (2011) 279–289 at 280.

6 UNESCO, 'Marine Spatial Planning Initiative, Marine Spatial Planning (MSP)', available at <http://www.unesco-ioc-marinesp.be/marine_spatial_planning_msp> (visited 5 February 2013).

7 Although the history of MSP can be traced back to the 1970s, the modern era of MSP can be seen to have begun at the 2002 World Summit on Sustainable Development in Johannesburg. See Fanny Douvere, 'The Importance of Marine Spatial Planning in Advancing Ecosystem-based Sea Use Management', 32 *Marine Policy* (2008) 762–771. See also Charles Ehler and Fanny Douvere, 'New Perspectives on Sea Use Management: Initial Findings from European Experience with Marine Spatial Planning', 90 *Journal of Environmental Management* (2009) 77–88 at 79–80; and Plan of Implementation of the World Summit on Sustainable Development, UN Doc. A/CONF.199/20 (2002), para. 31(c). At the moment, MSP is being used for the governance of marine areas in several countries throughout the world, for instance in Australia, Belgium, Germany, Norway, Sweden, the Netherlands, the United Kingdom, Canada, the United States and China. For a more comprehensive list of MSP-systems throughout the world, see UNESCO, 'Marine Spatial Planning Initiative, MSP around the world', available at <http://www.unesco-ioc-marinesp.be/msp_around_the_world> (visited 5 February 2013).

8 However, certain characteristics, such as those developed within UNESCO have been widely accepted in scholarly writings and one can already see MSP taking more solid formulations, see Part 2 of this paper.

In Part 2, the aim is to define the goals and certain functional characteristics of MSP which most of the MSP scholars agree on, and also to clear up some misunderstandings about the nature and functions of MSP. Some problems and possibilities which MSP may bring to the governance of marine areas are also analyzed. After this, Part 3 is dedicated to a short analysis of four different MSP systems currently operating in different parts of the world in order to assess whether the instruments of the MSP are functioning properly in light of the goals of MSP. Australia, Belgium, Germany and the Netherlands have been chosen as the objects of the study because they present very different views on how MSP may be deployed in the governance of the marine environment. The other significant factor for choosing these countries is the fact that the areal scope of MSP between these countries varies quite significantly. Belgium is a good example of very scarce marine space and multiple uses that would require roughly 2.6 times the marine space available, whereas in the other countries there is far more space available for planning purposes.[9]

2 Planning the marine area spatially

2.1 Reconciliation of interests as the aim of MSP

In this chapter, it is argued, firstly, that MSP is aimed at achieving sustainable development. Secondly, it is argued that because sustainable development is firmly based on the idea of reconciliation between environmental, social and economic development, all of the instruments which aim at implementing sustainable development, such as Ecosystem Based Management and MSP, attempt to reconcile competing interests in a rational and equitable way. The third argument in this chapter is that aiming at sustainability does not mean only balancing competing interests in the use and protection of the marine environment, but also reconciling social needs such as the functioning of the legal system and rule of law, with the environmental, economic and other social aspects of sustainability. Reconciliation within sustainable development has to take into consideration all of the aspects of sustainability, and the rational functioning of the legal system can be seen as one element of social sustainability. Developed legal systems have certain valuable characteristics in governing our social world and these have to be taken into account when conjuring up new governance instruments which aim at implementing sustainable development.[10]

[9] See on the scarce space in Belgium, Frank Maes, Jan Schrijvers and An Vanhulle: *A Flood of Space. Towards a Spatial Planning Structure Plan for Sustainable Management of the North Sea* (Belgian Science Policy, 2005), available at <http://www.unesco-ioc-marinesp.be/uploads/documentenbank/b29ecdecdd3c-1025c24b1f6473656633.pdf> (visited 30 January 2013) at 120–121.

[10] In this line of thought, the law is not seen purely as a means to achieve sustainability but also as an instrument that has its own valuable characteristics, such as procedural safeguards, predictability etc. These can be seen as inherent parts of the social world of sustainability. On the law as a means of achieving sustainability, see Louis Kotzé, 'Towards a Tentative Legal Formulation of Environmental Governance', in Ed Couzens and Tuula Honkonen (eds), *International Environmental Lawmaking and Diplomacy Review* 2009, University of Eastern Finland – UNEP Course Series 9 (University of Eastern Finland, 2010) 3–20, at 19.

With regard to the aims of MSP, Ehler and Douvere have recognized that:

> [a] key problem with various existing definitions on marine spatial planning is that they refer to planning and management of human activities and protection of the marine environment as if they were synonymous. They are not, however, and the lack of consistency in the use and application of both terms is one of the main reasons why fruitful discussions and interactions on the need of marine spatial planning regularly fail to go any further.[11]

Some may view MSP mainly as an instrument of environmental protection, whereas others view the primary purpose of planning instruments as being to advance economic interests.[12] As this paper will demonstrate below, both views are misleading because they do not take sustainable development, which MSP is supposed to implement, seriously.[13]

Since its wider popularization in the 1980s, the idea of sustainable development has been influential and widely accepted in international environmental policy and law.[14] No doubt, a big part of this success is a result of the concept's somewhat vague formulation and simultaneous adoption of at least seemingly conflicting views in a way that environmental, social and economic *development* were seen as mutually reinforcing instead of conflicting aims.[15] What the idea of sustainable development seems to be implicating is that it is *not impossible* to achieve a high level of social, environmental and economic conditions at the same time.[16]

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[11] Charles Ehler and Fanny Douvere, *The Need for a Common Vocabulary for Marine Spatial Planning in Ecosystem-based Marine Management* (UNESCO, 2007), available at <http://www.unesco-ioc-marinesp.be/uploads/documentenbank/04f55833a70d8ecb2b712f5c2d23d710.pdf> (visited 12 March 2013) at 7.

[12] Charles Siegel, *Unplanning. Livable Cities and Political Choices* (Preservation Institute, 2010) at 27.

[13] Although it has not been univocally accepted that the primary purpose of MSP is to achieve sustainable development, this paper will attempt to provide credible arguments as to why reconciliation of interests in line with the idea of sustainable development *should* be the aim of any MSP.

[14] Marie Claire Cordonier Segger and Ashfaq Khalfan, *Sustainable Development Law: Principles, Practices and Prospects* (Oxford University Press, 2004) at 15–50. However, debates still remain on the legal status of sustainability. The legal conversation around sustainability focuses very often on whether sustainable development is hard law or soft law and whether the idea of sustainability has legal validity. Usually, the conversation has revolved around whether sustainable development can be seen as customary international law, since it is quite clear that it cannot be regarded as hard law on the basis of the various international agreements that refer to it.

[15] Klaus Bosselman, 'The Concept of Sustainable Development', in Klaus Bosselmann and David Grinlinton, *Environmental Law for a Sustainable Society* (New Zealand Centre for Environmental Law, 2002) at 87 states that the idea of sustainable development can simultaneously facilitate a view holding that sustainable development poses a threat to the on-going economic growth and prosperity and, on the other hand, a view that sustainability is just another form of 'growth-obsessed industrialism'. See also Cordonier Segger and Khalfan, *Sustainable Development Law*, *supra* note 14, at 15; and Robert Costanza and Bernard C. Pattern, 'Defining and Predicting Sustainability', 15 *Ecological Economics* (1995) 193–196.

[16] However, some scholars have been somewhat sceptical as to whether this aim can be achieved. See, for instance, David W. Pearce and Edward B. Barbier, *Blueprint for a Sustainable Economy* (Earthscan, 2000) at 30. See also Tuomas Kuokkanen, 'Perspectives within the Climate Change Regime', in Ed Couzens and Tuula Honkonen (eds), *International Environmental Law-making and Diplomacy Review 2010*, University of Eastern Finland – UNEP Course Series 10 (University of Eastern Finland, 2011) 41–49, who at

The vague formulation, and adoption of aims which are at least to some extent conflicting, within the idea of sustainable development has led to a situation in which sustainability is used to justify economic growth at the same time as demanding radical changes to the current social and economic structures of societies on the basis that the carrying capacity of the earth will not sustain the present level of social and economic pressure. As Holling has noted:

> [s]ustainable designs driven by conservation interests often ignore the needs for an adaptive form of economic development that emphasizes human economic enterprise and institutional flexibility. Those driven by economic and industrial interests often act as if the uncertainty of nature can be replaced with human engineering and management controls, or be ignored all together. These are not wrong, just too partial.[17]

Advancing only certain interests was never the idea of sustainable development. Rather, the *idea of reconciliation or balancing* between the environmental, social and economic aspects was and still is paramount.[18] This idea of reconciliation behind sustainability is neatly characterized by the International Court of Justice (ICJ) in the *Gabčikovo–Nagymaros* case:

> [t]hroughout the ages, mankind has, for economic and other reasons, constantly interfered with nature. In the past, this was often done without consideration of the effects upon the environment. Owing to new scientific insights and to a growing awareness of the risks for mankind – for present and future generations of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past. *This need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development* [own emphasis].[19]

42 states that '[t]he new paradigm [sustainable development] was to optimize short-term economic interests and long-term environmental concerns. This did not, though, lead to a harmony of interests. Rather, the reconciliation brought the two elements under the framework [of sustainable development]'.

17 Crawford S. Holling, 'Theories for Sustainable Futures', 4 *Conservation Ecology* (2000), available at <http://www.consecol.org/vol4/iss2/art7/> (visited 6 February 2013).

18 See Gro Harlem Brundtland, *Our Common Future* (Oxford University Press, 1987) at 20: '[t]he "environment" is where we all live; and "development" is what we all do in attempting to improve our lot within that abode. The two are inseparable'; '2005 World Summit Outcome', UNGA Res. A/60/1, adopted by the General Assembly on 15 September 2005 para. 48: '… [t]hese efforts will also promote the integration of the three components of sustainable development – economic development, social development and environmental protection – as interdependent and mutually reinforcing pillars'; and Bosselman, 'The Concept', *supra* note 15 at 87. However, many scholars have emphasized that the concept of sustainability has many meanings depending on the context of its use. For instance, sustainability in social sciences and natural sciences has completely different meanings. See, for instance, Louis Kotzé, 'Towards a Tentative Legal Formulation of Environmental Governance', *supra* note 10, at 17.

19 *Gabčikovo-Nagymaros Project (Hungary/Slovakia),* ICJ Reports (1997) 7, at para. 140.

Despite the idea of sustainable development, or the idea of balancing between ecological, social and economic considerations, becoming more acceptable in recent years, the overall condition of the marine environment has by many standards been deteriorating and conflicts among different users of the marine resources and space are multiplying.[20] As was noted earlier, many scholars have pinpointed the reason behind this as being the failure in governance mechanisms. In other words, we do not possess the tools needed to implement the idea of sustainability in reality.[21]

Ecosystem Based Management (EBM) has been described as one of the tools for implementing the idea of sustainable development and helping to address the governance problems relating to marine issues.[22] The argument is that in order to achieve sustainability, we need to adopt an ecosystem approach, which 'considers the entire ecosystem, including humans. The goal of ecosystem-based management is to maintain an ecosystem in a healthy, productive and resilient condition so that it can provide the goods and services humans want and need'.[23] Within the context of the Convention on Biological Diversity (CBD),[24] EBM is defined as a '*strategy* for the integrated management of land, water and living resources *that promotes conservation and sustainable use* in an equitable way. Application of the ecosystem approach will help to reach a balance of the three objectives of the Convention' (own emphasis).[25]

In order for the goals of EBM to be achieved in marine areas, place-based and integrated management systems are needed, which allow for a vast amount of information from different sectors to be taken into account when deciding whether a certain

[20] See, for instance, UNEP, *Global Synthesis: A report from the Regional Seas Conventions and Action Plans for the Marine Biodiversity Assessment and Outlook Series* (UNEP Regional Seas Programme, 2010) *passim*.

[21] Lawrence J. MacDonnel, 'Sustainable Use of Water Resources', 2 *Natural Resources & Environment* (1997) 97–100 at 97: '[t]he virtue of sustainability as a concept sufficiently broad to embrace contemporary thinking about human objectives becomes a curse of vagueness when the discussion shifts from general to specific'.

[22] See Paul M. Gilliland and Dan Laffoley, 'Key Elements and Steps in the Process of Developing Ecosystem-based Marine Spatial Planning', 32 *Marine Policy* (2008) 787–796. Bruce Pardy, 'Changing Nature: The Myth of the Inevitability of Ecosystem Management', 29 *Pace Environmental Law Review* (2003) at 675–692 has been quite critical of the claim that ecosystems have to be managed instead of left to their own devices. While the present author agrees with Pardy on the notion that ecosystem management is a policy choice and that not every ecosystem should be managed, the author would like to point out that modern ecosystem management instruments are constructed in a way that allows some areas to be preserved (or maintained in a natural state of non-equilibrium) and other areas to be used more heavily for human purposes. This can be seen especially well in the place-based management instruments designed for marine areas, such as marine spatial planning. Ecosystem management can be a tool of management or non-management. Craig, *Comparative Ocean Governance*, *supra* note 4, at 5, has also noted that all the marine governance instruments are anthropocentric and some changes in the environment can be considered as bad from the point of view of ecological and economic productivity. For this reason, some form of management should be established in marine areas.

[23] Ehler and Douvere, *Marine Spatial Planning*, *supra* note 3, at 24.

[24] Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, <http://www.biodiv.org>.

[25] See CBD, 'Ecosystem Approach', available at <http://www.cbd.int/ecosystem/> (visited 28 January 2013). The objectives of the Convention are presented in Article 1: 1) conservation of biological diversity; 2) sustainable use of its components; and 3) fair and equitable sharing of benefits arising out of the utilization of genetic resources.

action in a certain area should be allowed or not.[26] The idea behind EBM is to move away from traditional single sector-based strategies of environmental governance.[27]

However, it has been argued that EBM itself is not suitable for the task of achieving sustainability because it operates on too general a level.[28] A new governance instrument is needed in order to reconcile the conflicts and allocate space between different uses. In marine areas, the tool designed to implement the principles of sustainable development and EBM is MSP.[29] Gilliland and Daffoley have argued that achieving sustainable development should be the main aim of MSP:

> … MSP should encompass the principles that underpin sustainable development… [and at the heart of this idea is providing] a balanced view between competing uses, high-lighting where one human activity might preclude another, helping avoid or minimise conflicts of interest, and, where possible, optimising the co-location of compatible activities.[30]

Taking into consideration the fundamental aim of reconciliation established above, it is quite clear that MSP should not be viewed purely as either an instrument of environmental protection or as an instrument advancing economic or social interests.[31] The somewhat idealistic aim of MSP is to achieve all of these objectives at the same time. The rationale of this thinking is to enable maximum utilization as well as maximum protection of biodiversity and ecosystems simultaneously.[32] It is true that many MSP systems have close (past or present) linkages to conservation (for instance, marine protected areas), but marine zoning within any MSP can also be used for purposes opposed to this. According to Agardy:

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[26] Fanny Douvere, Frank Maes, An Vanhulle and Jessie Schrijvers, 'The Role of Marine Spatial Planning in Sea Use Management: The Belgian Case', 31 *Marine Policy* (2007) 182–191; Oran R. Young, Gail Osherenko, Julia Ekstrom,Larry B. Crowder, John Ogden, James A. Wilson, Jon C. Day, Fanny Douvere, Charles N. Ehler, Karen L. McLeod, Benjamin S. Halpern and Robbin Peach, 'Solving the Crisis in Ocean Governance. Place-Based Management of Marine Ecosystems', 49 *Environment* (2007) 22–27; Douvere, 'The importance of', *supra* note 7, at 764; Ehler and Douvere, *Marine Spatial Planning*, *supra* note 3, at 18.

[27] Scott D. Slocombe, 'Implementing Ecosystem-based Management. Development of Theory, Practice, and Research for Planning and Managing a Region', 43 *BioScience* (1993) 612–622.

[28] Katie K. Arkema, Sarah C. Abramson and Bryan Dewsbury, 'Marine Ecosystem-Based Management: From Characterization to Implementation', 4 *Frontiers in Ecology and the Environment* (2006) 525–532.

[29] Deborah A. Sivas and Margaret R. Caldwell, 'A New Vision for California Ocean Governance: Comprehensive Ecosystem-based Marine Zoning', 27 *Stanford Environmental Law Journal* (2008) 209–270 at 226–227. The authors see MSP as an ecosystem based zoning instrument.

[30] Gilliland and Laffoley, 'Key Elements', *supra* note 22 at 788–789.

[31] See EC COM (2008) 791 final, *supra* note 5, at 2: '[o]bjective [of the MSP] is to balance sectoral interests and achieve sustainable use of marine resources'. The Commission of the European Union is currently preparing a directive for an EU-wide framework of the MSP. See also Tundi Agardy, *Ocean Zoning. Making Marine Management More Effective* (Earthscan, 2010) at 34.

[32] However, Stephen Jay, 'Built at Sea. Marine Management and the Construction of Marine Spatial Planning', 81 *Town Planning Review* (2010) 173–192 at 177 has been quite critical towards the idea that MSP could rationalize the use of marine space. This view is mainly based on scepticism towards MSP's capability of controlling the use of the marine environment to the extent required and on the problems of complex objectivities and political settings.

> … zonation may also be based on a kind of conservation-in-reverse process, whereby areas *not* needing as much protection or management as others would be highlighted. Such high-use zones could be 'sacrificial' areas, already so degraded or heavily used that massive amounts of conservation effort would not be cost-effective, or they might be areas determined to be relatively unimportant in an ecological sense.[33]

MSP seems to have two fundamental goals, which can both be systematized under the idea of sustainable development. The first goal is to balance and reconcile concrete interests within a specific marine area. On the other hand, MSP is based very closely on implementing EBM, which is in its own right an implementation mechanism for sustainable development. Taking into consideration this linkage between MSP and sustainable development, MSP should be able to balance the different aspects of sustainable development on a more general level as well. This means that while MSP should be able to deliver sustainable development in the area where it is deployed in balancing and reconciling competing interests, *the whole instrument of MSP should be sustainable as well*.

The sustainability of a governance instrument,[34] such as MSP, can be assessed through multiple criteria: 1) openness, transparency and accountability; 2) fairness and effective services; 3) clear and transparent laws and regulations; and 4) rule of law, among others.[35] Rule of law is commonly characterized as referring to, '[s]tates where conduct is governed by a set of rules that are applied predictably, efficiently, and fairly by independent institutions to all members of society, including those who govern'.[36] Rule of law has been seen as one of the elements that any governance system aiming at sustainable development should contain.[37] Furthermore, the idea of rule of law has been closely connected to achieving the aims of sustainable development or even that the rule of law is a part of sustainability in its social sphere.[38]

We now have two broad criteria by which any MSP system can be evaluated: firstly, whether MSP succeeds in reconciling and balancing competing interests in a certain marine area; and, secondly, whether MSP itself as a governance instrument can be

[33] See Agardy, *Ocean Zoning*, *supra* note 31, at 18.

[34] In this context, the 'sustainability' of a governance instrument refers to a set of criteria a legal or policy instrument has to fulfill in order for it to be described as 'good' governance. See further, on the criteria of good governance, OECD 'Final Report of the Ad Hoc Working Group on Participatory Development and Good Governance', Part 1 and Part 2 (1997).

[35] See *ibid*. See also Klaus Bosselmann, Ron Engel and Prue Taylor, *Governance for Sustainability – Issues, Challenges, Successes* (IUCN Switzerland, 2008) at 5–6.

[36] Durwood Zaelke, Mathew Stilwell and Oran Young, 'What Reason Demands; Making Law Work for Sustainable Development', in Durwood Zaelke et al (eds), *Making Law Work: Environmental Compliance and Sustainable Development* (Cameron May, 2005) at 38.

[37] See Bosselmann et al, *Governance for Sustainability*, *supra* note 35, at 517.

[38] UNGA Res. A/60/1 (2005) para. 11: '[w]e acknowledge that good governance and the rule of law at the national and international levels are essential for sustained economic growth, sustainable development and the eradication of poverty and hunger'. See also EC COM (2008) 791 final, *supra* note 5, at 2, in which legal certainty and rule of law are highlighted as some of the key components of MSP.

considered to meet the criteria of good governance, which are closely connected to achieving the aims of sustainable development as a whole. Although many agree that MSP may help to alleviate the problems of implementation of the sustainable development and ecosystem approaches, and that these should be the aims of MSP, Elher and Douvere have argued that, as an instrument of governance, MSP presents itself in quite vague and abstract terms.[39] Nonetheless, some characterizations of MSP have been rather widely accepted in the MSP-literature.[40]

2.2 Basic elements of MSP

Apart from the problem of setting the right aims, MSP also has to possess effective tools for achieving these aims. Ehler and Douvere have tried to summarize the elements of MSP in the following way:

> [t]he comprehensive marine spatial plan is usually long-term, general in nature and policy oriented and is implemented through more detailed zoning maps, zoning regulations and a permit system. Individual permit or licensing decisions can then be made based on the zoning maps, that in turn reflect the vision of the comprehensive marine spatial plan…[41]

Most commonly, MSP is regarded as a holistic and integrated process, which aims at *identifying*, *allocating*[42] and *reconciling* ecologically, economically and socially important uses of the marine space.[43] It is commonly thought that identification of different uses of the marine environment and ecosystem services provided by the marine environment is needed in order to avoid unnecessary conflicts and in order to acquire the knowledge of what resources are to be allocated and the interests and uses that need reconciling.[44] Allocation and reconciliation are necessary because the outputs

[39] Ehler and Douvere, 'New Perspectives', *supra* note 7, at 80.

[40] As a governance instrument, MSP also has close connections to Integrated Coastal Zone Management (ICZM); indeed, ICZM contains most of the characteristics which are generally attributed to MSP. See, for instance, European Commission, 'Towards a European Integrated Coastal Zone Management (ICZM) Strategy – General Principles and Policy Options. A Reflection Paper' (1999), available at <http://ec.europa.eu/environment/iczm/pdf/vol1.pdf> (visited 26 February 2013). For instance, in the EU the biggest difference between MSP and ICZM are their spatial dimensions. While ICZM is an integrated management tool for the coastal zone and the sea-land interface, MSP covers the Exclusive Economic Zone, see European Commission: Maritime spatial planning at Definition and scope. See European Commission, 'Maritime Spatial Planning', available at <http://ec.europa.eu/maritimeaffairs/policy/maritime_spatial_planning/index_en.htm> (visited 26 February 2013); European Commission, *Maritime Spatial Planning in the EU – Achievements and Future Development* (2011), available at <http://ec.europa.eu/maritimeaffairs/documentation/publications/documents/com_2010_771_brochure_en.pdf> (visited 26 February 2013) at 10. On ICZM, see the paper by Botero Saltarén et al in Part III of the present *Review*.

[41] Ehler and Douvere, 'New Perspectives', *supra* note 7, at 79.

[42] EC COM (2008) 791 final, *supra* note 5, at 9: 'MSP operates within three dimensions, addressing activities (a) on the sea bed; (b) in the water column; and (c) on the surface. This allows the same space to be used by different purposes. Time should also be taken into account as a fourth dimension, as the compatibility of uses and the "management need" of a particular maritime region might vary over time.'

[43] Ehler and Douvere, *Marine Spatial Planning*, *supra* note 3, at 21.

[44] See, for instance, Maes, Schrijvers and Vanhulle: *A Flood of Space*, *supra* note 9, where the working group first identified the present uses of the marine environment in a certain area and then analyzed the impacts

of the marine environment are limited, and the marine environment cannot usually meet all of the conflicting needs simultaneously without management.[45]

Currently, marine spatial planning can be described broadly as consisting of four main principles:[46] 1) the principle of fit; 2) the principle of multiple use; 3) the principle of stakeholder involvement; and 4) the principle of adaptive management.[47] The principle of fit usually means the management tools which aim at avoiding or minimizing conflicts or mismatches between 'biophysical systems, socioeconomic activities and governance practices'. The principle of multiple use is generally taken to mean the idea that there should be a procedure 'that can mediate among different uses of marine resources and establish priorities when conflicts are unavoidable'. In some cases, this means solving conflicts by adjusting the activities which it is anticipated will conflict so that they could coexist. However, in severe conflicts one has to resort to spatially separating the conflicting interests so that they would not interfere with each other.[48] Adaptive management is usually taken to mean 'managing according to plan by which decisions are made and modified as a function of what is known and learned about the system, including information about the effect of previous management actions'.[49]

In addition to the four principles outlined above, one of the big problems which MSP tries to tackle is the current practice of allocating space in the marine environment on a single sector basis and without consideration being given to cross-sectoral objectives or to a plan-based approach.[50] As more and more activities are competing

that each individual use has on the marine environment and also laid out different scenarios of how the competing interests relating to the use of ocean space could be reconciled and the conflicts between those interests alleviated and solved.

45 Ehler and Douvere, *Marine Spatial Planning*, *supra* note 3, at 18; UNESCO, 'Marine Spatial Planning Iniative: Marine Spatial Planning (MSP)', available at <http://www.unesco-ioc-marinesp.be/marine_spatial_planning_msp> (visited 28 June 2012). For instance, in the Belgian part of the North Sea, studies showed that the need for the marine space was almost three times larger than the available space See Maes, Schrijvers and Vanhulle: *A Flood of Space*, *supra* note 9, at 121–122.

46 A principle is understood here as meaning a *management principle*, not a legally binding principle.

47 On some occasions, marine spatial planning has also been referred to as a principle of international marine environmental law. See Nilufer Oral, 'Integrated Coastal Zone Management and Marine Spatial Planning for Hydrocarbon Activities in the Black Sea', 23 *International Journal of Marine and Coastal Law* (2008) 453–476 at 464. However, this description of MSP as a principle of international marine environmental law appears confusing in two respects. Firstly, MSP is an instrument that aims at implementing a principle (sustainable development) and contains certain principles that operationalize this aim. MSP has close relations to multiple principles of international environmental law but it seems hard to conceive of it as a principle in its own right. Secondly, MSP is presently a collection of certain highly regarded ideas of how we should organize the governance of marine areas. However, naming the instrument as a principle may present MSP as a legally (softly) binding instrument, which it currently is not, at least in its entirety.

48 Young et al, 'Solving the Crisis', *supra* note 26, at 27–29.

49 Ana Parma et al, 'What Can Adaptive Management Do for Our Fish, Forests, Food and Biodiversity?', 1 *Integrative Biology* (1998) 16–26 at 26.

50 Ehler and Douvere, *Marine Spatial Planning*, *supra* note 3, at 19. Craig, *Comparative Ocean Governance*, *supra* note 4, at 93 has also stated that this fragmentation in governance could potentially lead to a regulatory chaos, in which case multiple authorities regulate different aspects of the same marine space '… while pursuing individual and often conflicting priorities'.

for the finite resource of marine space, conflicts are bound to escalate over time.[51] In order to deliver sustainable use of ecosystems, it is of primary importance that all the sectors of economic use and environmental protection as well as social issues are involved in the process.[52] Consequently, one might add the principle of integration to the list of principles within MSP. Gilliland and Daffoley have also associated MSP with delivering better regulation, implementing multiple legal principles of international environmental law – such as the precautionary principle[53] and the polluter pays principle[54] – and enabling compliance with international, regional and national obligations.[55]

Ehler and Douvere have argued that MSP consists of ten steps:

1) identifying need and establishing authority;
2) obtaining financial support;
3) organizing the process through pre-planning;
4) organizing stakeholder participation;
5) defining and analysing existing conditions;
6) defining and analyzing future conditions;
7) preparing and approving the spatial management plan;

[51] See also Charles Ehler and Fanny Douvere, *Visions for a Sea Change, Report of the First International Workshop on Marine Spatial Planning*, Intergovernmental Oceanographic Commission and the Man and the Biosphere Programme (UNESCO, 2006), available at <http://www.belspo.be/belspo/northsea/publ/sea%20change%20vision%20.pdf> (visited 1 August 2013) at 18.

[52] Gilliland and Laffoley, 'Key Elements', *supra* note 22, at 788.

[53] According to Art. 15 of the Rio Declaration (UN Declaration on Environment and Development, Rio de Janeiro, 14 June 1992, UN Doc. A/CONF.151/5/Rev.1 (1992), 31 *International Legal Materials* (1992) 876), the precationary principle can be taken to mean the following: '[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost effective measures to prevent environmental degradation'. However, at this point it is quite clear that the precautionary principle is not yet a binding principle of international law despite of the fact that it does enjoy some normative support from non-binding legal instruments, see Nicolas de Sadeleer, 'Lessons from International, EU and Nordic Legal Regimes', in Nicolas de Sadeleer (ed.), *Implementing the Precautionary Principle* (Earthscan, 2007) at 382.

[54] The polluter pays principle is defined in the OECD Recommendation of the Council on the Guiding Principles concerning International Economic Aspects of Environmental Policies (26 May 1972 – C(72)128) in the following way:

> [t]his principle means that the polluter should bear the expenses of carrying out the above-mentioned measures decided by public authorities to ensure that the environment is in an acceptable state. In other words, the cost of these measures should be reflected in the cost of goods and services which cause pollution in production and/or consumption. Such measures should not be accompanied by subsidies that would create significant distortions in international trade and investment.

Philippe Sands, 'International Environmental Law: An Introductory Overview', in Philippe Sands (ed.), *Greening International Law* (The New Press, 1994) at xxxiv, has stated that the legal status of the principle in international law is somewhat unclear. However, it does enjoy some normative support in some international instruments, such as principle 14 of the Rio Declaration and the OECD Council Recommendations as cited above. Within the EU, the legal status of the principle is stronger as it is incorporated in the primary and secondary legislation of the EU. The polluter pays principle is used, for instance, in the Art. 191 of the Treaty on European Union (OJ C326, 26 October 2012) and in the Directive on environmental liability with regard to the prevention and remedying of environmental damage (2004/35/EC, OJ L143, 30 April 2004).

[55] Gilliland and Laffoley, 'Key Elements', *supra* note 22, at 788–789.

8) implementing and enforcing the spatial management plan;
9) monitoring and evaluating performance; and
10) adapting the marine spatial management process.[56]

As a process, then, MSP is adaptive and comprises complementary progressive cycles of planning which can be improved over time by learning from past experiences relating to the process. This means developing and moulding the instrument as scientific knowledge of the ecological and environmental conditions of the planned area increase and as the emphasis placed on certain interests in the marine area develop and change over time. Adaptability is presently considered as one of the key aspects of MSP.[57]

The planning process should also include wide stakeholder participation. In general, all the individuals, groups and organizations that are affected by or interested in the MSP can be considered stakeholders in the process. However, involving too many stakeholders at the wrong stage of the process or in the wrong way can distract the process from the anticipated results and takes a lot of time. For these reasons, stakeholder participation should be assessed taking into account certain criteria which can be used to evaluate the importance of a certain stakeholder to the MSP-process. For instance, existing legal rights as well as knowledge and skills and historical and cultural relations to the resources, or the degree of economic and social reliance on the resources to be allocated in the planning-area are criteria that should be taken into account when deciding on the extent of stakeholder participation.[58]

2.3 Confusions about MSP

Some aspects of MSP are already in place in many countries. Marine space has for decades been allocated to a certain extent, either with or without legally binding instruments, for uses such as shipping routes, cables and pipes, MPAs and the like. Many of these measures of spatial allocation are governed by instruments of international law as well as national agreements.[59] Many countries have also introduced multiple legally binding instruments which provide tools (such as permit requirements and environmental impact assessment procedures) through which to implement this spatial allocation. However, more comprehensive systems, which combine all of the aspects relating to the use of marine space, are rarer. The novelty of MSP is

[56] Ehler and Douvere, *Marine Spatial Planning*, *supra* note 3, at 4–5 and 18–19.
[57] Jon Day, 'The Need and Practice of Monitoring, Evaluating and Adapting Marine Planning and Management – Lessons from the Great Barrier Reef', 32 *Marine Policy* (2008) 823–831 at 829–830. See also Agardy, *Ocean* Zoning, *supra* note 31, at 6: 'Overall, place-based marine management should strive to be anticipatory, dynamic, creative, and above all adaptive.'
[58] Ehler and Douvere, *Marine Spatial Planning*, *supra* note 3, at 18 and 43–44.
[59] For instance, the main international legal instrument concerning shipping and installation of cables and pipes is the United Nations Convention on the Law of the Sea (UNCLOS), Montego Bay, 10 December 1982, in force 16 November 1994, 21 *International Legal Materials* (1982) 1261.

that it tries to incorporate some of the existing elements of environmental governance and places them under a single governance tool, namely MSP.[60]

MSP is often confused with ocean zoning or other already existing governance instruments, or is mistakenly thought to replace some or all of the existing instruments of governance.[61] Although zoning is an integral part of MSP, zoning is most commonly seen as a tool for implementing the aims of MSP.[62] MSP is not an instrument which would replace other instruments of governance; rather it complements them and brings all the existing instruments – such as environmental impact assessment, environmental permits, planning and zoning – together in a holistic manner and integrates different governance mechanisms related to the use of marine space with different sectors[63] and agencies.[64] In this way, *MSP is an instrument for managing other instruments of governance*. It also gives other governance instruments a more temporal dimension and a strategic, as well as an anticipatory, nature: it is not enough merely to allocate space and reconcile conflicting interests here and now – future developments and needs also have to be taken into consideration. In a long-term evaluation, it is paramount to understand how ecosystems and different human uses of the marine environment change over time.[65]

Secondly, MSP cannot be used as a single instrument for the governance of marine resources. MSP is primarily an instrument for gathering and coordinating information relating to the different uses of the marine space so that the decision-makers in different sectors and in different processes gain comprehensive knowledge of the human activities in a certain area, as well as of the ecosystem-services that a certain area provides.[66] It can also be used as a legally binding instrument for allocating marine areas to different uses, but other instruments of governance are needed to safeguard the sustainability of the allocated activities. Allocating the space is one problem, limiting the use of that space to a sustainable level quite another.[67]

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60 Ehler and Douvere, *Visions for a Sea Change*, *supra* note 51, at 18.

61 See Agardy, *Ocean Zoning*, *supra* note 31, at 13: '[t]hough zoning is one of the central components of MSP, contrary to the public perception, the two are not one and the same'. However, Agardy has argued that any MSP-system *not using* zoning as an implementation mechanism' is not taking advantage of the power of ocean zoning as a problem-solving tool'. To Agardy, zoning represents the concrete implementation of the aims set in MSP. See *ibid*. at 14.

62 On the misconceptions related to marine zoning, one of the implementation mechanisms of MSP, see *ibid*. at 34.

63 By different sectors this paper means, for instance, aquaculture, fisheries, marine conservation and protection, maritime transportation, military defence, renewable energy and seabed mining. See Ehler and Douvere, *Marine Spatial Planning*, *supra* note 3, at 23.

64 *Ibid*. at 18 and 22–23. Agardy, *Ocean* Zoning, *supra* note 31, at 6: '[o]cean zoning by its very nature overcomes fragmentation – obligating the managers of all the various sectors using marine resources and ocean space to think strategically and plan for sustainable use'.

65 Larry Crowder and Elliott Norse, 'Essential Ecological Insights for Marine Ecosystem-based Management and Marine Spatial Planning', 32 *Marine Policy* (2008) at 772–778; Ehler and Douvere, *Marine Spatial Planning*, *supra* note 3, at 20.

66 *Ibid*. at 22.

67 Ehler and Douvere, *The Need for a Common Vocabulary*, *supra* note 11.

2.4 MSP as a planning instrument

Marine spatial planning is a planning instrument and this means that the temporal scope of MSP is aimed at the future in order to reach certain desired goals. As with land-use planning, this planning for the future in MSP consists of two parts. Firstly, a textual formulation of the important goals, priorities and principles of the planning; as well as the reasons for adopting the plan and guidance for the interpretation of the plan. Secondly, a spatial plan usually includes also a map, which indicates the spatial distribution of different activities.[68] The key aspect of MSP is that it is place-based or area-based, which means that it covers only a certain geographical area and does not concentrate on a certain sector or on an environmental problem as a whole.[69] It takes all of the uses of the marine environment into consideration at the same time, but does this only in a certain, defined area. It has been claimed that place-based measures of marine management, such as zoning, can aid in targeting economic and ecological goals simultaneously.[70] According to Agardy:

> [t]he quest for a more holistic approach to ocean governance leads naturally to an increased use of place-based management. The basic premise of place-based marine management is that regulators can delineate a particular area of the ocean (large or small) and create a governance regime for that area that simultaneously addresses all values to be protected and all activities of concern.[71]

Until recently, the idea of planning, let alone zoning, has been mainly thought of as a terrestrial instrument. Jay argues that this is closely related to the basic purposes of planning in controlling the development and use of (terrestrial) space. This control has usually been based on land ownership and parcelling of land by visible and accurate boundaries. Furthermore, terrestrial planning has usually had the objective of making organized construction and settlement possible. Jay suggests that the marine environment, by its very nature, resists all the above basic elements of terrestrial planning.[72] However, with the present prospects of major offshore wind-farms, as well as of renewable marine energy, spatial planning on marine areas is starting to share more and more elements with terrestrial land-use planning.[73]

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[68] For a good overview of planning and spatial planning in general and their relationship to MSP, see Backer, 'Trans-boundary Maritime Spatial Planning', *supra* note 5, at 280–281.

[69] Ehler and Douvere, 'New Perspectives', *supra* note 7, at 78. See Agardy, *Ocean Zoning*, *supra* note 31, at 13: 'Marine Spatial Planning (MSP) is a generic term describing the process leading to place-based marine management'.

[70] Arkema, Abramson and Dewsbury, 'Marine Ecosystem-based Management', *supra* note 28, at 531.

[71] Craig, *Comparative Ocean Governance*, *supra* note 4, at 94.

[72] Jay, 'Built at Sea', *supra* note 32, at 175.

[73] *Ibid*. at 177. The building of wind farms has been one major driver behind the development of MSP in many of the European Countries. See UNESCO, 'MSP around the World', available at <http://www.unesco-ioc-marinesp.be/msp_around_the_world> (visited 13 June 2013). On specific wind farm projects, see, for instance, Hendrik Schoukens, An Cliquet and Frank Maes, 'Wind Farm Development in the Belgian Part of the North Sea: A Policy Odyssey without Precedent', *Zeitschrift für europäisches Umwelt- und Planungsrecht* (2012) 304–312.

On the other hand, it has to be stated that the unique characteristics of marine spatial planning differentiate it somewhat from terrestrial planning – as Jay has suggested.[74] In the view of the Commission of the European Union,

> MSP does not replicate terrestrial planning at sea, given its tri-dimensionality and the fact that the same sea area can host several uses provided they are compatible. However, in the same way that terrestrial planning set up a legally binding framework for the management of land, MSP should be legally binding if it is to be effective.[75]

In contrast to terrestrial planning, the nature of the marine environment offers different possibilities for accomplishing reconciliation between different interests – even within the same spatial area. This is made possible by the three-dimensional and temporal allocation of activities as well as the compatibility between certain interests to exist in the same area spatially and temporally. Despite this advantage, the present writer agrees with Eagle, Sanchiro and Thompson in their assessment that any zoning system within MSP should first prioritize a certain use or uses in a particular area of the zone. However, the zoning should also 'permit non-priority uses where that use can be conducted in a manner consistent with the overall purpose of that zone'.[76] In contrast to terrestrial planning, marine spatial planning should be firmly based on reconciliation between interests. This can be accomplished by not only zoning space for different activities and separating the uses and interests but also by accommodating multiple, compatible uses in the same area or part of the zone.

The lack of property rights in water areas has been used as an argument against MSP and any efforts to zone the marine areas. It has also been used as an argument to highlight that terrestrial land use planning principles cannot be used in marine areas. While the terrestrial instrument may not be directly applicable to marine areas, the lack of property rights also creates possibilities for the zoning of marine areas. Sanchiro has argued that zoning efforts could create group property rights in which case the holders of certain interests would belong to a certain group and manage the area jointly. According to Sanchiro, this would 'provide stewardship incentives and lead to rationalization of uses'.[77]

MSP is usually deployed in areas under national jurisdiction and the exclusive economic zone (EEZ).[78] In addition, transboundary MSP projects are becoming increas-

[74] In addition, Peel and Lloyd, 'The Social Reconstruction', *supra* note 3, at 374, have argued that one must be careful when contemplating the transfer of terrestrial planning instruments to marine environments, stating that '[t]here is little evidence that land-based policy solutions will readily transfer offshore'.

[75] COM (2008) 791 final, *supra* note 5, at 10.

[76] Josh Eagle, James N. Sanchirico and Barton G. Thompson, 'Ocean Zoning and Spatial Access Privileges: Rewriting the Tragedy of the Regulated Ocean', 17 *New York University Environmental Law Journal* (2008) 646–668 at 654.

[77] 'Comprehensive Ocean Zoning: Answering Questions about This Powerful Tool for EBM', 2 *Marine Ecosystems and Management* (2008) 1–4 at 2.

[78] On the areal aspects of MSP, see Backer, 'Trans-boundary Maritime Spatial Planning', *supra* note 5, at 280.

ingly common.[79] The main legal instrument regulating planning in respect of marine areas is the United Nations Convention on the Law of the Sea (UNCLOS), which divides marine areas into internal waters, archipelagic waters, territorial waters, contiguous zone, EEZ and continental shelf. The regimes under UNCLOS define the rights of states within these areas. Article 8 of UNCLOS states that waters on the landward side of the baseline[80] of the territorial sea form part of the internal waters of the state. Article 3 of UNCLOS states that every state has the right to establish a territorial sea which extends up to 12 nautical miles (nm) from the baseline. An archipelagic state may draw straight archipelagic baselines joining the outermost points of the outermost islands and drying reefs of the archipelago provided that within such baselines are included the main islands and an area in which the ratio of the area of the water to the area of the land, including atolls, is between 1 to 1 and 9 to 1 (Article 47 of UNCLOS). The coastal state has sovereignty over its internal waters, archipelagic waters and territorial sea (Articles 2 and 49 of UNCLOS).[81]

According to Article 33 of UNCLOS, the contiguous zone extends 24 nm from the baselines from which the territorial sea is measured. The coastal state has a right to exercise control over the contiguous zone to (a) prevent infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea; and (b) punish infringement of the above laws and regulations committed within its territory or territorial sea.

The EEZ extends a maximum of 200 nm from the baseline. In the EEZ, the sovereignty of the coastal state is limited and, according to Article 56 of UNCLOS, the coastal state possesses only certain sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil.

The continental shelf is the final marine zone under partial state control. The continental shelf comprises the seabed and subsoil of the submarine areas that extend beyond a coastal state's territorial sea throughout the natural prolongation of its land

[79] See, for instance, the Plan Bothnia project between Sweden and Finland. More information on Plan Bothnia, see <http://planbothnia.org/about/> (visited 4 February 2013). See also the MASPNOSE project between the United Kingdom, the Netherlands, Germany and Denmark; for more information, see <http://www.wageningenur.nl/en/show/Maspnose-Maritime-spatial-planning-in-the-North-Sea.htm> (visited 13 June 2013). A multitude of legal instruments have a direct connection to the drafting and implementation of an MSP. On a regional level, and with regard to transboundary issues in the EU, for instance, the directive on assessment of the effects of certain plans and programmes on the environment (SEA-directive, 2001/42/EC, OJ L197, 27 June 2001) lays down some legal obligations with regard to access to information and consultations between countries while the MSP is being drafted. See SEA-directive, Art. 7.

[80] There are numerous methods and exceptions to the definition of the baseline but the general rule is provided in Art. 5 of UNCLOS: the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal state.

[81] This sovereignty is complete in internal waters, in which even the right to innocent passage does not apply. The coastal state can in a similar fashion exert full sovereignty in archipelagic waters with the exception that freedom of innocent passage, as defined in Art. 19 of UNCLOS, has to be allowed.

territory to the outer edge of the continental margin, or to a distance of 200 nm from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance. However, the outer limit of the continental shelf shall not in any case exceed 350 nm (Article 76 of UNCLOS). The coastal state has a sovereign right to exploit natural resources in its continental shelf as stipulated in Article 77 of UNCLOS.

From a planning perspective, it is interesting to note that by recognizing certain rights of coastal states and creating legally binding zones, UNCLOS has been responsible for lessening the gap between terrestrial and marine spatial planning by eliminating some of the key-problems of spatial planning in marine areas.[82]

2.5 MSP and the rule of law

In the characterizations discussed above, adaptive management is one of the key aspects of MSP and is taken quite universally as the basis of governing complex problems related to natural resource management issues. As is highlighted in the literature concerning MSP, the instrument is seen as place-based and highly customizable, and can take into consideration the different ecological, social and economical contexts in which MSP is deployed.[83] The idea of MSP necessarily involves the idea of reconciling between different interests, but the question is how this can be done in a way that would allow for the MSP to benefit from the multiple benefits of place based management and adaptability in a way that would not be too hostile towards legal certainty and giving legal protection to *all* of the interests in a certain area.[84] To balance the notion of the adaptability of MSP, it has also been stated that predictability and stability are, in addition to flexibility and adaptability, central values within any MSP.[85] The question for MSP is, then, whether we need more or less (legal) rigidity and predictability from MSP.

The idea of the place-based governance and adaptability of MSP closely relates to the frustration that traditional and rigid control measures have been somewhat unsuccessful in resolving large-scale and complex environmental problems or conflicts.

[82] See also Frank Maes, 'The International Legal Framework for Marine Spatial Planning', 32 *Marine Policy* (2008) 797–810 at 799–806.

[83] See part 2.2 in this paper.

[84] Bruce Pardy, 'The Pardy–Ruhl Dialogue on Ecosystem Management Part V: Discretion, Complex-Adaptive Problem Solving and the Rule of Law', 25 *Pace Environmental Law Review* (2008) 341–354 at 351–352, has been critical towards whether any ecosystem management instrument can achieve this aim of reconciliation and whether the instruments only allow ecosystem degradation if economic or social interests conflict with the integrity of the ecosystems.

[85] See White House Council on Environmental Quality, *Final Report of the Ocean Policy Task Force* (2010), available at <http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf> (visited 3 March 2013) at 44. See also Craig, *Comparative Ocean Governance*, *supra* note 4, at 109: '… one of the tensions in promoting place-based management for the oceans is how to balance the desire for predictability and stability with the knowledge that human needs and desires will change over time'. One would be inclined to say that this problem does not concern only place-based management but the whole of any legal system and any application of the law as well.

Johnson, for instance, has argued that traditional regulatory methods have been effective in respect of problems where the management system of a natural resource has been clear in its goals and focused on problems that could be solved by scientific or technological means. They have not been that successful in managing uncertainties and complex environmental problems, for instance the problem of non-point source pollution or climate change.[86]

With regard to water governance in climate change mitigation and adaptation, Hurlbert has argued for more adaptive governance, which is also fitting to marine issues:

> [t]hus, the fundamental contribution of governance to reducing the vulnerabilities of people rests on its ability to anticipate problems and to manage risk and challenges in a way that balances social, economic, and natural interests (IPCC, 2007). This entails a well-established decision-making framework and process involving grassroots civic engagement. This is not the same as a rigid, positivist framework of water law only requiring dissemination to the constituents affected by it. The St Mary's case study evidenced a flexible responsive decision framework successful in quickly responding to the 2001 drought in a manner allowing the efficient allocation of water priorities maximizing economic return. This was done within a very short time period of a few weeks; a solution the institution of formal water law arbitrated by courts could not offer.[87]

The balance between rule of law, stability and legal certainty on the one hand, and flexibility and adaptability on the other, have been increasingly discussed in environmental law as well as in legal theory on a more general level.[88] A big part of the discussion has been revolving around the question of how stability and flexibility can be reconciled in a way that the basic principles of the rule of law, the constant change in the environment, the increase in scientific knowledge and the changes in societal values can be taken into account simultaneously.[89]

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[86] Barry L. Johnson, 'The Role of Adaptive Management as an Operational Approach for Resource Management Agencies' 3 *Conservation Ecology* (1999), available at <http://www.ecologyandsociety.org/vol3/iss2/art8/> (visited 28 January 2013). See also R. D. Brunner and T. W. Clark, 'A Practice-based Approach to Ecosystem Management', 11 *Conservation Biology* (1997) 48–58; Margot Hill, *Climate Change and Water Governance: Adaptive Capacity in Chile and Switzerland* (Springer, 2013) at 9. Bosselmann, Engel and Taylor, *Governance for Sustainability – Issues, Challenges, Successes* (IUCN, 2008), *supra* note 35, at 4, have also recognized these problems in assessing tensions between present forms of governance and sustainability. Mainly, these tensions manifest themselves in the failure of present forms of governance to answer to the increasing complexities and magnitude of the problems presented for environmentally, socially and economically sustainable development.

[87] Margot Hurlbert, 'The Adaptation of Water Law to Climate Change', 1 *International Journal of Climate Change Strategies and Management* (2009) 230–240 at 237.

[88] Robin Kundis Craig, '"Stationarity is Dead" – Long Live Transformation: Five Principles for Climate Change Adaptation Law' (2009), available at <http://works.bepress.com/robin_craig/4> (visited 28 January 2013); Hill, *Climate Change and Water Governance*, *supra* note 86, at 41–44. On the legal theoretical discussion, see, for instance, Scott J. Shapiro, *Legality* (Belknap Press of Harvard University Press, 2011).

[89] Hill, *Climate Change and Water Governance*, *supra* note 86, at 41–44.

Agardy has suggested that MSP, or more specifically the zoning implementing MSP, 'is likely to be dynamic, with zones moving year to year or even seasonally, in some cases'.[90] If this zoning is legally binding and based on statutory instruments, Agardy's suggestion poses serious problems from the view point of MSP's sustainability as a governance instrument. While the notion of adaptability may be a commendable scenario for maintaining a certain ecological condition of the marine environment, it poses grave dangers for the rule of law. One of the basic aspects widely accepted and inherent in any developed legal system is that the contents of the system do not change frequently, making it possible for the legal subjects to be aware of the contents of the law at any given time.[91] If the contents of the legally binding zoning instrument change yearly or even seasonally, there is a risk of losing one of the basic elements attributed to a well-functioning and legitimate legal system.

In discussing adaptability and context-specific governance, the issues of place-based justice and legal uncertainty arise. How can we make sure that adaptive management adapts in the same way in different places when facing the same problems? Or that the managers and adapters of MSP are basing their adaptive measures on sound scientific data and making sound value judgments when adjusting the system?

With regard to the first question, one might argue that no two places are exactly the same when it comes to the management of marine resources. Every place has its own unique circumstances, which would justify an infinite variation of place-based measures. Adaptive measures, on the other hand, are supposed to be based on scientific data upon which the MSP can be adapted to changing environmental conditions. Nonetheless, decisions about the desirable state of the managed marine area have to be made in the process. How can one be sure that these adaptation measures are not based on personal prejudices of, or arbitrary judgments made by, the experts adapting the instrument?[92] There is a risk that in trying to reconcile the different aspects of sustainability in marine areas, work is done at the cost of legal certainty and the basic principles of the rule of law.

[90] Agardy, *Ocean Zoning*, *supra* note 31, at 10. Craig, *Comparative Ocean Governance*, *supra* note 4, at 109 has been quite sceptical on whether the adaptability suggested by Agardy is possible. Craig states that the dynamic changes to marine zones are 'likely to be limited' due to the 'lengthy and contentious process' of drafting the zones. In addition, the legal instruments by which the zoning system is created may be quite cumbersome and not allow swift changes to the zoning.

[91] See, for instance, Lon L. Fuller, *The Morality of Law* (Revised edition, Yale University Press, 1969) at 145–151. Fuller has persuasively argued that legal norms have to have a certain degree of stability in order for the legal system to function properly in creating legal certainty and making it possible for the legal subjects to be reasonably aware of what law requires of them. This aim may not be achieved if the contents of the law change frequently as Agardy has suggested.

[92] This critique of adaptive management has been presented by Pardy, 'The Pardy–Ruhl Dialogue', *supra* note 84, at 351–353. There is no problem from the rule of law point of view if the desirable state of the environment in a certain area is defined by the legislator with clear goals which the adaptive management instrument is supposed to serve, and the instrument is applied similarly in similar circumstances.

From the rule of law point of view, the idea of reconciling between competing interests as the main goal of MSP can also be effectively criticized.[93] If all of the interests have to be taken into account, does this not give an open mandate for the decision-maker to decide how the MSP should be drafted and how the different activities should be allocated? There is a significant risk of this happening, but there are ways to alleviate such risk. The first strategy is to mandate the application of the multiple use approach[94] in such a way that all of the legitimate interests relating to the use of the marine area have to be reconciled, for instance by spatial or temporal placement of conflicting activities in order to reduce and eliminate the conflicts between uses. This is in no way in conflict with the concept of the rule of law because the drafting of the MSP does not include making value judgments on which interests are most important and which have to be set aside. The problem with MSP is that a full reconciliation will not always be possible, and most of the time some choices between different interests will have to be made and certain interests eliminated, at least partially. However, this risk of arbitrary judgment in deciding the importance of certain interests can be significantly reduced by attributing a certain hierarchy between interests when there is a conflict between them on the use of a certain marine area. If the legislator sets clear rules of the basic premises of the hierarchy of interests in conflict situations, the problem of arbitrary judgment can be considerably reduced.

The above-mentioned mechanism does of course affect the adaptability of MSP in the sense that the instrument is not as flexible and agile as possible. Having said this, a trade-off between adaptability and rule of law has to be made here. An ideal situation striking a balance between adaptability and rule of law would be to have a legally mandated adaptation process, which would allow the legislator effectively and swiftly to adjust the aims of the MSP by using regulations, which would in turn complement the statute-level instrument by which MSP is created.

The second strategy in restricting the use of discretion and creating predictability for an MSP is to place reconciliation of interests (or multiple use) as the aim of the statute by which MSP is given legal validity, but this aim should be given effect and specified by lower level regulations as the need for adapting the aims of the instrument arises. This would create a legitimate system of checks and balances for MSP and would also allow adaptive place-based management which is at the same time legitimate from the rule of law perspective. MSP should be based on hard law[95] and

[93] As Bruce Pardy, 'The Hand is Invisible, Nature Knows Best and Justice is Blind: Markets, Ecosystems, Legal Instrumentalism, and the Natural Law of Systems', 44 *Tulsa Law Review* (2008) 67–92 at 68, has pointed out, referring among other things, to the principle of sustainable development: '[o]ccasional attempts are made to identify or articulate abstract principles, but these principles tend to be malleable and vacuous, providing political and legal decision-makers with more room, not less, to craft the results that they prefer in any particular situation'.

[94] In this context, a 'multiple use approach' refers to a situation in which the governance of a certain state owned area is organized in a way which emphasizes and enhances simultaneous existence of as many legitimate interests as possible.

[95] The term 'hard law' is used to refer to legally binding instruments. See, for instance, Gregory C. Shaffer

adopted not just for a certain area. Instead, the use of the instrument should be made possible for every marine area under a certain jurisdiction. The legal certainty and rule of law, on one hand, and adaptive governance, on the other hand, could be reconciled in a system where the scope of planning progressively increases as one moves towards the operational level.[96]

Place-based nature and adaptability can be seen as a threat, to a certain extent, from the legal point of view. However, MSP can also be viewed as reconciling between legal certainty and adaptive management.[97] This, however, requires that MSP stipulates clear criteria on the interests that it seeks to reconcile and on the processes in which the MSP is formulated and adapted. MSP facilitates the elimination of unnecessary conflicts between different interests and also aids the environmental impact assessment as well as different permit procedures required for natural resource use activities. It also makes it easier for an individual actor to plan ahead with its actions relating to a certain marine area.[98]

MSP has been said to deliver better governance of marine resources and to move governance closer to sustainability.[99] As was made clear earlier, this is done by way of a multitude of instruments within MSP. Some of the most critical aspects of MSP

and Mark A. Pollack, 'Hard vs. Soft Law: Alternatives, Complements, and Antagonists in International Governance', 94 *Minnesota Law Review* (2010) 706–799, at 712–713.

96 The idea of securing stability at a higher level of governance and on a higher legal hierarchical level and of allowing more flexibility on lower levels of governance has also been quite popular in other water related issues, see Hill, *Climate Change and Water Governance*, *supra* note 86, at 43–44: '[f]ocusing on the balances between these two elements [stability and flexibility] might be a more productive framing of the problem than seeing social-ecological resilience as a black and white trade-off to legal certainty. This argument has also been used to suggest that the development of stable and predictable structures at higher levels (law, regulation, government institutions) might also allow for greater flexibility and experimentation at lower levels … This would posit the role of law as one of stability within change, as opposed to stability versus change'. This kind of planning is also used in many parts of the world in terrestrial areas. With regard to MSP, hierarchical systems have already been adopted in different areas of the world. See Agardy, *Ocean Zoning*, *supra* note 31, at 11. However, planning or zoning on water covered areas differs considerably from terrestrial planning or zoning and this also has implications on the structure of governing the marine areas. When discussing water rights, Hill, *Climate Change and Water Governance*, *supra* note 86, at 24, aptly identifies the main difference: '[t]here are however, a number of outstanding questions and different versions of what the appropriate definition, valuation and measurement of water rights (and natural resources in general) may be in the quest for efficiency and effectiveness, as well as the minimization of social and environmental externalities. This is further complicated in the case of water rights because hydrological realities are not as fixed, regular or constant as land, building and other commodities'. This observation is also correct in marine contexts and presents a problem for MSP. Jay, 'Built at Sea', *supra* note 32, at 174, has also argued that MSP has quite unique features compared to terrestrial planning although it shares some of its features in the form of principles, institutions and practices.

97 The possibility of increasing legal certainty and predictability through MSP, and particularly through zoning the marine area, has also been accepted by Agardy. See Agardy, *Ocean Zoning*, *supra* note 31, at 17 and 34.

98 Shapiro, *Legality*, *supra* note 88, has argued that law in general functions as a plan of action. By 'plan' Shapiro means setting certain goals, operationalizing means to achieve the goal and acting on the plan that was adopted. With regard to marine areas, the problem has been that many actors and officials have different interests as well as different management tools for the same area and this can cause the plans to conflict. MSP can aid in providing a process to manage all the processes and interests and in this way makes possible the functioning of the law as a system of planning as Shapiro has suggested.

99 See part 2.1 above.

have been considered to be planning through integration of different sectors, stakeholder participation, evaluation of the planning instrument at regular intervals and being based on sound scientific data as well as reconciling the competing demands for marine space.[100] One considerable upside of MSP has been paid considerably less attention, namely making the use of legal discretion easier in permit procedures concerning the use of natural resources. In other words, MSP has the potential to (1) alleviate conflicts between use and protection of the marine environment before they escalate; and (2) specify semantically open formulations of a legal provision relating to the use and protection of the marine environment which have become a wide spread phenomena in environmental law.[101]

Despite posing threats to the predictability of the legal system, MSP could help considerably in narrowing down the use of legal discretion usually present when granting a permit to use natural resources in marine areas. If MSP is made legally binding, it can mediate accurate scientific information as well as changed societal values swiftly and legitimately into legal decision-making. This would make possible broad semantic formulations in drafting natural resource laws, which, in turn, would increase the flexibility required for the effective governance of the use and protection of the environment.

Even the seasonal adaptability of MSP, suggested by Agardy above, may be reconciled with legal certainty.[102] Seasonal changes in MSP do not appear absolutely impossible per se, but the changes have to be predictable to legal subjects. If a regulatory instrument would clearly stipulate a circulation system between different zones so that, for instance, no take zones would be sustainable use zones for a certain period of time during the year and at other times they would be no take zones, there would not be a problem from the point of view of legal certainty. The only problems the present author is concerned with are frequent, rapid and unexpected changes in the MSP, which make it difficult for the legal subjects to adapt to the new regulatory conditions.

3 Marine Spatial Planning and the practice of reconciliation

3.1 Planning the North Sea: Belgium, the Netherlands and Germany

3.1.1 Belgium

The Belgian Government has adopted and implemented an MSP called Master Plan for the use of the Belgian part of the North Sea (BPNS). The area is around 3 600 km² with a coastline of 66 km. The MSP has both ecological and economic objec-

[100] See part 2.2 above

[101] See on the unwanted nature of semantically open, instrumental provisions in environmental law, Pardy, 'The Hand is Invisible', *supra* note 93, at 68–70.

[102] See Agardy, *Ocean Zoning*, *supra* note 31, at 10.

tives, the main drivers being offshore wind-farms, gravel extraction, and delimitation of marine protected areas as well as protected areas under the EU-law (SPA and SCA-sites).[103]

In Belgium, until mid-2012, MSP had been adopted without a formal legal basis for the process. Douvere et al have stated that the MSP provided 'a translation of current and future objectives of various sectors into a spatial vision'.[104] Despite the lack of formal legal status for the process, the MSP had close linkages to a permit-system and environmental impact assessment, which formed the legislative framework for the planning of the BPNS.[105] However, Douvere et al concluded (in respect of the old system) that:

> … new activities, the expansion of existing activities, an increasing need for nature conservation, and the goal to integrate the management of marine and coastal ecosystems will definitely lead to increased conflicts that cannot be dealt with by a permit system or an environmental impact assessment only. At the policy level, the response to this challenge resulted in the development of a sustainable Master Plan for the BPNS. The Master Plan aims to serve as an overarching framework for a multi-use planning system covering the entire territorial sea and EEZ, by translating current and future objectives of sea uses into alternative spatial visions.[106]

Starting from mid-2012, the legal basis for the MSP has been secured by an amendment to the Act on the Protection of the Marine Environment (1999)[107] which introduces provisions on MSP-process, stakeholder participation, exchange of transboundary information, transboundary consultation, and a revision of the plan at least every six years.[108]

It has been suggested that the North Sea is 'one of the most exploited marine areas in the world'. Due to the intensive exploitation and the existence of many marine activities in a rather small area, conflicts between different uses are inevitable.[109] In order to alleviate the conflicts, the MSP in Belgium consisted of five central stages of assessment: 1) suitability of human actions on the environment; 2) interaction

[103] Douvere et al, 'The Role of Marine Spatial', *supra* note 26, at 183–185; UNESCO, 'MSP around the World/Belgium', available at <http://www.unesco-ioc-marinesp.be/spatial_management_practice/belgium> (visited 5 February 2013).

[104] Douvere et al, 'The Role of Marine Spatial', *supra* note 26, at 186.

[105] Agardy, *Ocean Zoning*, *supra* note 31, at 106 has stated that this linkage to environmental permits may cause problems for integrating and reconciling interests because permits are issued on a sectoral basis and this is not in accordance with the principles of MSP.

[106] Douvere et al, 'The Role of Marine Spatial', *supra* note 26, at 190.

[107] Act of 20 January 1999 on the protection of the marine environment in the marine areas under Belgian jurisdiction, Belgian Official Journal, 12 March 1999.

[108] Act of 20 July 2012 modifying the Act of 20 January 1999 on the protection of the marine environment, with respect to marine spatial planning, Belgian Official Journal, 11 September 2012.

[109] Douvere et al, 'The Role of Marine Spatial', *supra* note 26, at 185.

between uses and the environment; 3) interaction among uses; 4) identification of key-values; and 5) different development visions.[110]

The report of the GAUFRE-project[111] shows that some of the most severe impacts on the environment are caused by construction and operation of wind-turbine parks, construction and presence of coastal defence equipment, dredging as well as sand and gravel extraction, construction and presence of pylons and aquaculture and fishing. The presence of wrecks, water recreation, pipelines and military exercises were, *for the most part*, considered reconcilable with the good standing of the physical, chemical and ecological status of the marine area.[112]

When assessing the interaction among uses, it was noticed that wind-power parks, hard coastal defence, aggregate extraction, dredging and dredge disposal and refuge sites induced the most conflict with other uses of the sea. At the same time research, managed MPAs and recreational use of the sea were mostly compatible with the other uses. [113]

As was observed in the GAUFRE-project, many of the uses of the sea are mutually incompatible with maintaining the physical, chemical and ecological integrity of the sea-area. After assessing the human–human and human–environment conflicts, the researchers of the project identified well-being (mostly human recreation), ecology, landscape and economic value as the core values of the North Sea. After this, they suggested five scenarios as directions in which the use of the marine area of the BPNS could be developed. While future scenarios for the use of the BPNS labelled as the 'relaxed sea' and 'playful sea' placed emphasis on the recreational uses of the marine area, the 'natural sea' scenario was seen as emphasising the ecological values of the area. By contrast, in the 'mobile sea' scenario maritime transport was emphasized, and in the 'rich sea' scenario the use of natural resources was seen as a primary focus of the MSP. Even the presence of these different scenarios (none of which is capable of satisfying all interests simultaneously) is a manifestation of the fact that in a marine area where the available space is scarce in comparison with the need for the space and where many of these competing interests are in stark contrast with one another, it is impossible to reconcile between all the uses as well as between the uses and the en-

[110] *Ibid*. at 188–190.

[111] Toward Spatial Structure for Sustainable Management of Sea (GAUFRE) was a research project organized in Belgium which aimed at studying examples, procedure and methodology of MSP and suggesting multiple scenarios and proposals for MSP in the Belgian part of the North Sea. The project ran from 2003 through 2005 and was funded by the Belgian Science Policy (BELSPO), see Frank Maes et al, *Towards a Spatial Structure Plan for the Sustainable Management of the Sea (GAUFRE)* (Brussels, Belgian Science Policy, 2005).

[112] Maes et al, *Towards a Spatial Structure Plan*, *supra* note 111, at 384. The report provides only background information and develops the process of MSP in Belgium. It is not officially linked to the MSP in place in Belgium but can provide information on the kind of problems the reconciliation of interests faces in the BPNS. *Ibid*. at 317–318. This reconciliation is the main aim of the MSP in Belgium. See UNESCO, 'MSP around the World/Belgium', available at <http://www.unesco-ioc-marinesp.be/spatial_management_practice/belgium> (visited 5 February 2013).

[113] Maes et al, *Towards a Spatial Structure Plan*, *supra* note 111, at 338–339.

vironment.[114] However, this is precisely the kind of situation in which the need for adopting and implementing MSP is increased because there is so little space; and where the compatibility between uses as well as between uses and the environment needs to be as effective as possible.

It seems that the MSP in Belgium has been successful in mapping out the different interests related to the marine area under scrutiny, but it is debatable whether the proposed scenarios for the MSP can actually achieve the aim of reconciling the interests and achieving sustainable development of a certain marine area. One of the main economic drivers for the adoption of the MSP, namely offshore wind-power parks,[115] was among the uses which conflicted the most with the other uses in the BPNS. One might be inclined to argue that the MSP was deployed to legitimize a new manner of using the marine area with an instrument that promises to reconcile the different uses and non-uses but is unable to achieve this aim.[116]

3.1.2 The Netherlands

MSP has also been adopted in the Dutch part of the North Sea (DPNS).[117] With 58 000 km², the DPNS is considerably larger than the Belgian part. The drivers behind the MSP are quite similar to those in the BPNS, and the current and future uses also come close to those identified in the GAUFRE report addressed above. The MSP on the DPNS is not legally binding, but has the status of a policy instrument.[118] However, the MSP is closely connected to other legal instruments, such as permitting and environmental impact assessment, as was the case also in Belgium.[119]

The starting point of the MSP in the DPNS is free passage of shipping. Limitations on fishing rights are also considered, as they conflict with wind farms and ecologically important areas:

> [f]ree passage for shipping is guaranteed by international routing measures and a system of nationally established clearways, within which no fixed objects may be placed. Most ecological areas are situated in the northern part of the Dutch Continental Shelf and are too far from the coast to be eligible for other functions. This means that most of the time conflicts can be avoided. An important point of attention is the decrease in space for fishing because more and more space is

[114] *Ibid*. at 352–358.
[115] On the main economic drivers, see Douvere et al, 'The Role of Marine Spatial', *supra* note 26, at 183.
[116] Some scholars have concluded that the windfarms and ecological criteria are conflicting because windfarms were allocated space before a comprehensive biological evaluation of the BPNS was finished. See Agardy, *Ocean* Zoning, *supra* note 31, at 104.
[117] Policy Document on the North Sea 2009–2015 (2009); Integrated Management Plan for the North Sea 2015, available at <http://www.unesco-ioc-marinesp.be/uploads/documentenbank/4cf76ef0978d9e21b00ffa0460eb0221.pdf> (visited 7 February 2013); UNESCO, 'MSP Around the World/The Netherlands', available at <http://www.unesco-ioc-marinesp.be/spatial_management_practice/the_netherlands> (visited 5 February 2013).
[118] *Ibid*.
[119] Integrated Management Plan for the North Sea 2015 at 3.

> being used for functions that are incompatible or difficult to combine with fishing: for example, ships cannot be permitted to sail in wind farms and conditions may well be imposed on fishing activities in ecological areas in future.[120]

One of the immediate differences from the viewpoint of reconciliation is that the Dutch have considerably more marine space at their disposal when planning the marine area. This has some clear implications for the success of reconciling interests because most of the problems can be solved by spatial and temporal allocation. This can be seen from the map of the MSP, in which only ecologically important areas, military restricted areas and sand extraction areas partially overlap on the spatial scale.[121] Other interests have been zoned in such a way that they do not cause major disturbance to one another. It is also interesting to note that while the Dutch have considerable space at their disposal, they have adopted a system of prioritizing between certain interests in the zone of MSP. This has been done by creating a hierarchy of interests which is based on the level of legal protection each interest enjoys, as was suggested earlier in chapter 2.

3.1.3 Germany

Germany has adopted legally binding MSPs for the German part of the North Sea (GPNS) as well as the Baltic Sea EEZ under Germany's jurisdiction. The size of the MSP in the German part of the North Sea is around 28 600 km². The main driver behind the MSP has been reconciling the accelerating demands for maritime transport and offshore wind farms with environmental protection.[122] Although the MSP recognizes multiple compatible interests, such as shipping, pipelines and cables, the MSP is based on the premise that shipping, due to its value of over 50 billion euros annually, and the estimated increase of more than 100 per cent by the year 2025, shall be given priority over other uses. Other priority areas are established for pipelines and cables and wind energy developments. The priority area status means that uses that are incompatible with the priority use are prohibited in the area that is reserved for priority use.[123] This priority is justified by and in line with UNCLOS and International Maritime Organization (IMO) regulations, which are legally binding.[124] However, offshore wind power plants are not allowed in the Natura 2000

[120] *Ibid*. at 2.

[121] *Ibid*. at 8.

[122] Spatial Plan for the German Exclusive Economic Zone in the North Sea – Text section, unofficial translation, available at <http://www.bsh.de/en/Marine_uses/Spatial_Planning_in_the_German_EEZ/documents2/Spatial_Plan_North_Sea.pdf> (visited 7 February 2013) at 7. See also UNESCO, 'MSP Around the World/Germany', available at <http://www.unesco-ioc-marinesp.be/msp_practice/germany_north_baltic_seas> (visited 5 February 2013).

[123] Spatial Plan for the German Exclusive Economic Zone, *supra* note 122, at 5 and 12.

[124] Shipping and maritime transport and fisheries as well as marine protected areas may be considered as enjoying a high level of legal protection in this regard. At the international level, UNCLOS forms the basis for any MSP system in the EEZ, and in Art. 58 of UNCLOS shipping is granted a special status under the Convention by guaranteeing freedom of navigation. Laying of cables and pipelines is granted similar status under Art. 58. On the territorial waters, freedom of innocent passage (Art. 17 of UNCLOS) is granted to maritime transport, but it can be restricted to a certain extent by the legislation of the contracting state. Under Art. 62 of UNCLOS, the contracting states are granted the right to regulate, for

protection sites,[125] and power plants shall not obstruct the safety and efficiency of navigation.[126] When discussing and giving legal protection to fisheries, mariculture and protection of environmental interests, the MSP uses much softer language: 'negative impacts … shall be avoided', and mariculture facilities, for instance, shall *preferably* be located in combination with existing installations.[127]

The German MSP for the North Sea considers every activity or claim for space in the EEZ and evaluates the priorities and other interests which have to be taken into account. The priority uses described above are given most weight in these evaluations, and other uses are reconciled on the terms of these priority uses. For instance, exploitation of non-living resources (sand and gravel extraction) shall maintain appropriate distance from existing pipelines and submarine cables, whereas fisheries and cultural heritage sites 'shall be taken into account'. [128]

Looking at the map of the spatial plan in the GPNS, it seems that the most pressing conflicts may arise between marine protected areas and sand and gravel extraction which are located on the same marine space.[129] According to the non-technical summary of the German MSP:

> [a] large range of physical and chemical changes of the ground and water take place due to sediment dredging: substrate removal and changing of the bottom topography, changing of the hydrographic conditions, formation of vanes of turbidity, remobilization of chemical substances and sedimentation of suspended materials. Sand and gravel extraction also results in increased shipping traffic and noise emissions due to the shipping operation and dredging work. [130]

instance, seasons and areas of fishing within the EEZ under their jurisdiction. Article 192 of UNCLOS also stipulates that all states have the obligation to protect and to preserve the marine environment. Under Art. 8 of the CBD, contracting parties shall establish marine protected areas which are legally binding towards other uses if implemented by regional or national legislation. In the European context, the Birds Directive (79/409/EEC, OJ L103, 25 April 1979) and Habitats Directive (92/43/EEC, OJ L206, 22 July 1992) form such a legal basis. A multitude of other international and regional instruments also have to be addressed when resolving conflicts between the interests of a certain marine area. For an overview of the international legal instruments which are relevant to MSP, see Maes, 'The International Legal Framework', *supra* note 82, at 797–810. By IMO regulations is meant, for instance, the Traffic Separation Scheme under IMO which is incorporated into the Rule 10 of the Convention on the International Regulations for Preventing Collisions at Sea, London 20 October 1972, in force 15 July 1977, 1050 *United Nations Treaty Series* 16.

125 Natura 2000 is an EU-wide nature and biodiversity protection network which has been put forward by EU-level legislation and further implemented by national legislation. See further European Commission, 'Natura 2000 network', available at <http://ec.europa.eu/environment/nature/natura2000/> (visited 13 June 2013).

126 Spatial Plan for the German Exclusive Economic Zone, *supra* note 122, at 19.

127 *Ibid*. at 24.

128 *Ibid*. at 9–10.

129 Spatial Plan for the German Exclusive Economic Zone in the North Sea – Map, available at <http://www.bsh.de/en/Marine_uses/Spatial_Planning_in_the_German_EEZ/documents2/MSP_DE_NorthSea.pdf> (visited 7 February 2013).

130 Spatial Plan for the German Exclusive Economic Zone in the North Sea – Non-technical summary (North Sea), available at <http://www.bsh.de/en/Marine_uses/Spatial_Planning_in_the_German_EEZ/documents2/Report-NorthSea.pdf> (visited 7 February 2013).at 25.

The GPNS includes large MPAs, which make a full reconciliation between interests difficult, especially between shipping and MPAs, as well as sand and gravel extraction and the MPAs. In addition, shipping and the extraction of sand and gravel seem to overlap spatially but they may be temporally reconciled. The MPAs are protected under the EU legislation under which certain activities can be exceptionally allowed within the MPA if they do not hamper the purpose for which the MPA is protected.[131] This makes possible the overlapping of two seemingly conflicting uses of space and allows reconciliation between interests without the need to exclude either.

Another source of potential conflict is considered to be that between maritime transport and wind farms in the MSP. According to Kannen:

> [d]ealing with spatial conflicts between different sea uses depends mostly on their compatibility or incompatibility. In the German North Sea offshore, wind farming is the best example because it is the latest actor, supported by national policy targets and interferes significantly with other sea uses because of its huge demands for space. In particular, offshore wind farms and shipping are incompatible within the same locations due to the risk of collisions, which led to separated zones for these activities in the spatial plan.[132]

However, looking at the map of the MSP, one might argue that the wind power plants and other interests have been reconciled quite successfully on the spatial scale.[133]

3.2 MSP in Australia: Great Barrier Reef Marine Park

The Great Barrier Reef Marine Park (GBRMP) is one of the largest MPAs in the world, being approximately 344 400 km² in size.[134] Since its inception, the GBRMP has been governed by a multitude of instruments but presently it has a comprehensive and legally binding MSP-system in place. Although the aim of the Great Barrier Reef Marine Park Act of 1975 (GBRMPA), which is to implement the MSP-system, is the protection of the MPA, the marine area hosts a multitude of other interests as well.[135] These include, *inter alia*, aquaculture, extraction of non-living

[131] Council directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC, OJ L206, 22 July 1992). See further European Commission, 'Natura 2000 network', available at <http://ec.europa.eu/environment/nature/natura2000/> (visited 13 june 2013).

[132] Andreas Kannen, 'Challenges for Marine Spatial Planning in the Context of Multiple Uses, Policy Arenas and Actors Based on Experiences from the German North Sea', *Regional Environmental Change* (2012) 1–12.

[133] Spatial Plan for the German Exclusive Economic Zone in the North Sea – Map, *supra* note 129.

[134] See Australian Government, Great Barrier Reef Marine Park Authority, 'Facts about Great Barrier Reef', available at <http://www.gbrmpa.gov.au/about-the-reef/facts-about-the-great-barrier-reef> (visited 13 June 2013). See also UNESCO, 'MSP Around the World/Australia (Great Barrier Reef)', available at <http://www.unesco-ioc-marinesp.be/spatial_management_practice/australia_great_barrier_reef> (visited 7 February 2013).

[135] For instance, tourism has been one of the main drivers behind the MSP, creating revenues exceeding AU$5 billion annually. See Great Barrier Reef Marine Park Authority, *Great Barrier Reef Outlook Report 2009*,

resources, fishing, recreation, research, and shipping. According to Article 2A of the GBRMP, the main objective of the Act is to provide for the long-term protection and conservation of the environmental, biodiversity and heritage values of the Great Barrier Reef Region and also allow ecologically sustainable use.

The GBRMP consists of multiple zones, which are legally binding. These zones designate areas for buffering, conservation, general use, habitat protection, national parks, preservation and scientific research. These zones have differing legal consequences for different activities. For instance, aquaculture, boating, fishing, shipping and tourism activities are generally allowed in the general use zone (some actions need a permit); but in the buffer zone, marine national park zone, preservation zone and scientific research zone these activities are, for the most part, banned.[136] The zoning system covers all human activities and provides a high level of protection to some, ecologically important, areas while allowing a multitude of other uses elsewhere. Day summarizes the MSP in the GBRMP quite nicely:

> … virtually all reasonable activities are allowed, including most types of fishing, shipping, dredging and aquaculture, in certain zones within the GBRMP. Zoning ensures an overriding conservation rationale for the entire area, minimises impacts and conflicts, and provides for high levels of protection for specific representative areas, while allowing a variety of other uses to continue in other zones.[137]

Straight away, there is a major difference between the MSP-systems in the North Sea and the GBRMP because the primary starting point is not to make construction of wind-power parks, safeguarding of shipping lanes or extraction of minerals possible, but rather to make possible the effective protection of the *ecological* sustainability of the area. Other interests are suppressed under this goal.[138] This overarching aim differs somewhat from the MSP-systems in the North Sea. Although the GBRMPA allows a multitude of different human activities in the area, the legal acceptability of all these actions is subdued by the aim to preserve the ecological integrity of the area. This greatly simplifies the task of reconciliation between interests because protection of the area is given the highest importance and is given precedence over other interests – whereas in the North Sea it was the economic activities of wind-farms and shipping routes that were given precedence if interests were conflicting. This was especially so in Germany, but was visible also in the Netherlands and in Belgium.[139]

available at <http://www.gbrmpa.gov.au/__data/assets/pdf_file/0018/3843/OutlookReport_Full.pdf> (visited 16 May 2013) at 66. See also Agardy, *Ocean Zoning*, *supra* note 31, at 61. GBRMP also has a significant effect on employment, creating more than 50 000 jobs. See Great Barrier Reef Marine Park Authority, *Great Barrier Reef Outlook Report 2009* at 3.

[136] Great Barrier Reef Marine Parks Zoning, Map 1, Cape York, available at <http://www.gbrmpa.gov.au/zoning-permits-and-plans/zoning/zoning-maps> (visited 7 February 2013).

[137] Day, 'The Need and Practice of Monitoring', *supra* note 57, at 823.

[138] Agardy, *Ocean Zoning*, *supra* note 31, at 61 and 66.

[139] Not to oversimplify the comparison, it has to be stated that the context of drafting an MSP for a marine area is very different in the GBRMP and the North Sea respectively. This is due to the fact that the North Sea is filled with shipping routes, cables and pipes and the like, as mandated by UNCLOS and IMO

The zoning system adopted for the GBRMP also differs somewhat from the MSP-systems in place in the North Sea. In Belgium, Germany and the Netherlands all the interests or different activities have been indicated at a rather precise level on the zoning map itself. On the contrary, the GBRMP-MSP has been drafted so that only the general purposes of the area in question are laid out on the zoning map and the written Activities Guide indicates which activities are allowed and which are not in a certain zone. On the other hand, this textual formulation gives clear criteria about which activities can be allowed in a certain area and which cannot. The requirement to apply for a permit for certain activities also varies between the different zones.

3.3 Reconciliation between environmental, social and economic interests?

Marine spatial planning seems to be a very successful instrument in areas where there is a lot of marine space and fewer activities that use that space. In these circumstances, the reconciliation of interests relating to the use of the space is also easier compared to situations where the demand for marine space far overshadows the availability of space, as is the case in the Belgian part of the North Sea. However, it is in these smaller and heavily used areas that MSP is mostly needed because the conflicts between different uses and the uses and the environment manifest themselves more clearly and demand solutions. It is somewhat ironic, though, that MSP cannot fully reach its aims in those areas where the instrument is most sorely needed.

The starting point of any MSP-system is that in highly industrial marine spaces different uses of the sea necessarily conflict with each other.[140] In other words, 'marine spatial planning is driven by the need to separate conflicting uses' to achieve a situation in which as many legitimate uses of the marine environment as possible could co-exist without conflict.[141] The *method of separation* is the key to the reconciliation that an MSP has to offer. What MSP tries to do is to achieve reconciliation of interests in the same place at the same time, and if this is not possible separate the interests in a spatial and temporal scale. If two conflicting activities take place simultaneously, the conflict may be solved by placing the conflicting activities in separate locations so that they will not affect each other. This may be done two-dimensionally, placing conflicting activities in different locations or three-dimensionally by placing them in the same location but using the depth of the sea or area above the sea to alleviate the conflict. If the geographical reconciliation between interests is not possible, there is one option left, namely placing the conflicting activities temporally

regulations. This is not, however, the case in the GBRMP. The problems of reconciling interests are also greatly simplified in the GBRMP compared to the North Sea by the fact that the space available for planning is much greater in the GBRMP than in the context of the North Sea.

[140] As Gilliland and Laffoley point out: 'MSP should help to achieve synergies among different objectives and interests as well as making the best use of space. Nevertheless, conflicts will arise and a number of options exist to address these, including by identifying policy priorities or "decision rules" based on clear principles and stakeholder engagement'. Gilliland and Laffoley, 'Key Elements', *supra* note 122, at 795.

[141] Douvere et al, 'The Role of Marine Spatial', *supra* note 26; Young et al, 'Solving the Crisis', *supra* note 26, at 26.

apart on the same geographical area. These can be called the instruments or methods of reconciliation within MSP.

In a situation where full reconciliation of interests is not possible, the conflicting interests must be solved on the basis of the legal protection enjoyed by the interest. This means creating a hierarchy for allocating space: the most important legally protected interests are allocated space first and less important interests can claim the space that is left over by the legally protected interests.[142] This has been done to a certain extent in all of the MSP-systems discussed earlier. For instance, the legal protection under UNCLOS and IMO regulations has put an emphasis on shipping and maritime transport above other interests in the North Sea, whereas the Great Barrier Reef Marine Park Act aims at maintaining the ecological integrity of the area. These overarching aims, or as the Germans call them, priority uses, have great influence on the design of the MSP-system and as a consequence on the reconciliation of interest.

Choosing between the different uses of the marine areas will sometimes have to occur in the case of finite space. Despite the promises of reconciliation, all the conflicts cannot be avoided, even with a careful planning system in place. This, however, places the emphasis on the instruments' adaptability: when there is new information on the potential effects of a certain activity or the societies' values change, the planning systems must also be able to adapt to this change. This is why the adaptability and evaluation of MSP at regular intervals have been regarded as some of the main features of the MSP-systems discussed above.

4 Conclusions

In this paper, it was first argued that as marine spatial planning is a tool for implementing ecosystem based management, and ecosystem based management in turn is a tool for implementing sustainable development, the overall aim of any MSP should be the aim of sustainable development itself: achieving reconciliation of conflicting interests. The second argument in this regard was that it is not enough merely to think of the contents of MSP, or to look at how MSP can achieve its aim of reconciliation; one also has to pay close attention to the sustainability of the instrument itself. Here, the question turns to whether MSP itself is, or can be, part of good governance.

After setting the overall goals for MSP, this paper sought to define the most commonly accepted characteristics of MSP based on earlier research. The principles of multiple use and reconciliation of interests, stakeholder involvement, adaptive management, integration between different sectors and aspects of sustainable develop-

[142] See *supra* note 124.

ment were established as the key elements of MSP. These principles are deployed as MSP seeks to balance the present and future interests of certain, defined marine areas. It was also noted that MSP is coming closer to more traditional forms of terrestrial planning, although the marine environment itself presents some challenges to this approach.

At the end of part 2, the paper analyzed some potential threats and possibilities which MSP might bring from the point of view of legal certainty and the rule of law. It was concluded that the adaptive nature of MSP may be a threat to predictable and equitable functioning of a legal system if the adaptability is not balanced properly with legal rules guiding the process. MSP can also serve as a tool of promoting legal certainty in so far as it increases knowledge of the interests that are in place in a certain area as well as knowledge on the human-human conflicts and human–environmental conflicts which may arise. In this regard, MSP can aid in solidifying the use of legal discretion in different permit judgments concerning the use of natural resources or the building of coastal defences, for instance.

In part 3, the MSP-systems in Australia, Belgium, Germany and the Netherlandswere analyzed from the point of view of reconciling interests. The main aim was to comment on the aims upon which these countries have built their MSP-systems and how well the reconciliation of interests has been achieved. As a conclusion, it can be said that Belgium had serious challenges in reconciling all of the relevant interests because the size of the marine area was very small compared to the interests that were present. The need for marine space was far larger than the space available, and this forced the Belgian MSP to be based on choices between different scenarios on which the governance of the marine area could be built. All the interests could not be satisfied at the same time, even if there was the most sophisticated MSP system in place. In Germany and in the Netherlands, the task of reconciliation was considerably easier because of the availability of marine space. However, both of these systems were built on the premise that shipping and laying of pipelines and cables, as well as wind farms, were given precedence over other uses. This was especially highlighted in the German MSP. On the contrary, the Great Barrier Reef MSP was based on achieving ecological sustainability of the area while also allowing a multitude of human actions in the area.

Besides the quite obvious fact that the availability of space and the amount and nature of interests has a significant effect on the success of reconciliation, it can also be said that the reconciliation was made easier, especially in Australia and Germany, by the fact that these countries had clear goals and priorities for the MSP. If certain interests conflicted, it was clear which would prevail over the other.

By way of a conclusion, it can be said that MSP has the potential to function as an implementation mechanism for sustainable development as a whole. It definitely can play a role in reconciling different and potentially competing international environ-

mental law instruments, such as the CBD and UNCLOS. The biggest challenge in achieving this, however, lies in reconciling different competing interests in a rational and legitimate manner. On a broader scale this can be seen as the greatest challenge of marine governance as a whole. While MSP may be an instrument to alleviate this problem, great care has to be taken to design MSPs in a way that does not pose grave threats to the rule of law or justify the promotion of only limited sectorial interests. If these obstacles can be overcome, MSP can have a bright future as a governance instrument.

At present there are some developments apparent, at least on a regional scale, toward governing MSP in a more detailed and organized manner. The EU, for instance, is aiming at unifying MSP within the European Union, to some extent, and the MSP-directive is at a drafting stage. It remains to be seen whether MSP will continue to be governed only through the current limited number of existing national and international instruments; or whether a specific convention on MSP will be developed. Further international legal instruments on MSP could help in solving some of the problems addressed in this paper.

Part III

Regional Perspectives on Ocean Governance

Integrated Coastal Zone Management and International Instruments: An Overview and Two Latin American Perspectives from Colombia and Cuba

Camilo-Mateo Botero Saltarén,[1] *Marlenny Diaz Cano*[2] *and Celene Milanes Batista*[3]

1 Introduction

Integrated Coastal Zone Management[4] (ICZM) is nowadays probably the most widely accepted framework for organizing human activities on coasts. The first legal milestone for ICZM was the United States' Coastal Zone Management Act[5] of 1972, which establishes a domestic law intended to reduce conflict among various coastal activities, such as fishing, the operation of ports and tourism.[6] After this develop-

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[4] ICZM has been defined as a process to lead human development and simultaneously conserve natural and cultural heritage of coastal areas. J. M. Barragan, *Medio ambiente y desarrollo en áreas litorales* (Universidad de Cádiz, 2003).

[5] Public Law 92-583, 16 U.S.C. 1451–1456; available at <http://www.cr.nps.gov/local-law/FHPL_CstlZoneMngmt.pdf> (visited 7 May 2013).

[6] Adalberto Vallega, *Fundamentals of Integrated Coastal Management* (Kluwer Publishers, 1999).

ment, many countries, such as Canada, France and the United Kingdom, adopted their own laws related to coastal activities and the management thereof. However, the majority of the national legal frameworks created in the 1970s and 1980s were based on single activities rather than on their integration.[7]

At the international level, the main advance for ICZM was the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, where Agenda 21[8] was adopted. Chapter 17 of Agenda 21 includes a detailed list of actions and compromises relating to human activities in coastal and marine areas, including a general concept of ICZM. Stemming from UNCED, several manuals and guides were published to implement this framework, both at the national and the international levels. Examples include texts by Clark,[9] Cicin-Sain and Knecht,[10] and Vallega,[11] which have been widely quoted during the last fifteen years in scientific documents and national policies related to ICZM.[12]

In Latin America, the implementation of ICZM started somewhat later than in Europe and North America. This paper focuses on two Latin American countries, Colombia and Cuba, as examples of this advancement within the international arena. Both countries have thousands of kilometres of coastline, with the majority consisting of tropical marine ecosystems. The sustainable use of the coastal and marine environment is thus a core issue for these governments. The purpose of this paper is to show how ICZM is related to several international instruments; to analyse how Colombia and Cuba have incorporated ICZM into their domestic laws and policies; and to consider whether there is a need for a new multilateral environmental agreement which focuses specifically on ICZM.

ICZM is understood in this paper as being a part of ocean governance due to the fact that it focuses on the management of a 'public property': the coast. However, coastal zones do not have clear and permanent boundaries, being defined according to different cultural, economic and natural criteria.[13] Therefore, each country must

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7 Camilo-Mateo Botero, *Evaluación de los esquemas de certificación de playas en América Latina y propuesta de un mecanismo para su homologación*, PhD Thesis, Universidad de Cádiz, Spain (2013).

8 Agenda 21, UN Conference on Environment and Development, Rio de Janeiro, 13 June 1992, UN Doc. A/CONF.151/26/Rev.1 (1992), available at <http://www.un.org/esa/dsd/agenda21/>. Agenda 21 is a multi-volume global blueprint for the implementation of sustainable development at various levels.

9 John R. Clark, *Coastal Zone Management Handbook* (Lewis Publishers, 1995).

10 Biliana Cicin-Sain and Robert W. Knecht, *Integrated Coastal and Ocean Management: Concepts and Practices* (Island Press, 1998).

11 Vallega, *Fundamentals of ICM*, *supra* note 6.

12 The book: J. M. Barragan, *Manejo costero integrado y política pública en Iberoamérica* (Iberoamerican Network of Integrated Coastal Management, 2009), provides several examples of policies and scientific documents which have been based on the work of these authors.

13 There are two main criteria for defining coastal zones' boundaries: firstly, an 'environmental-geographic' perspective, in which natural, socioeconomic or legal aspects are core; and, secondly, a 'problematic' perspective, in which focus is on the conflicts among users of coastal resources. Rafael Steer et al, *Documento base para la elaboración de la Politica Nacional de Ordenamiento Integrado de las Zonas Costeras Colombianas* (Environmental Ministry of Colombia, 1997) 75–80.

within its domestic law determine the boundaries of its coasts, mainly on-shore, to be able to achieve sustainable development in these areas. One of the issues considered in this paper is the manner in which coastal zones are defined in Colombia and Cuba.

2 Recognition of ICZM in international instruments

Coastal zones comprise less than five per cent of the earth's total area, but in them are concentrated almost 60 per cent of the total global population.[14] Several ecosystems are threatened by human activities, such as construction and operation of industries and ports, fishing, tourism and urbanization. It is therefore important that government and civil society protect the natural resources in these zones so as to ensure continued sustainable access to the ecosystem services provided by the coast. In addition, it is normal for coastal ecosystems to cross national boundaries, thus becoming a shared responsibility between two or more countries and increasing the difficulties inherent in managing these ecosystems in a sustainable manner.

Since the Stockholm Declaration was agreed to at the United Nations Conference on the Human Environment (UNCHE),[15] several international instruments have been adopted with the potential to assist in protecting coastal zones.[16] Nowadays, there are several international instruments which include coastal areas as a part of their general scope, although their focus is on specific environmental elements or issues, rather than on specific geographical areas. Some examples in which coastal zones are not explicitly mentioned in an instrument, but are included within its scope, are the Convention on Biological Diversity (CBD),[17] Declarations of different environmental or sustainable development summits convened under the United Nations system,[18] and the United Nations Framework Convention on Climate Change (UNFCCC).[19] For example, the CBD provides, in its Article concerning financial resources, that consideration is to be given to 'the special situation of developing

[14] Barragan, *supra* note 4.

[15] Declaration of the United Nations Conference on the Human Environment, Stockholm, 16 June 1972, UN Doc. A/CONF.48/14/Rev.1 (1973), 11 *International Legal Materials* (1972) 1416.

[16] On the use of non-specific declarations and conventions in the protection of the marine environment, see generally Ed Couzens, 'International Law Relating to Climate Change and Marine Issues' in Ed Couzens and Tuula Honkonen (eds), *International Environmental Law-making and Diplomacy 2010*, University of Eastern Finland – UNEP Course Series 10 (University of Eastern Finland, 2011) 185–216.

[17] Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, <http://www.biodiv.org>.

[18] Declaration of the United Nations Conference on the Human Environment, Stockholm, 16 June 1972, UN Doc. A/CONF.48/14/Rev.1 (1973), 11 *International Legal Materials* (1972) 1416; UN Declaration on Environment and Development, Rio de Janeiro, 14 June 1992, UN Doc. A/CONF.151/5/Rev.1 (1992), 31 *International Legal Materials* (1992) 876; Johannesburg Declaration on Sustainable Development 'From our origins to the future', Johannesburg, South Africa, 4 September 2002, available at http://www.un.org/esa/sustdev/documents/ WSSD_POI_PD/English/POI_PD.htm. (visited 3 March 2013).

[19] United Nations Framework Convention on Climate Change, New York, 9 May 1992, in force 21 March 1994, 31 *International Legal Materials* (1992) 849, <http://unfccc.int>.

countries, including those that are most environmentally vulnerable, such as those with … coastal … areas';[20] and the Convention's Conference of the Parties (COP) has adopted decisions dealing specifically with ICZM.[21] The CBD also indirectly refers to the United Nations Convention on the Law of the Sea (UNCLOS);[22] promotes the integration of conservation and sustainable use of biological resources (which would include marine resources[23]) into decision-making;[24] and has developed a thematic programme on marine and coastal biodiversity.[25] On the other side, the UNFCCC includes a specific reference to coastal management when referring to adaptation to the impacts of climate change.[26]

One of the clearest acknowledgements of the importance of ICZM in an international document is to be found in Agenda 21,[27] which includes an entire chapter on coastal zones and their sustainable development.[28] During the 1990s, following the adoption of Agenda 21 at the United Nations Conference on Environment and Development (UNCED), several municipalities in Europe and North America implemented local environmental agendas in coastal areas.[29] However, in other regions of the world less attention has been paid to this instrument; such as in Latin America, where implementation of local Agenda 21 has not often happened.

Another relevant, and considerably more recent, instrument is the Rio+20 Outcomes Document[30] which includes a statement about the importance of management of coastal and ocean areas;[31] nevertheless, it is too soon to assess the significance of this document.

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[20] Article 20 'Financial Resources', Art. 20(7).

[21] See, for instance, 'Marine and coastal biological diversity: enhancing the implementation of integrated marine and coastal area management' CBD Decision VIII/22 (2006).

[22] Article 22 'Relationship with Other International Conventions', Art. 22(2): 'Contracting Parties shall implement this Convention with respect to the marine environment consistently with the rights and obligations of States under the law of the sea'.

[23] Article 2 of the CBD defines 'biological resources' to include 'genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity'.

[24] Article 10 'Sustainable Use of Components of Biological Diversity', Art. 10(a): '[Each Contracting Party shall, as far as possible and as appropriate …] Integrate consideration of the conservation and sustainable use of biological resources into national decision-making'.

[25] See <http://www.cbd.int/marine/>.

[26] Article 4 'Commitments', Art. 4(e): '[All parties … shall … c]ooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, (...)'.

[27] See *supra* note 8.

[28] The main concepts of ICZM, as outlined in Chapter 17 of Agenda 21, have been referred to in many of the coastal management manuals and guides published during the last 20 years.

[29] See *supra* note 14.

[30] Rio+20 Outcome Document 'The Future We Want', available at <http://www.uncsd2012.org/ content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf> (visited 30 March 2013).

[31] Paragraphs 158–177 of the Rio+20 Outcomes Document relate to oceans and seas. In these paragraphs, the signatory states highlight, *inter alia*, the importance of the conservation and sustainable use of the oceans and seas and their resources, and commit to applying an ecosystem approach and a precautionary approach in managing activities that impact the marine environment.

In addition, several multilateral environmental agreements (MEAs) are focused on activities and ecosystems located at the narrow interface between land and sea; these could be called 'coastal MEAs'. Some of these seek to control maritime and coastal activities and their impacts on ecosystems and human health; among the most relevant being the 1973/78 International Convention for the Prevention of Pollution from Ships (MARPOL),[32] the 1972 London Dumping Convention and its 1996 Protocol,[33] and the 1982 Convention on the Law of the Sea (UNCLOS).[34] Other international initiatives are focused on protecting ecosystems and natural resources found within coastal areas, mainly at the national or regional levels, to ensure public access to their ecosystems services and that these are preserved for future generations. Some examples are UNEP's Regional Seas Programme,[35] under which are found apparently successful initiatives such as the Mediterranean Action Plan;[36] and the Ramsar Convention,[37] which focuses on the conservation and wise use of wetlands (these being defined to include 'areas of marine water the depth of which at low tide does not exceed six metres'[38]).

Despite these various efforts, there is not an international instrument focused specifically on coastal management as a core issue. Agenda 21 has provided important support for ICZM within national laws and policies: it has been the main reference for the majority of manuals published, including publications prepared by multilateral organizations such as the Intergovernmental Oceanographic Commission (COI)/UNESCO[39] and the World Bank.[40] Nevertheless, and perhaps because of this absence of a specific international instrument for ICZM, integrated management of coastal and oceanic areas has suffered from weak implementation.

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[32] International Convention for the Prevention of Pollution from Ships, 1973, first signed 2 November 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), adopted 17 February 1978. The combined instrument entered into force on 2 October 1983, 12 *International Legal Materials* (1973) 1319, <http://www.imo.org>.

[33] Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 13 November 1972, in force 30 August 1975, 11 *International Legal Materials* (1972) 1294; 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 7 November 1996, in force 24 March 2006, <http://www.imo.org>.

[34] United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, in force 16 November 1994, 21 *International Legal Materials* (1982) 1261.

[35] See <http://www.unep.org/regionalseas/>.

[36] Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (1995). For more information, see <http://www.unep.org/regionalseas/programmes/unpro/ mediterranean/instruments/default.asp> (visited 8 May 2013).

[37] Convention on Wetlands of International Importance especially as Waterfowl Habitat, Ramsar, 2 February 1971, in force 21 December 1975, 11 *International Legal Materials* (1972), 963, <http://www.ramsar.org>. This Convention provides rules for the protection of wetlands, and it thus has relevance for mangrove management schemes.

[38] In Art. 1(1).

[39] IOC/UNESCO, *Methodological Guide to Integrated Coastal Zone Management,* 36 Manuals and Guides of IOC (UNESCO, 1997), available at <http://www.jodc.go.jp/info/ioc_doc/Manual/121249eo.pdf> (visited 8 May 2013).

[40] Jan C. Post and Carl G. Lundin (eds), *Guidelines for Integrated Coastal Zone Management.* (World Bank, 1996), available at <http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1996/08/01/000009265_ 3961219091924/Rendered/PDF/multi_page.pdf> (visited 8 May 2013).

3 The Colombian perspective

Colombia is located in the north-west corner of the South American continent, with almost 3 000 km^2 of coast on the Caribbean Sea and the Pacific Ocean.[41] Due to its geographical position, most of the country's coastal and marine ecosystems exist in tropical areas. These ecosystems include beaches, cliffs, coral reefs, mangroves, seabed bottoms and seagrass meadows.[42] At the same time, the Andes Mountain Range is divided into three smaller mountain ranges at the south of Colombia; therefore, several rivers end on the coast and form an intricate system of coastal lagoons and estuaries, some of which are protected as Wetlands of International Importance under the Ramsar Convention.[43,44]

The country has been active in multilateral environmental meetings and has ratified many global MEAs with relevance to coastal and marine issues, such as the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal,[45] the CBD,[46] the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES),[47] MARPOL,[48] the Ramsar Convention, and the UNFCCC.[49] Furthermore, Colombia has been part of many regional agreements and organizations, having ratified several regional MEAs, especially in the Wider Caribbean[50] and the South-East Pacific.[51] Nevertheless, ratification of these

41 Ministry of Environment and Sustainable Development, *Política Nacional para el Desarrollo Sostenible de las Zonas Costeras e Insulares de Colombia – PNAOCI* (MESD, 2000).

42 *Ibid*.

43 Incorporated into Colombian law through Law 357 of 1997. Colombia appears to have a strict system of incorporating international agreements it ratifies into its domestic legislation through specific, numbered national laws. A list of more than 100 international agreements (and the relevant national laws where these have been incorporated), relating to biological diversity either through their commercial or environmental subject matter, can be seen at 'Summary of the main international conventions ratified by Colombia', <http://www.humboldt.org.co/ingles/en-pol-reco-tratados.htm> (visited 30 September 2013).

44 The first RAMSAR-designated wetland in Colombia, and one of the most significant, is called Cienaga Grande de Santa Marta, which has more than 42 km^2 of wetlands and which includes two national parks. This area was designated as a RAMSAR site in 1998; and was also designated as a Biosphere Reserve of UNESCO in 2000.

45 Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Basel, 22 March 1989, in force 5 May 1992, 28 *International Legal Materials* (1989) 657, <http://www.basel.int>; signed by Colombia on 22 March 1989 and ratified by Colombia on 31 December 1996 – incorporated through Law 253 of 1996.

46 The CBD was incorporated into Colombian law through Law 165 of 1994.

47 Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington DC, 3 March 1973, in force 1 July 1975, 993 *United Nations Treaty Series* 243, <http://www.cites.org>; ratified by Colombia on 31 August 1981, then brought into force on 31 November 1981 (Law nr 17, 1981) and then given technical interpretation through Decree 1420 of 1997.

48 MARPOL was incorporated into Colombian law through Law 12 of 1981.

49 The UNFCCC was incorporated into Colombian law through Law 164 of 1994.

50 See Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, Cartagena, 24 March 1983, in force 30 March 1986, 22 *International Legal Materials* (1983) 221; and Protocol Concerning Specially Protected Areas and Wildlife to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, Kingston, 18 January 1990, in force 18 June 2000, available at <http://www.cep.unep.org/cartagena-convention/spaw-protocol/spaw-protocol-en.pdf> (visited 13 February 2009).

51 See Agreement on regional cooperation against oil pollution and other harmful substances in cases of

international instruments does not mean that Colombia is necessarily taking a great interest in coastal areas, as none of them relate directly to ICZM.

Insofar as domestic instruments are concerned, Colombia has two national policies related to integrated coastal zone management: the National Environmental Policy of the Oceanic Spaces and Coastal and Insular Areas of Colombia (PNAOCI);[52] and the National Policy for Oceans and Coastal Regions (PNOEC).[53] The former is focused on environmental and territorial planning issues, being divided along three strategic areas: environmental planning; marine environmental quality; and sectoral environmental sustainability. The PNOEC, on the other hand, is more concerned with multi-sectoral issues, from military aspects to economic activities and including environmental and cultural topics. Despite this, only the PNOEC contains specific guidelines for international issues.

Moreover, the Ministry of the Environment[54] has formulated several programmes related to the protection or sustainable use of marine resources. As an example, every year a report on marine and costal ecosystems[55] is published, although it is descriptive rather than being management-oriented. Another programme which can usefully be mentioned here is one relating to research on coastal erosion,[56] which aims to identify specific mitigation actions in affected areas. Despite its importance, the programme is limited in that it does not address the overall integrity of the coastal zone, and is thus not really an example of integrated coastal zone management.

The protection and sustainable use of coastal and marine ecosystems are additionally regulated through several domestic laws. One of the first laws was Law 2811 of 1994, also called the 'Natural Resources Code', which in its Article 278 prohibits fishermen from conducting their activities on beaches where wild species reproduce, in national parks and in public bathing areas. Another important domestic law, adopted in 1978,[57] defines the territorial sea, exclusive economic zone and continen-

emergency for the South-East Pacific, Lima, 12 November 1981, <http://www.cpps-int.org> (incorporated by Colombia through Law 45 of 1985 (original title in Spanish: Acuerdo sobre la Cooperación Regional para el combate contra la Contaminación del Pacífico Sudeste por hidrocarburos y otras sustancias nocivas en casos de emergencia)); and Protocol for the protection of the South-East Pacific against pollution from land-based sources, Quito, 22 July 1983, <www.cpps-int.org>. Incorporated by Colombia through Law 45 of 1985 (original title in Spanish: Protocolo para la protección del Pacífico Sudeste contra la Contaminación proveniente de fuentes terrestres).

52 Ministry of Environment and Sustainable Development, *Política Nacional*, *supra* note 41.

53 Colombian Commission for Oceans, *Política Nacional del Océano y los Espacios Costeros- PNOEC* (CCO, 2007).

54 The Ministry of Environment has changed its name three times since 2000 when the PNAOCI was approved. It is currently called the Ministry of Environment and Sustainable Development.

55 INVEMAR, *informe del estado de los ambientes marinos y costeros en Colombia* (Instituto de Investigaciones Marinas y Costeras, 2012).

56 W. Guzman, B. O. Posada, G. Guzman. and D. Morales, *Programa Nacional de Investigación para la Prevención, Mitigación y Control de la Erosión Costera en Colombia - PNIEC: Plan de Acción 2009-2019* (INVEMAR, 2008).

57 República de Colombia Congreso Nacional, *Ley 10 de 1978, Por medio de la cual se dictan normas sobre*

tal shelf.[58] However, the most relevant domestic law for the marine environment was that which created the Ministry of Environment and the National Environmental System.[59] Since this law, several statutes (including sectoral laws[60]) and policy instruments have been approved, such as the PNAOCI previously mentioned, assisting Colombia in fulfilling its commitments under various international environmental instruments.

An interesting issue for ICZM and the application of international instruments is the delimitation of the coastal zone. As recently as 2013, Colombia established its first law exclusively applicable to coastal areas and their management,[61] complementing the two policies mentioned above. However, a lack of legislative guidance remains on how to determine the extent of the coastal zone. This is, in particular, the case on-shore, because the boundaries of the marine area within which regional environmental authorities are to perform their functions (i.e. the boundaries of the off-shore part of the coastal zone) are clearly defined in Article 208 of the current National Development Plan.[62] The in-land boundaries of the coastal zone are not yet defined by any law or instrument – not even the very recent Decree 1120 (mentioned above). As a result, each institution defines its on-shore boundaries according to its own interests, which is barely congruent with the principles of 'integrated management'.

The main instrument for delimiting the coastal zone in Colombia is the PNAOCI. This policy proposed zoning of the Colombian coastal area on two scales: 'Environmental Coastal and Oceanic Units' (UACOs in Spanish), which cover hundreds of kilometres of littoral area; and 'Integrated Management Units' (UMIs in Spanish), which are smaller than UACOs and vary in length from ten to 100 kilometres. It is important to highlight that UACOs were strictly defined by PNAOCI,[63] and later

mar territorial, zona económica exclusiva, plataforma continental, y se dictan otras disposiciones, Diario Oficial No. 35077, 18 August 1978.

58 Due to this law having been adopted before UNCLOS came into existence, the law is not fully aligned with the Convention. As an example, Law 10 of 1978 merely defines distances from land of the territorial sea, the exclusive economic zone, the continental shelf and the base line; while UNCLOS has very detailed provisions within these zones.

59 República de Colombia, Congreso Nacional. *Ley 99 de 1993, por la cual se crea el Ministerio del Medio Ambiente, se reordena el Sector Público encargado de la gestión y conservación del medio ambiente y los recursos naturales renovables, se organiza el Sistema Nacional Ambiental, SINA, y se dictan otras disposiciones*, Diario Oficial No. 41146, 22 December 1993.

60 The main relevant domestic sectoral laws include: Law 1 of 1991 (Marine Ports Statute); Law 141 of 1994 (special financing for many coastal areas); Law 685 of 2001 (Mining Code, including specific actions to protect the marine environment); Decree 1100 of 2003 (special financing for national parks and RAMSAR sites); and Decree 2190 of 2005 (National Plan to Prevent and Attend Oil Spills).

61 Ministry of Environment and Sustainable Development, Decree 1120 of 2013, '*por el cual se reglamentan las Unidades Ambientales Costeras -UAC-y las comisiones conjuntas, se establecen las reglas de procedimiento y criterios para reglamentar la restricción de ciertas actividades en pastos marinos, y se dictan otras disposiciones*' (2013).

62 República de Colombia Congreso Nacional, *Ley 1450 de 2011 por el cual se expide el Plan nacional de desarrollo 2010–2014*, Diario Oficial No. 48102, 16 June 2011.

63 PNAOCI created eight UACO on the Continental Caribbean Coast, four on the Pacific Coast and one on the Insular Caribbean Coast (San Andres, Providencia and Santa Catalina Archipelago). See *supra* note 36.

through Decree 1120, whereas UMIs must be defined by local stakeholders according to local characteristics.[64]

During the years 1997 to 2000, the Ministry of Environment and its research institutes engaged in an exercise of zoning the shoreline based on biophysical characteristics, governance variables and socio-economic criteria; as a result, UACOs were defined and included in the PNAOCI. This exercise educates stakeholders that the Colombian coastal zone is divided into three big coastal areas (Caribbean Islands, the Continental Caribbean Coast and the Pacific Coast) and ten UACOs; however, stakeholder participation was very low and the limits of the project were merely the shoreline, without defining any boundaries on-shore or off-shore.

On the other hand, UMI boundaries are not explicitly defined within the PNAOCI, nor in Decree 1120. The responsibility for defining these units thus lies with local ICZM committees. Although there is not a unique methodology to establish UMIs, few efforts have been made to create UMIs in Colombia, with only one well-documented case on the Pacific Coast.[65] Therefore, zoning and planning at local levels is still needed in respect of the majority of Colombia's coasts, demonstrating a lack of empowerment of local stakeholders. Finally, it could be important to highlight that the participation of Colombia in several international organizations at the regional level, such as in the Wider Caribbean or the South-East Pacific, has not been enough to trigger this local process of delimitation; implying that a more explicit instrument to define coastal zones is perhaps still necessary.

4 The Cuban perspective

Cuba is located at the confluence of the Atlantic Ocean, the Caribbean Sea and the Gulf of Mexico. As a consequence of its being an island and its 67 831 km^2 of continental shelf, the country has a rich diversity of ecosystems and types of coasts, including beaches, coastal lagoons, coral reefs, marine grasses, swamps and wetlands. Cuba has 253 protected areas, 91 at the national level and 182 at the local, covering 19.95 per cent of the total land and marine area of the country.[66]

[64] PNAOCI is not clear about procedure and which stakeholders are to be included in establishing UMIs. Nevertheless, current UMIs have followed local manuals, such as D. A. Alonso, P. C. Sierra Correa, F. A. Arias-Isaza and M. L. Fontalvo, *Conceptos y guía metodológica para el manejo integrado de zonas costeras en Colombia, manual 1: preparación, caracterización y diagnóstico* (Serie de documentos generales de INVEMAR No. 12, 2003); and X. Rojas Giraldo, P. C. Sierra-Correa, P. Lozano-Rivera and A. López Rodríguez, *Guía metodológica para el manejo integrado de las zonas costeras en Colombia, manual 2: planificación de la zona costera* (Serie de Documentos Generales INVEMAR No.44, 2010).

[65] A. C. López, P. C. Sierra-Correa, J. C Rodríguez and J. L. Freyre-Palua (eds), *Plan de manejo integrado de la zona costera del complejo de las bocanas Guapi Iscuandé, Pacífico colombiano - Fase II* (Serie de Documentos Generales INVEMAR No. 17, 2003).

[66] J. Angulo-Valdés, 'Effectiveness of a Cuban Marine Protected Area in Meeting Multiple Management Objectives', PhD Thesis, University of Halifax, Canada (2005) at 267.

Cuba has signed more than 150 international instruments, including MEAs linked with protection of marine resources and impacts on coastal populations. Environmental instruments which Cuba has been particularly active in implementing include the Rio Declaration, Agenda 21, the UNFCCC[67] and the CBD.[68] Moreover, Cuba participates in the activities of many multilateral environmental organizations, such as those of the United Nations Environment Programme (UNEP).[69]

The main advances related to ICZM in Cuba have occurred at the national level. The first action was the creation in 1976 of the National Commission for Environmental Protection and Rational Use of Natural Resources, which was reinforced by Law 33 of 1981.[70] After that, in 1992, the National Constitution[71] was modified to include the concept of sustainable development in its Article 27.[72] Furthermore, Law 81[73] was modified in 1997, establishing more instruments for environmental management. However, the most important development was the creation of the Ministry of Science, Technology and Environment – CITMA[74] – in 1994. The CITMA steers all aspects related to the environment, such as environmental education, policy-making and scientific research.

More recently, in 2000, the Decree-Law 212 was approved,[75] which guides the majority of human activities on the coast and links environmental legislation with territorial planning. In 2002, the CITMA proposed a National Integrated Coastal Management Programme,[76] which includes a National Bay Group and a National River Basins Council.[77] In addition, the National Environmental Strategy[78] proposed that

[67] Ratified by Cuba on 5th January of 1994.
[68] Ratified by Cuba on 8th March of 1994.
[69] See <http://www.unep.org>.
[70] Gisela Alonso Domínguez, *Intervención en el acto de inauguración de la VIII Convención de Medio Ambiente y Desarrollo* (CITMA, 2011).
[71] Gaceta Oficial de la República de Cuba, *Constitución de la República de Cuba* (Asamblea Nacional del Poder Popular, 1992), available at <http://www.cubanet.org/ref/dis/const_92.htm > (visited 14 July 2013).
[72] Original text in Spanish 'El Estado protege el medio ambiente y los recursos naturales del país. Reconoce su estrecha vinculación con el desarrollo económico y social sostenible para hacer más racional la vida humana y asegurar la supervivencia, el bienestar y la seguridad de las generaciones actuales y futuras (…)' (authors' emphasis to show explicit reference to sustainable development).
[73] Law 81 provides for environmental policy and environmental management in order to achieve sustainable development. Gaceta Oficial de la República de Cuba, *Ley 81 sobre Política Nacional Ambiental* (Asamblea Nacional del Poder Popular, 1997), available at <http://www.oas.org/dsd/fida/laws/legislation/cuba/cuba_81-97.pdf> (visited 30 September 2013).
[74] See <http://www.medioambiente.cu> (visited 14 July 2013).
[75] Gaceta Oficial de la República de Cuba, *Decreto-Ley 212. Gestión de la Zona Costera* (Centro de Investigaciones Tecnología de Medio Ambiente, 2000).
[76] See <http://www.oas.org/reia/IWCAM/pdf/cuba/Section%204.pdf> (visited 14 July 2013).
[77] Juan Alfredo Cabrera et al, *El manejo costero integrado en Cuba*: *un camino* in J. M. Barragán Muñoz (ed.), *Manejo Costero Integrado Política Pública en Iberoamérica: Un diagnóstico. Necesidad de cambio* (Red IBERMAR, 2009) at 91–120.
[78] Lorenzo Brito, *Procedimiento nacional para el establecimiento de Zonas bajo Régimen de Manejo Integrado Costero* (Centro de Información, Gestión y Educación Ambiental, 2010).

ten per cent of the Cuban area should be declared as 'area(s) under integrated coastal management' (ZBRMICs); currently there are 15 areas of this kind.[79]

In 2007 the CITMA established a specific national instrument to support these areas under ICZM,[80] with the aim of evaluating and approving coastal management programmes in different zones of the country. From that year on, the instrument has been used to approve, control, and evaluate at least three zones under Integrated Coastal Management Regime (ZBRMIC) each year, and to study their progress.[81]

The first six ZBRMICs were declared in 2008, and in 2009 the results of the first year of ICZM implementation in the zones were evaluated. As a consequence of this successful implementation, ten more ZBRMICs have been proposed.[82] Cuba aims, by 2015, to have a total of 32 ZBRMICs, representing 74 per cent of all coastal zones.[83]

It is also important to acknowledge the government's support of this process. For declaring ZBRMICs, management authority is coordinated by the local government with representation from the different key actors in each area, such as academic, economic and scientific institutions, the coastal community, and various other organizations. Consulting the ZBRMIC proposal file reveals that five of the eight (to date) revised programmes have already been structured through such management authorities.[84] Other relevant Cuban strategic instruments for integrated management of coastal and marine systems and resources include the National Environmental Strategy for 2011–2015; local ICM programmes; river basin management plans; and protected area management plans.[85] An important support of Cuba's goal to declare areas under integrated coastal management has been the UNDP[86]–GEF[87] project in Sabana-Camagüey Archipelago,[88] which has been financed since the mid-1990s, creating one of the most well-protected coastal areas Cuba has.

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79 Celene Milanés, *Reflexiones sobre la delimitación de zonas costeras y su contribución al Manejo Integrado Costero: el caso de Santiago de Cuba* (Revista Costas de Manejo Costero Integrado en Iberoamérica, 2012) 122–139.

80 CIGEA, *Lineamientos para el Proceso de Identificación y Evaluación de Zonas Costeras para su Declaración como Zonas Bajo Régimen de Manejo Integrado Costero* (Documento de trabajo de la Reunión de los Centros de Estudios Ambientales de Cuba, 2007).

81 D. Salabarría, and L. Brito, *Declaración de zonas bajo régimen de manejo integrado en Cuba* (Memorias de la V Conferencia Internacional de Manejo Integrado de Zonas Costeras, 2011).

82 Celene Milanes, *Unidades costeras ambientales para el manejo en Santiago de Cuba: delimitación y prioridades de actuación* (Revista Arquitectura y Urbanismo, XXXIII, No. 3, 2012) 83–97.

83 See Cabrera et al, *El manejo costero integrado*, *supra* note 79, at 190.

84 Celene Milanés, *Reflexiones sobre la delimitación de zonas costeras y su contribución al Manejo Integrado Costero: el caso de Santiago de Cuba*, Revista COSTAS de Manejo Costero Integrado en Iberoamérica, Vol. 1 No. 1 (2012) at 122–139, available at <http://www.unesco.org.uy/cienciasnaturales/es/areas-de-trabajo/ciencias-naturales/mci-icam-atlantico-sur/inicio/en-portada.html> (visited 1 October 2013).

85 Celene Milanes et al, 'Integrated Coastal Management in Cuba and Colombia: A Comparative Analysis', 28 *Ocean Year Book* (2013, in press) at 17.

86 United Nations Development Programme, see <http://www.undp.org/>.

87 Global Environment Facility, launched in 1991 by UNEP. See <http://www.thegef.org/>.

88 See <http://www.proyesc.cu>.

It should be highlighted that Cuba has, in its laws, recognized the importance of coastal and marine areas. The first decree after the National Socialist Constitution[89] concerned the extension of the territorial sea; and the second concerned the exclusive economic zone. Both of these decrees were approved in 1977. After that, since 1990, several environmental decrees have been approved: Decree 118 (National System of Environmental Protection and Rational Use of Natural Resources); Decree 164 (Fisheries Regulation); Decree 201 (natural protected areas); and the previously mentioned Decree 212, known as the 'Coastal Zone Law', which has been implemented in almost all provinces in Cuba.

The authorities responsible for proposing the corresponding policies and strategies to use and rehabilitate coastal zones, applying ICM principles, are also defined by the Decree 212, which has been described as a very useful document for regulation of urban growth in coastal zones.[90] It is also important to emphasize that steps are currently being taken towards improving Decree 212. Two new chapters are being considered for inclusion in the Decree: one on tax-regulations when coastal spaces and resources are used for multiple activities; and the second for land-use planning programmes and ICM strategies.[91]

To conclude this brief overview of integrated coastal zone management in Cuba, the delimitation of coastal zones should be discussed. According to Decree-Law 212, which regulates the delimitation and protection of coastal zones, these zones are defined as 'a land-marine strip of variable width, where land, sea and atmosphere interact, through natural processes … On it are developed exclusive fragile ecosystems and particular economic, social and cultural relations'. The use of coasts, depending on their type (beaches, dunes, mangroves or reefs), is restricted by the Decree to terrestrial distances from 20 to 300 metres. The external boundaries of coastal zones in the sea is defined by the Decree to depths from 100 to 200 metres, taking into consideration the territorial insular platform.[92] In brief, delimitation of coastal areas in Cuba remains linked to its shoreline rather than encompassing wider areas.

Concerning the creation of ZBRMICs, recent research[93] has demonstrated a lack of standardized criteria for delimitation of and proposals for declaring the different areas. In consequence, in a study of eight cases, six were found to define the boundaries of the proposals based on political and administrative criteria, marking the entire study area as including the coastal municipality or several municipalities as part of the same proposal. Other programmes specify criteria for delimitation and demarcation of the proposed management areas according to their conservation interest.

[89] See <http://pdba.georgetown.edu/Constitutions/Cuba/cuba1976.html> (visited 14 July 2013).
[90] Celene Milanés and Ofelia Pérez, 'An Inquiry into Land-Use Planning and Integrated Coastal Zone Management: The Cuban Experience' 26 *Ocean Year Book* (2012) 509–532.
[91] Celene Milanés et al, 'Integrated Coastal Management', *supra* note 85, at 16.
[92] The territorial insular platform is the submarine relief of the Cuban Archipelago, wherein erosion and nontectonic movements are the main drivers of formation and transformation.
[93] See Celene Milanés et al, 'Integrated Coastal Management', *supra* note 85.

5 Conclusion

Environmental issues have been widely promoted during the last four decades through both international instruments and countries' domestic laws. Simultaneously, coastal zones have become more relevant on national agendas, and sectoral approaches to management of coastal zones have started to be replaced by more integrated approaches. Despite this, at the international level, only Agenda 21 has included ICZM as a core issue. Meanwhile, the majority of international instruments maintain their focus on specific species or activities, many of which are applicable in coastal areas, with a lack of integration among them.

It has been argued in the present paper that ICZM is relevant to several multilateral environmental agreements, such as the CBD, MARPOL and the UNFCCC. However, there is no current international instrument that is of wide enough scope to cover all of the issues included by the ICZM approach. As a consequence, many countries have implemented their own policies and laws for their coastal zones without international coordination having been provided by any multilateral organization. UNESCO and UNEP, an organization and a programme within the United Nations System, each have their own ICZM programmes, but there is not any international instrument at global scale to promote integrated coastal management.

At the national level, the cases of Colombia and Cuba show a typical pattern in respect of ICZM implementation. Each country develops its own domestic law related to coastal issues, trying to fulfill its obligations under a variety of multilateral environmental agreements, but failing to take an integrated approach to implementing commitments under different agreements. At the same time, the relationship between domestic ICZM laws and relevant international agreements is not clear. As a result, international instruments relating to the marine environment are not, at present, effectively supporting domestic implementation of ICZM.

In Colombia two policies, one law and some core documents support ICZM implementation; however, legislation remains too sectoral. The country's current approach needs to evolve so that its legal instruments focus on the integration of activities and on a wide scope which would effectively include ecosystem services[94] of the coasts. Until now, Colombia's main efforts have been in respect of the delimitation of coastal areas, although boundaries on-shore remain vague. It is important to note that Colombia has not to date ratified the UNCLOS, which provides the basis for offshore limits of coastal zones. Moreover, ICZM in Colombia has to date focused on biophysical characterization of coastal areas, mainly giving effect to obligations incurred under the CBD.[95]

[94] The concept of 'ecosystem services' being a suggested means of calculating the value of biological diversity and natural resources in terms of their value to humans.

[95] Francisco Avella et al, *Gestión del litoral en Colombia. Reto de un país de tres costas* in *Manejo Costero Inte-*

With regard to Cuba, there is a strong scientific-based approach discernible in the legislation, which allows for appropriate coastal management. However, the majority of laws and instruments for ICZM have been developed by the Ministry of Science, Technology and Environment, showing a focus on environmental aspects, and a failure to consider intersectoral interests. Valuable lessons might be learned from the Cuban experience of implementing ZBRMICs; nevertheless, advances made within Cuba in respect of implementation of ICZM appear not to be similar to those of other countries, perhaps because of the lack of an international instrument providing a framework for coordinating joint efforts.

As general conclusions, both countries could have important roles to play in developing the future course of ICZM in international thinking, their experiences arguably highlighting the importance of developing an international instrument focused on coastal areas and their integrated management. Moreover, an important gap is evident between scientific advances in the understanding of coastal management and the recognition of such advances in multilateral environmental agreements. Although, during the last 20 years, several scientific documents have proposed the adoption of ICZM as a core approach to achieving sustainable development,[96] only the Rio Declaration has made any explicit mention of ICZM, with the Rio+20 Outcomes Document containing a faint suggestion. Some multilateral environmental agreements, such as the CBD or the UNFCCC, promote actions linked with ICZM, but do not refer to it directly. This paper has considered the state of ICZM implementation in two Latin American countries, as a contribution toward developing and discussing options for stronger international environmental law-making, supporting academic claims for greater ICZM implementation.

Regarding international environmental law-making, the main challenges for a hypothetical international instrument focused on integrated coastal management would include: delimitation of the geographical boundaries of coastal zones on-shore and off-shore; equity in accessing coastal ecosystems services; financing of natural and cultural heritage protection on coastal areas; and national responsibilities toward shared coastal areas. The majority of these issue-areas have their own international instruments, but the point of this paper is to highlight the need for an integrated multilateral agreement focused on coastal areas and their management.

Finally, a new MEA focused on ICZM should play a major role within national and international decisions related to sovereignty and environmental protection. As a related matter, a recent case in the International Court of Justice (ICJ)[97] could be

grado y Política Pública en iberoamérica: Un Diagnóstico. Necesidad de cambio (Red Iberoamericana en Manejo Costero Integrado, 2009).

96 See *supra* notes 6, 7, 9, 10, 14, 39 and 40.

97 The International Court of Justice (ICJ) is the principal judicial organ of the United Nations (UN). It was established in June 1945 by the Charter of the United Nations (Charter of the United Nations, 26 June 1945, available at <http://www.un.org/en/documents/charter/index.shtml>) and began work in April 1946 (see <http://www.icj-cij.org>).

mentioned. On 19th November 2012, the ICJ released its judgment concerning a territorial and maritime dispute between Colombia and Nicaragua related to the sovereignty of the San Andrés, Providencia and Santa Catalina Archipelago.[98] As a result of this judgment, the Archipelago was fragmented into several parts, giving sovereignty over cays and islands to Colombia and over maritime waters to Nicaragua. The ICJ decision went against accepted ecosystems-based logic and against the general tenor of most international instruments relevant to ICZM, because since 2000 the Archipelago has been a UNESCO Biosphere Reserve.[99] In other words, one of the most globally well-known environmental and cultural protection concepts, UNESCO's Biosphere Reserves, was not taken into account by the ICJ which chose instead to split a homogeneous marine and coastal area. The main question, useful for understanding this particular case and this overall paper, is: how much can the protection of marine and coastal environments in voluntary international instruments influence decisions in the international arena? Arguably, it is necessary to have stronger instruments and to move from voluntary and 'soft' initiatives toward 'hard' law. ICZM can be said to have made inroads into progressive international and national legal thinking, but not as yet to have established a firm footing within international environmental law.

[98] International Court of Justice, *Judgment of territorial and maritime dispute (Nicaragua v Colombia*), 19 November 2012; General List No. 124.

[99] Seaflower Biosphere Reserve (declared in 2000) is situated at the Archipelago of San Andrés, Providencia and Santa Catalina, at the South-Western Caribbean, off the East coast of Nicaragua, halfway between Colombia and Jamaica (see http://www.unesco.org/mabdb/br/brdir/directory/biores.asp?mode=all&Code=COL+05). Biosphere reserves are sites established by countries and recognized under UNESCO's Man and the Biosphere (MAB) Programme to promote sustainable development based on local community efforts and sound science (see <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/>) (both visited 12 July 2013).

An Overview of Marine Management and Ocean Governance in the Caribbean Community and the Organisation of Eastern Caribbean States Regions of the Caribbean

Alana Malinde S.N. Lancaster[1]

1 Introduction

The marine environment of the Wider Caribbean region is particularly rich and complex. The region boasts a rich diversity of habitats, which are threatened with destruction. These habitats, which include coral reefs, mangroves and sea-grass beds, provide homes for a significant reservoir of species – many of which are endemic to the region. In addition to its array of biodiversity – much of which is important to the region's fisheries and tourism industries – the marine environment boasts important ecological functions, and constitutes an important asset in economic, physical, political and social terms. The marine environment suffers, however, from human impacts through, *inter alia*, harvesting, invasive alien species, land-based sources of pollution and sedimentation. Concerns over these impacts on the marine environment of the Wider Caribbean have catalyzed the development of regional agreements intended effectively to manage these resources.[2]

Another critical issue in marine management and ocean governance is that of marine delimitation, and management of resources within the exclusive economic zone, as

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[2] One key agreement, which will be discussed in more detail later in this paper, is the 1983 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena, 24 March 1983, in force 11 October 1986, <http://www.cep.unep.org/cartagena-convention/text-of-the-cartagena-convention>).

prescribed by the 1982 United Nations Convention on the Law of the Sea (UNCLOS).[3] All states contemplated in this paper are parties to UNCLOS, and six[4] qualify as archipelagic states in accordance with the definition provided in Article 46. However, a combination of the close proximity of the islands to each other and the absence of bilateral and other forms of delimitation agreements remains an ongoing concern.[5]

At the most general level, states in the Caribbean Sea region are combined with the adjacent continental masses of Central, North and South America and, when thus integrated, are referred to as the Wider Caribbean Region (WCR). This comprises the insular and coastal states and territories with coasts on the Caribbean Sea and Gulf of Mexico, as well as waters of the Atlantic Ocean adjacent to these states and territories, and includes 28 island and continental countries. The 1983 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (the Cartagena Convention),[6] and its subsequent Protocols,[7] were drafted with this spatial setting in mind.

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3 See Part V of UNCLOS (United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, in force 16 November 1994, 21 *International Legal Materials* (1982) 1261).

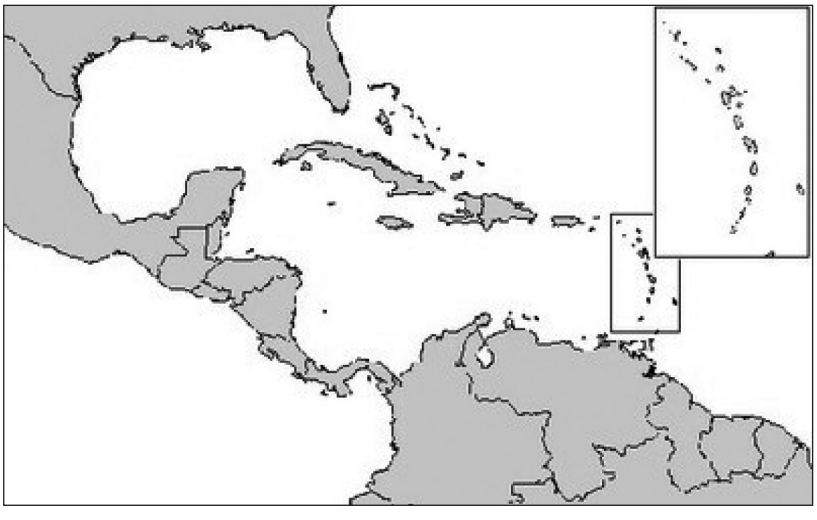
4 Antigua and Barbuda, the Bahamas, Grenada, Jamaica, St. Vincent and the Grenadines and Trinidad and Tobago.

5 See, for example, Tricia Lovell, *Regionalism Versus National Sovereignty: The Promise and Problems of a CARICOM Fisheries Agreement* (UN, 2008), available at <http://www.un.org/depts/los/nippon/unnff_programme_home/fellows_pages/fellows_papers/lovell_0708_antigua-barbuda.pdf> (visited 27 September 2013). Trinidad and Tobago and Grenada have concluded a bilateral agreement with respect to the delimitation of their marine space. Examples of the contentious nature of this issue, however, are evidenced by two cases between members of the Caribbean Community (CARICOM) grouping – Trinidad and Tobago, Barbados, Guyana and Suriname: *Arbitration between Barbados and the Republic of Trinidad and Tobago, Relating to the Delimitation of the Exclusive Economic Zone and the Continental Shelf between them (Barbados v Trinidad and Tobago)*, 11 April 2006, available at <http://untreaty.un.org/cod/riaa/cases/vol_xxvii/147-251.pdf> and *Arbitral Tribunal Constituted pursuant to Article 287, and in accordance with Annex VII of the United Nations Convention on the Law of the Sea in the Matter of an Arbitration between Guyana and Suriname (Guyana v. Suriname),* 17 September 2007, available at <http://www.pca-cpa.org/upload/files/Guyana-Suriname%20Award.pdf> (both visited 27 September 2013).

6 The Cartagena Convention is a regional instrument, which was introduced in order to address pollution in the Caribbean Sea, and (together with its Protocols) is part of the United Nations Environment Programme's (UNEP) Regional Seas Programme. See UNEP, 'Regional Seas Programme', available at <http://www.unep.org/regionalseas/> (visited 18 September 2013). The Wider Caribbean Region Regional Seas Programme was initiated in 1976, when UNEP was urged to launch the Caribbean Environment Programme (CEP). See UNEP, 'Regional Seas Programme: Wider Caribbean', available at <http://www.unep.org/regionalseas/programmes/unpro/caribbean/default.asp> (visited 18 September 2013). Governments of the region identified a number of pressing issues, which in 1981 led to the adoption of the Caribbean Action Plan, which was adopted into a legal framework in 1983 as the Cartagena Convention.

7 Protocol Concerning Co-operation in Combating Oil Spills in the Wider Caribbean Region, Cartagena, 24 March 1983, in force 11 October 1986; <http://www.cep.unep.org/cartagena-convention>; Protocol Concerning Pollution from Land-Based Sources and Activities, Oranjestad, 6 October 1999, in force 13 August 2010; all available at <http://www.cep.unep.org/cartagena-convention>; and Protocol Concerning Specially Protected Areas and Wildlife (SPAW) in the Wider Caribbean Region, Kingston, 18 January 1990, in force 18 June 2000, <http://www.cep.unep.org/cartagena-convention/spaw-protocol/overview-of-the-spaw-protocol>.

Within the WCR lie two key geopolitical structures which will be the subject of discussion in this paper. First, there is the Caribbean Community (CARICOM) group, which was birthed in the West Indies Federation[8] in 1958. The union is today constituted and guided by means of the 2001 Revised Treaty of Chaguaramas,[9] and is a regional integration movement which comprises 15 member states and five associate member States.[10] This arrangement is primarily for purposes of economic and regional integration, as well as the management of the region's natural and human resources.



Map 1. Map of the Wider Caribbean Region including Caribbean Community (CARICOM) and Organization of Eastern Caribbean States (OECS) States[11]

Within this arrangement is another economic sub-union – the Organisation of Eastern Caribbean States (OECS), which currently comprises nine members, spread across the Eastern Caribbean in a near-continuous archipelago,[12] encompass-

[8] The West Indies Federation was a Federation of ten Caribbean territories, and was created in 1958 with the purpose of estabishing a political union among its members. The Federation collapsed in 1962. Caribbean Community Secretariat, 'West Indies Federation', available at <http://www.caricom.org/jsp/community/west_indies_federation.jsp?menu=community> (visited 18 September 2013).

[9] Revised Treaty of Chaguaramas establishing the Caribbean Community Including the CARICOM Single Market and Economy, Nassau, 5 July 2001, available at <http://www.caricom.org/jsp/community/revised_treaty-text.pdf> (visited 8 June 2013).

[10] Article 3 of the 2001 Revised Treaty of Chaguaramas. The member states of CARICOM are Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago; and its associate members are Anguilla, Bermuda, British Virgin Islands, Cayman Islands and the Turks and Caicos Islands.

[11] Source: UNEP, 'Wider Caribbean Region', available at <http://www.cep.unep.org/content/wcr.jpg/view> (visited 28 May 2013).

[12] Antigua and Barbuda, Commonwealth of Dominica, Grenada, Montserrat, St Kitts and Nevis, St Lu-

ing states in both the Leeward Islands in the north and the Windward Islands to the south. The bloc is guided by means of the 2011 Revised Treaty of Basseterre,[13] and all members of the OECS are either full[14] or associate members of CARICOM.

The members of CARICOM and OECS are all Small Island Developing States (SIDS) – coastal countries that tend to share similar sustainable development challenges, including excessive dependence on international trade, fragile environments, limited resources, remoteness, small but growing populations, susceptibility to natural disasters, and vulnerability to external shocks.[15] Poverty is widespread throughout both the mainland and island countries, where an average 38 per cent of the population is poor.[16] Most economies are based on agriculture and the extraction of marine living resources, with the exception of the petroleum producing state of Trinidad and Tobago.[17] Tourism also makes a significant contribution to the economies of countries in the WCR.[18]

The focus of this paper is ocean governance in the CARICOM Caribbean. After describing the importance of the marine environment to the Caribbean region and the challenges facing ocean governance in this region the paper provides an overview of regional efforts to manage the marine environment and comments on the achievements and shortcomings of such efforts. Finally, suggestions are made as to how ocean governance might be improved in the CARICOM Caribbean.

2 The importance of the marine environment to the Caribbean Region

The marine environment of the WCR should be viewed as an invaluable and immeasurable resource, which has cultural, ecological, economic and spiritual significance to the region. The region extends from Florida in the north, to French Guiana in the south-east. This includes the Caribbean Sea, the Western edge of the Atlan-

cia and St Vincent and the Grenadines. The chain is 'broken' by the French overseas territories of Martinique and Guadeloupe, which lie between St. Lucia and Dominica and Dominica and Montserrat respectively on the Lesser Antillean chain. Anguilla and the British Virgin Islands are associate members.

13 Revised Treaty of Basseterre Establishing the Organisation of Eastern Caribbean States Economic Union, Gros Islet, 18 June 2010, in force 21 January 2011, available at <http://www.oecs.org/publications/doc_download/506-revised-treaty-of-basseterre-establishing-the-oecs-economic-union> (visited 8 June 2013).

14 All full members of the OECS are also full members of CARICOM.

15 See Department of Economic and Social Affairs Statistics Division, Office of the High Representative for Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, *World Statistics Pocketbook 2010: Small Island Developing States*, (UN, 2011), available at <http://www.unohrlls.org/UserFiles/File/Pocketbook2010-SIDS%20full.pdf,> (visited 27 September 2013) ix

16 UNEP, *Caribbean Environmental Outlook* (UNEP, 2004), available at <http://www.pnuma.org/deat1/pdf/GEO%20Carribean%20Environment%20Outlook%20Ing%202004.pdf> (visited 28 May 2013).

17 Nicole Brown, Tighe Geoghegan and Yves Renard, *A Situational Analysis for the Wider Caribbean* (IUCN, 2007), available at <http://data.iucn.org/dbtw-wpd/edocs/2007-035.pdf> (visited 27 September 2013).

18 See below under Section 2.

tic Ocean and the Gulf of Mexico, which together arguably meet the definition of a 'semi-enclosed sea' as identified in Article 122 of UNCLOS.[19]

The marine environment of the WCR is extremely susceptible to influences on it.[20] Accordingly, concerted efforts are required to achieve the protection of the integrity of the coastal and marine resources of the WCR. Within the WCR is the semi-enclosed Caribbean Large Marine Ecosystem (CLME) – a distinct ecological region, bounded to the north by the Bahamas and the Florida Keys, to the east by the Windward Islands, to the south by the South American continent, and to the west by the isthmus of Central America. The CLME contains a substantial proportion of the region's fishery resources.[21]

Much of the importance of marine resources to the Caribbean region is tied to the ability of states to utilise and exploit their exclusive economic zones (EEZ) as provided for by UNCLOS.[22] Many of the smaller islands – about 66 per cent of the CARICOM membership[23] and 100 per cent of the OECS membership – are entirely 'coastal', with most economic activities and investments being centered on the coastal zone. The coastal zones are also home to approximately 75 per cent of the region's populace.[24] Most CARICOM states can peg the majority of their national wealth directly to their marine resources. In terms of Article 56 of UNCLOS, a coastal state has sovereign rights over its EEZ for the purposes of, *inter alia*, exploiting natural resources and pursuing other economic activities (such as the production of energy). This 200 nautical mile formulation of marine delimitation under UNCLOS[25] in some instances translates into a marine environment equal to, or larger than, a country's terrestrial area – especially for the smaller islands in the region, for which the ratio of marine to terrestrial environment can be as much as 388:1 (as in the case of Barbados).[26] However, because of the close proximity of the islands in the Caribbean Sea, the issue of uncertain marine delimitations provides an ever-present threat to sustainable governance of the marine environment.[27]

[19] Article 122 reads: '[f]or the purposes of this Convention, "enclosed or semi-enclosed sea" means a gulf, basin or sea surrounded by two or more States and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal States'.

[20] See, for example, Economic Commission for Latin America and the Caribbean (ECLAC), *Major Issues in the Management of Enclosed or Semi-Enclosed Seas, with Particular Reference to the Caribbean Sea*, Doc. LC/CAR/L.24 (2004), available at <http://www.eclac.org/publicaciones/xml/1/20811/L0024.pdf> (visited 28 May 2013).

[21] Lucia Fanning, Robin Mahon and Patrick McConney, 'Focusing on Living Marine Resource Governance: The Caribbean Large Marine Ecosystem and Adjacent Areas Project', 37 *Coastal Management* (2009) 219–234 at 222.

[22] See Lovell, *Regionalism Versus National*, *supra* note 5.

[23] With the exception of the larger island states of Jamaica and Trinidad and Tobago, and the continental states of Guyana, Suriname and Belize.

[24] UNEP, *Global Environmental Outlook (GEO) 5* (UNEP, 2012), available at <http://www.unep.org/geo/geo5.asp>, Chapter 12: Latin America and the Caribbean.

[25] Specifically Art's 46–48 dealing with archipelagic states, and Art's 55–57 dealing with the exclusive economic zone.

[26] See UNEP, *Caribbean Environmental Outlook*, *supra* note 16, at 18.

[27] Most of the marine delimitation in the region remains unsettled. The *Treaty Between the Republic of*

The benefits of utilising and harvesting the resources of the EEZ are particularly evident in two of the major industries in the region – fisheries and tourism. Approximately 113 000 tonnes of fish are caught annually within the EEZs of the CARICOM Caribbean states, of which 45 per cent is consumed locally (by residents and tourists), 23 per cent is shipped to European Union territories and 30 per cent is exported to North America.[28] Resources harvested include coastal pelagic fish catches, conch catches, continental shelf demersal fish catches, deep-slope and bank fish catches, lobster catches, offshore pelagic fish catches, reef fish catches and shrimp catches. There is also a variety of less important catches, such as marine mammals, sea turtles, sea urchins, and seaweeds.[29] Fishing is predominantly undertaken with small crafts, with the larger states such as Belize, Guyana and Suriname practicing trawling. Concern over illegal, unreported and unregulated (IUU) fishing led to the adoption of the 2010 Castries Declaration on Illegal, Unreported and Unregulated Fishing[30] by the Second Special Meeting of the Caribbean Regional Fisheries Mechanism's Ministerial Council.[31]

Relative to its size, the island population of the Caribbean is more dependent on income from tourism than that of any other part of the world, with over one-fifth (21.7 per cent) of all capital investment linked to tourism – well over twice the global average.[32] Twenty-five million tourists choose to holiday in the Caribbean each year,[33] in large part in pursuit of a dream of relaxation shaped by the natural features of the region – the sun, the sand and the sea – but not necessarily with concern for their impacts on other, more sensitive natural features.

Another important use of the WCR is shipping – both for commercial and non-commercial purposes.[34] Cruise ships and yachts, which are both linked to the region's tourism industry, are the main non-commercial uses. In recent times, the use of the

Trinidad and Tobago and Grenada on the Delimitation of Marine and Submarine Areas (21 April 2010, available at <http://www.gov.gd/egov/docs/other/delimitation_treaty_trinidad_tobago_grenada.pdf> (visited 27 September 2013)) is one of the few boundary delimitation agreements. In addition, the OECS has established the Agreement Establishing Common Fisheries Surveillance Zones of Participating Member States of the Organisation of Eastern Caribbean States (1 February 1991, in force 1 March 1991, available at <http://faolex.fao.org/docs/pdf/ant1087.pdf> (visited 27 September 2013)). See also Lovell, *Regionalism Versus National*, *supra* note 5.

28 Terese Maitland and Karen Morrison, Oceans and Human Health Training Course. (UWI CaveHill Campus, Barbados, 2010), available at <http://www.conservation.bm/storage/projects-pages/ocean%20%20human%20health%20course%20UWI%20Nov%202010.pdf> (visited 27 September 2013).

29 Fanning et al, 'Focusing on Living Marine', *supra* note 22.

30 Castries Declaration on Illegal, Unreported and Unregulated Fishing, Castries, 28 July 2010, available at <http://www.caricom-fisheries.com/LinkClick.aspx?fileticket=eeRVRXUBWGA%3D&tabid=37> (visited 27 September 2013).

31 See <http://www.caricom-fisheries.com/AnnualMeetings/MinisterialCouncilMeeting/tabid/181/Default.aspx> (visited 27 September 2013).

32 John B. R. Agard, Angela Cropper and Keisha Garcia (eds), Caribbean Sea Ecosystem Assessment, (2007), available at <http://www.thecropperfoundation.org/docs/carsea/CARSEA%20Report.pdf> (visited 28 September 2013).

33 *Ibid*.

34 Asha Singh and Laurence Mee, 'Examination of Policies and MEAs Commitment by SIDS for Sustainable Management of the Caribbean Sea', 32 *Marine Policy* (2008) 274–282.

marine environment has also evolved to include oil and gas exploration;[35] the marine environment is additionally used as a source of potable water (after purification) in some cases,[36] as well as a source of alternative energy.[37]

3 Challenges to managing the marine environment of the Caribbean Region

As illustrated above, use of the marine environment is crucial for the WCR. However, the uses the marine environment is put to also place it under incredible stress. According to UNEP's *Global Environmental Outlook 5*,[38] the key environmental problems facing the coastal and marine areas of the Latin American and Caribbean region are related to habitat conversion and destruction, pollution produced by human activities and overexploitation of coastal and offshore fisheries resources.[39] The underlying causes of these problems are linked to a proliferation of resorts related to the development of coastal areas for infrastructure, tourism and urbanisation, and to the conversion of coastal habitats for uses such as agriculture and the expansion of aquaculture.[40] In addition to diminished natural productivity of coastal areas, there has been a general lack of effective coastal regulation.[41] The effects of climate change and global warming are expected to exacerbate these stresses on the primarily coastal-dwelling populace of the region.[42]

Efforts to address the challenges to marine conservation and environmental protection in the Caribbean area have been ongoing at the regional and national levels, and began in various guises before the end of the colonial era.[43] These include, *inter alia*, measures aimed at the protection of specific species – including cetaceans,[44] marine

35 As in the case of Trinidad and Tobago.
36 For example, Barbados.
37 As in the case of Dominica, Grenada and St. Christopher-Nevis, to list a few examples.
38 UNEP, *Global Environmental Outlook (GEO) 5*, *supra* note 24, at Chapter 12.
39 *Ibid*.
40 *Ibid*.
41 UNEP, *Municipal Wastewater as a Land-based Source of Pollution in Coastal and Marine Areas of Latin America and the Caribbean* (UNEP/ Regional Office for Latin America and the Caribbean (ROLAC), 2001), available at <http://docs.watsan.net/Scanned_PDF_Files/Class_Code_8_Countries/827-17634.pdf> (visited 28 September 2013).
42 Caribbean Community Climate Change Centre (CCCCC), *Climate Change and the Caribbean: A Regional Framework for Achieving Development Resilient to Climate Change (2009–2015)* (CCCCC, 2009), available at <http://www.cpdcngo.org/cpdc/attachments/article/107/Regional%20Framework.pdf> (visited 28 September 2013).
43 David Read Barker, 'Biodiversity Conservation in the Wider Caribbean Region', 11 *Review of European Community and International Environmental Law* (2002) 74–83 at 82.
44 See, for example, UNEP, 'Elements for the Development of a Marine Mammal Action Plan for the Wider Caribbean: A Review of Marine Mammal Distribution', UN Doc. UNEP(DEC)/CAR IG.20/INF.3 (2001); UNEP, 'Draft Action Plan for the Conservation of Marine Mammals in the Wider Caribbean Region', UN Doc. UNEP(DEC)/CAR WG.27/2 Rev.3 (2005).

turtles[45] and other marine mammals,[46] and both commercially and domestically valuable food species such as the queen conch (*Strombus (Lobatus) gigas*),[47] Nassau grouper (*Epinephelus striatus*)[48] and West Indian sea urchin (*Tripneustes ventricosus*).[49] A key conservation tool which has been relied upon in the region has been coastal and marine protected areas (MPAs); but, as Guarderas et al[50] point out, these MPAs are not sufficiently representative, and, according to Miller, many are simply 'paper parks'.[51]

4 Approaches to managing the marine environment of the Caribbean Region

A significant event for marine management in the Caribbean was the launching by UNEP, in 1976, of the Regional Seas Programme (RSP) for the WCR. In 1981, under the auspices of the RSP, the Caribbean Action Plan was adopted. The Action Plan initially identified the need for evaluation and control of marine pollution, evaluation of impacts on the coastal area, fishing studies, management of watersheds, evaluation of natural hazard effects, energy accounting systems studies, urbanization of the coastal area, and building capacity and training. The Caribbean Action Plan has been periodically evaluated and adapted to the changing political and environmental realities and to regional necessities.[52]

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45 For example, efforts by Wider Caribbean Sea Turtle Conservation Network (WIDECAST), under the SPAW Protocol and Inter-American Convention for the Conservation and Protection of Sea Turtles (Caracas, 1 December 1996, into force 2 May 2001, <http://www.iacseaturtle.org/>).

46 For example, the West Indian manatee under Annex I of the SPAW Protocol.

47 Listing of the queen conch under Annex II of SPAW Protocol, and the 2003 recommendation by the Standing Committee of CITES on non-trade with Haiti, the Dominican Republic and Honduras. Belize is currently considering its options with respect to the harvesting of the resource in light of the United States Congress' proposed ban against the importation of queen conch. The US is the single largest importer of the queen conch. See Caribbean 360, 'Belize going up against US NGO to defend right to harvest conch' (5 November 2012), available at <http://www.caribbean360.com/index.php/news/belize_news/630822.html#axzz2PBumyUSF> (visited 6 June 2013).

48 UNEP, 'Report on Fish Spawning Aggregations in the Wider Caribbean with Emphasis on the Nassau Grouper', Fourth Meeting of the Scientific and Technical Advisory Committee (STAC) to the Protocol Concerning Specially Protected Areas and Wildlife (SPAW) in the Wider Caribbean Region, Gosier, Guadeloupe, France, 2–5 July 2008, UN Doc. UNEP(DEPI)/CAR WG.31/INF.7 (2008).

49 For example, the moratorium on harvesting of the sea urchin under s. 8 of the 1998 Fishing (Management) Regulations (Barbados), available at <http://www.ilo.org/dyn/natlex/docs/ELECTRONIC/87107/98970/F1464867899/BRB87107.pdf> (visited 29 September 2013).

50 A. Paulina Guarderas, Sally D. Hacker and Jane Lubchenco, 'Current Status of Marine Protected Areas in Latin American and the Caribbean', 22 *Conservation Biology* (2008) 1630–1631 at 1631; and A. Paulina Guarderas, Sally D. Hacker and Jane Lubchenco, 'Ecological Effects of Marine Reserves in Latin America and the Caribbean', 429 *Marine Ecology Programme Series* (2011) 219–225.

51 Marian A. L. Miller, 'Protecting the Marine Environment of the Wider Caribbean Region: The Challenge of Institution-Building', 37 *Green Globe Yearbook* (1996) 37–46 at 43; and The Nature Conservancy, 'Caribbean Challenge Initiative', available at <http://www.nature.org/ourinitiatives/regions/caribbean/caribbean-challenge.xml> (visited 6 June 2013).

52 Nelson Andrade Colmenares and J. Jairo Escobar, 'Ocean and Coastal Issues and Policy Responses in the Caribbean, 45 *Ocean & Coastal Management* (2002) 905–924.

Perhaps the next most significant event was the adoption, in 1983, of the Cartagena Convention, which provides an opportunity for significant advances in the regional environmental law toward cooperation for the protection of the marine environment of the WCR. The Cartagena Convention is, to date, the only regional legal framework available to CARICOM, OECS and other WCR states specifically to foster combined or singular action for the sustainable management of marine resources. Movement toward the realisation of the Convention was given additional impetus when UNCLOS was adopted in Montego Bay, Jamaica, in 1982.[53] The Cartagena Convention exemplifies Chapter 17 of Agenda 21[54] and will be instrumental in the furtherance of initiatives envisioned under paragraphs 158 – 177 of the Rio+20 Outcome Document ('The Future We Want'),[55] which address oceans and seas. Unfortunately, the Cartagena Convention's acceptance by Caribbean states has been lukewarm. Nevertheless, as outlined below, there have been several noteworthy policy responses to ocean and coastal problems in the Caribbean.[56]

The adoption of the Cartagena Convention, and the period subsequent to the 1992 United Nations Conference on Environment and Development in Rio de Janeiro, Brazil, both marked the era of increased ratification of multilateral environmental agreements by Caribbean countries. Such agreements aimed at addressing a variety of marine-related issues, including biodiversity,[57] climate change,[58] fisheries,[59] hazard-

[53] Barker, 'Biodiversity Conservation', *supra* note 43.

[54] Commonly termed the 'marine chapter', Chapter 17 of Agenda 21 (Agenda 21, UN Conference on Environment and Development, Rio de Janeiro, 13 June 1992, UN Doc. A/CONF.151/26/Rev.1 (1992), available at http://www.un.org/esa/dsd/agenda21/) is titled 'Protection of the Oceans, All Kinds of Seas, Including Enclosed and Semi-Enclosed Seas, and Coastal Areas and the Protection, Rational Use and Development of Their Living Resources'.

[55] Rio+20 Outcome Document 'The Future We Want' (2012), available at <http://www.uncsd2012.org/content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf> (visited 30 March 2013).

[56] Colmenares and Escobar, 'Ocean and Coastal Issues', *supra* note 52.

[57] Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, <http://www.biodiv.org>.

[58] United Nations Framework Convention on Climate Change, New York, 9 May 1992, in force 21 March 1994, 31 *International Legal Materials* (1992) 849, <http://unfccc.int>.

[59] Agreement for the Implementation of the Provisions of the UN Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, New York, 4 August 1995, in force 11 December 2001, 34 *International Legal Materials* (1995) 1542, <http://www.un.org/Depts/los/convention_agreements/texts/fish_stocks_agreement/CONF164_37.htm> (visited 22 March 2012).

ous[60] and chemical[61] wastes, invasive species,[62] oil spills,[63] shipping,[64] wetlands,[65] and wildlife.[66] In addition, international instruments which promote the management and conservation of cultural features of the marine environment have also been relied upon as a conservation tool. For example, the Belize Barrier Reef Reserve System[67] and Saint Lucia's Pitons Management Area[68] are both MPAs which have been designated as World Heritage Sites under the 1972 World Heritage Convention.[69] Further, the Convention on the Protection of Underwater Cultural Heritage[70] can be useful

[60] Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Basel, 22 March 1989, in force 5 May 1992, 28 *International Legal Materials* (1989) 657, <http://www.basel.int>.

[61] Convention on Persistent Organic Pollutants, Stockholm, 22 May 2001, in force 17 May 2004, 40 *International Legal Materials* (2001) 532, <http://www.pops.int>; and Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, Rotterdam, 11 September, 1998, in force 24 February, 38 *International Legal Materials* (1999) 1, <http://www.pic.int>. The recently concluded Minamata Convention (Minamata Convention on Mercury, Geneva, 19 January 2013) will also be relevant.

[62] For example, International Convention for the Prevention of Pollution from Ships, 1973, first signed 2 November 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), adopted 17 February 1978. The combined instrument entered into force on 2 October 1983, 12 *International Legal Materials* (1973) 1319, <http://www.imo.org>.

[63] For example, MARPOL 73/78; International Convention on Civil Liability for Oil Pollution Damage, Brussels, 29 November 1969, in force 19 June 1975, 973 *United Nations Treaty Series* 3); 1970 Convention Emergency Fund (see <http://www.unesco.org/new/en/culture/themes/illicit-traffic-of-cultural-property/1970-convention-emergency-fund/> (visited 29 September 2013)); and Convention on Limitation of Liability for Maritime Claims (London, 19 November 1976, in force 1 December 1986; <http://www.imo.org>, and Protocol of 1996 to amend the Convention on Limitation of Liability for Maritime Claims, 1976 (London, 2 May 1996, in force 13 May 2004).

[64] For example MARPOL 73/78 and Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 13 November 1972, in force 30 August 1975, 11 *International Legal Materials* (1972) 1294; 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 7 November 1996, in force 24 March 2006, <http://www.imo.org>.

[65] Convention on Wetlands of International Importance, Ramsar, 2 February 1971, in force 21 December 1975, 11 *International Legal Materials* (1972), 963, <http://www.ramsar.org>.

[66] Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington DC, 3 March 1973, in force 1 July 1975, 993 *United Nations Treaty Series* 243, <http://www.cites.org>; Convention on the Conservation of Migratory Species of Wild Animals, Bonn, 23 June 1979, in force 1 November 1983, 19 *International Legal Materials* (1980) 15, <http://www.cms.int>; International Convention for the Regulation of Whaling, Washington D.C., 2 December 1946, in force 10 November 1948, 161 *United Nations Treaty Series* 72; and the 1994 Inter-American Convention for the Conservation and Protection of Sea Turtles.

[67] UNESCO, 'Belize Barrier Reef Reserve System, available at <http://whc.unesco.org/en/list/764> (visited 29 September 2013).

[68] UNESCO, 'Pitons Management Area', available at <http://whc.unesco.org/en/list/1161> (visited 29 September 2013).

[69] Convention Concerning the Protection of the World Cultural and Natural Heritage, Paris, 16 November 1972, in force 17 December 1975, 11 *International Legal Materials* (1972) 1358, <http://whc.unesco.org>.

[70] UNESCO Convention on the Protection of the Underwater Cultural Heritage, Paris, 2 November 2001, in force 2 January 2009, available at <http://portal.unesco.org/en/ev.php-URL_ID=13520&URL_DO=DO_TOPIC&URL_SECTION=201.html> (visited 6 June 2013).

for the protection of shipwrecks in the region, as well as areas such as Jamaica's Port Royal[71] and the statues in Grenada's Molinere/Beausejour Marine Protected Area.[72]

Efforts under the relevant multilateral environmental agreements (MEAs) have been buttressed by the incorporation of issues of marine management into the economic integration agreements of Chaguaramas, as well as Basseterre and the St. George's Declaration. For example, Article 121 of the Revised Treaty of Chaguaramas defines the Caribbean Sea as a 'special area', though the relevance of this is not fully articulated in the text of the agreement. What is clearer is the designation, in 1991, of the Caribbean Sea as a Special Area under Annex V of the MARPOL Convention, which prescribes certain measures for the control of pollution by garbage from ships. This designation came into effect for the Caribbean region in 2011, and was an important early step, given that sewage and domestic wastewater from land-based and marine sources (including ships) were first identified as problems in the Wider Caribbean region in 1994.[73] However, the 20 years between the identification of the area as one requiring Special Area status and its designation under the MARPOL Convention was an unacceptably long period.

In the 21st century, efforts to conserve and manage the marine environment have shifted away from the fragmented approach that was taken during the 1980s and early 1990s, and towards the adoption of more holistic strategies. This is evident in the moves by states to embrace more comprehensive strategies, such as integrated coastal zone management[74] and the ecosystem approach to fisheries and ocean governance. The ecosystem approach has been emphasized by the Conference of the Parties to the 1992 Convention on Biological Diversity,[75] and has gained currency in the Caribbean region. For example, in 2011, the Centre for Resource Management and Environmental Studies of the University of the West Indies and the Caribbean Law Institute Centre published a Technical Report entitled 'Ecosystem-based Management Principles in the Caribbean'.[76] This complemented an earlier publication

[71] Port Royal was a city located at the tip of the Palisadoes (which is a tombolo, or narrow sand bar linking a small island with the mainland, located at the mouth of the Kingston Harbour in south-eastern Jamaica).

[72] The Molinere /Beausejour Marine Protected Area is located on the west coast of Grenada, and spans a length of approximately 2.5 kilometres. It was established by the 2001 Fisheries (Marine Protected Area) Regulations (Grenada) to protect the best reef system in Grenada. The area is subject to high levels of fishing, scuba-diving and mooring from yachts. One of the major objectives of the Regulations was thus to zone the area into a multi-use MPA. Molinere Bay is also the site of the Grenada Underwater sculpture Park, an underwater gallery comprising 65 sculptures anchored to the seafloor, and designed to act as artificial reefs. See Lyndon Robertson, 'Integrated Management of Marine Protected Areas in Grenada', 53rd Gulf and Caribbean Fisheries Institute (2003), available at <http://procs.gcfi.org/pdf/gcfi_54-61.pdf> (visited 7 June 2013).

[73] UNEP, *Regional Overview of Land-Based Sources of Pollution in the Wider Caribbean Region*, CEP Technical Report No. 33 (UNEP Caribbean Environment Programme, 1994), available at <http://www.cep.unep.org/publications-and-resources/technical-reports/tr33en.pdf> (visited 7 June 2013).

[74] For example, the 1998 Coastal Zone Management Act (Barbados) and 1998 Coastal Zone Management Act (Belize).

[75] See 'Ecosystem appraoch', CBD Decisions V/6 (2000) and VII/11 (2004).

[76] CERMES/CLIC, *Ecosystem-based Management Principles in the Caribbean*, CERMES Technical Report

entitled 'Towards Marine Ecosystem-Based Management in the Wider Caribbean'[77] – which incorporated a broad range of perspectives of ocean governance in the region. Additionally, the Cartagena Convention's Protocol Concerning Specially Protected Areas and Wildlife (SPAW)[78] and Protocol on Marine Pollution from Land-based Sources and Activities (LBS)[79] promote this approach, as do projects addressing ocean governance issues, such as the PROGOVNET[80] and CLME[81] Projects.

In keeping with the ecosystem approach, the use of MPAs has been coupled with coastal zone management as a further management mechanism for the conservation and management of sensitive or threatened ecosystems,[82] including more recent efforts at combined fisheries and multi-use management.[83] Belize[84] and Barbados[85] are notable examples in this regard.[86] However, while a large number of MPAs exist in the region, the deficiencies highlighted by Miller[87] and Guarderas et al[88] (namely, that the existing MPAs are non-representative and ineffective) are prominent, as most

No 47, available at <http://www.cavehill.uwi.edu/cermes/Technical_Reports/CLIC_2011_PROGOVNET_ecosystem-based_management_principles_Caribbean_CTR_47.pdf> (visited 7 June 2013).

77 Lucia Fanning, Robin Mahon and Patrick McConney, *Ecosystem-based Management Principles in the Caribbean* (Amsterdam University Press, 2011).

78 For example, Art's 4–11. See also Benedict Sheehy, 'Does International Marine Environmental Law Work? An Examination of the Cartagena Convention for the Wider Caribbean Region', 12 *Georgetown International Environmental Law Review* (2004) 441–472; Alessandra Vanzella-Khouri, 'Implementation of the Protocol concerning Specially Protected Areas and Wildlife (SPAW) in the Wider Caribbean Region', 30 *The University of Miami Inter-American Law Review* (1998) 53–83; and Vijay Krishnarayan, Yves Renard and Lyndon John, 'The SPAW Protocol and Caribbean Conservation: Can a Regional MEA Advance a Progressive Conservation Agenda?', 9 *Journal of International Wildlife Law & Policy* (2006) 265–276 at 273.

79 For example, Art's III and IX and Annex III.

80 Strengthening Principled Ocean Governance Networks: Transferring Lessons from the Caribbean to the Wider Ocean Governance Community (PROGOVNET) was a Nippon Foundation funded project, which ran from January 2008 until March 2011 and aimed to strengthen regional ocean governance within the Caribbean. Dalhousie University, 'Completed International Projects', available at <http://intlresearchdevelopment.dal.ca/International_Projects/Completed_Projects/> (visited 18 September 2013).

81 The CLME Project is a programme of the UNESCO Intergovernmental Oceanographic Commission's Sub-commission for the Caribbean and Adjacent Regions (IOCARIBE), and assists countries in the Wider Caribbean Region to improve management of shared marine living resources through the use of an ecosystem approach. For further information on the project, see IOCARIBE, 'Caribbean LME Project', available at <http://iocaribe.ioc-unesco.org/index.php?option=com_content&view=article&id=56&Itemid=27> (visited 18 September 2013).

82 See, for example, Leandra Cho, 'Marine Protected Areas: A Tool for Integrated Coastal Management in Belize', 48 *Ocean and Coastal Management* (2005) 932–947 at 946.

83 Examples include the Soufriere (Callum M. Roberts et al, 'Effects of Marine Reserves on Adjacent Fisheries', 294 *Science* (2001) 1920–1923); and the Molinere-Beaseajour (Lyndon Robertson, 'Integrated Management of Marine Protected Areas in Grenada', 53rd Gulf and Caribbean Fisheries Institute (2003), available at <http://procs.gcfi.org/pdf/gcfi_54-61.pdf> (visited 7 June 2013))

84 See, for example, Cho, 'Marine Protected Areas', *supra* note 82.

85 Janice Cumberbatch, *Case Study of the Folkestone Park and Marine Reserve, Barbados*, CANARI Technical Report No. 281 (CANARI, 2001), available at <http://www.canari.org/folkstone.pdf> (visited 29 September 2013).

86 As indicated in footnote 74, Belize and Barbados both have statutes which specifically address coastal zone management. In the case of Belize, the statute established the Coastal Zone Management Authority and integrated ICZM and MPA management; while Barbados' legislation established the Coastal Zone Management Unit, and sought to cumulate and streamline various statutes which concerned the management of the coastal zone. See Cho, 'Marine Protected Areas', *supra* note 82.

87 Miller, 'Protecting the Marine Environment', *supra* note 51.

88 Guarderas et al, 'Current Status of Marine Protected', *supra* note 50.

MPAs are either coastal, in the territorial sea or poorly planned.[89] Indeed, most MPAs fail adequately to balance competing interests, and because of issues of monitoring and regulation are often simply 'paper parks'. However, the prospects of the Caribbean Sea Commission and the Caribbean Challenge, discussed below, may perhaps provide a glimmer of hope in this regard.

The ecosystem approach is also reflected in the linking of coastal, land-based and marine issues through the combination of the SPAW and LBS Protocols, which together aim at mitigating several of the principal threats to the region's marine environment. The two Protocols are linked through the categorization of Class I waters (these being areas where states can extend added protection to both ecosystems and species). Class I waters are defined by the LBS Protocol to include areas that provide habitat for species protected under the SPAW Protocol, as well as protected areas listed under the SPAW Protocol.[90]

Finally, states can rely on tools which have been in existence in the region for over a decade, but have not been used as extensively for marine management as they have in other contexts, such as waste management. These tools include environmental impact assessment (EIA)[91] – which is provided for in the Cartagena Convention[92]

[89] *Ibid*.

[90] Annex III of the 1999 LBS Protocol defines Class I waters as waters in the Convention area that, due to inherent or unique environmental characteristics or fragile biological or ecological characteristics or human use, are particularly sensitive to the impacts of domestic wastewater. Class I waters include, but are not limited to:
(a) waters containing coral reefs, seagrass beds, or mangroves;
(b) critical breeding, nursery or forage areas for aquatic and terrestrial life;
(c) areas that provide habitat for species protected under the Protocol Concerning Specially Protected Areas and Wildlife to the Convention (the SPAW Protocol);
(d) protected areas listed in the SPAW Protocol; and
(e) waters used for recreation.

[91] EIA as a tool for environmental and natural resource management has seen limited success in the CARICOM Caribbean region. Five jurisdictions have implemented legislation aimed specifically at incorporating the EIA regime into environmental management and conservation, while at least two others have incorporated it into town and country (development) planning. However, public interest in the EIA process is lacking, and environmental litigation has been rare, with only a handful of cases taken to the courts from Jamaica (*Pear Tree Bottom*, *Harbour View* and *Palisadoes* cases), Belize (*BACONGO Nos. 1 & 2*), Trinidad and Tobago (*Talisman* and *Fishermen and Friends of the Sea*), the British Virgin Islands (*Virgin Islands Environmental Council*), and the Bahamas (*Save Guana Cay*) (see *infra* notes 138–144), in the last 10 years. For a further discussion on this, see Alana Malinde S. N. Lancaster and Lyndon F. Robertson, 'Environmental Governance for Oceans, Health and Humans in the Caribbean Region: A Phoenix Rising From the Ashes?' 15 *Advances in Medical Sociology:* (forthcoming 2013) 311; Danielle E. Andrade, Carole Excell, and Candy Gonzalez, 'Citizen Enforcement of Procedural Rights in the Environmental Impact Assessment Process in Belize and Jamaica', a paper presented at the Ninth International Conference on Environmental Compliance and Enforcement 2011, available at <http://inece.org/conference/9/proceedings/49_Andrade.pdf> (visited 29 September 2013); Mark Bynoe, 'Citizen Participation in the Environmental Impact Assessment Process in Guyana: Reality or Fallacy?' 2 *Law, Environment and Development Journal* (2006) 35–49; and Rajendra Ramlogan, 'Using the Law to Achieve Environmental Democracy and Sustainable Development: An Elusive Dream for Trinidad and Tobago', 1 *Electronic Green Journal*, (2010), available at <http://www.escholarship.org/uc/item/11p9f74m#page-2> (visited 29 September 2013).

[92] Article 12.

and the SPAW[93] and LBS[94] Protocols; economic instruments[95] and 'debt-for-nature' swaps. For example, Jamaica – which has benefited from a debt-for-nature swap[96] – has indicated its interest in participating in more debt-for-nature swaps which address climate change-based threats to the marine resource under the Caribbean Challenge.[97] The Caribbean Challenge[98] is an endorsement of Decision VII/28[99] of the Convention on Biological Diversity and will see several states in the WCR dedicating between 20-25 per cent of their marine and coastal environment to MPAs. This initiative aims at curbing a possible trend toward creation of 'paper parks', effecting more comprehensive management and balancing competing uses of the marine environment in the region. This proposed dedication of 20-25 per cent of the marine and coastal environment to MPAs is valiant and pertinent; but may be overly ambitious and impractical, given the proximity of states, issues of marine delimitation, and, most importantly, the heavy reliance of Caribbean states on the marine environment.

5 Marine management and ocean governance in the Caribbean Region: smooth sailing or choppy waters?

An evaluation of the approaches by the Caribbean region to marine management and ocean governance yields a mixed scorecard. CARICOM states have illustrated their interest, or even commitment, in several instances; but this needs to be counterbalanced with sustained strategies and concrete measures toward the management of marine resources. The region has rarely adopted a proactive approach to the management of its natural resources, and often measures such as species-specific strategies

93 Article 13.

94 Article VII.

95 For example, deposit-refund schemes, environmental levies, and refundable bonds.

96 In its first debt-for-nature swap, Jamaica and the United States, in October 2004, signed a US$16 million agreement, which was aimed at supporting Jamaica's forest conservation activities. See 'US, Jamaica sign US$16-m debt-for-nature swap deal', Jamaica Observer of 11 October, 2004, available at <http://www.jamaicaobserver.com/news/67435_US--Jamaica-sign-US-16-m-debt-for-nature-swap-deal> (visited 29 September 2013).

97 See Caribbean 360, 'Wanted: More Debt-for-nature swaps for Caribbean' (10 July, 2009), available at <http://www.caribbean360.com/index.php/news/15566.html#axzz1Wkjzp52w> and 'Islands Explore Debt for Nature Swaps', *Jamaica Observer* of 26 October 2012, available at <http://www.jamaicaobserver.com/magazines/career/Islands-explore-debt-for-nature-swaps_12344486>. See also David Smith, 'The Jamaican Debt-for-Nature Swap Experience' (2005), available at <http://www.fundses.org.ar/deuxedu/biblioteca/9_presentacion_congresos_reuniones/the_jamaican_debt_for_nature_swap_experience_smith2005.pdf>; and Robert Weary, 'Strategy for Financing Action and Adaption in Small Island Developing States (SIDS) via Debt-for- Climate Swaps: A Global Approach' (2012), available at <http://www.yokwe.net/index.php?module=News&func=display&sid=3059> (all visited 7 June 2013).

98 The Caribbean Challenge is an initiative (launched in 2008) in terms of which ten participating Caribbean countries and territories commit to, *inter alia*, protect at least 20 percent of their marine and coastal habitats by 2020. The Nature Conservancy Caribbean, 'The Caribbean Challenge Initiative', available at <http://www.nature.org/ourinitiatives/regions/caribbean/caribbean-challenge.xml> (visited 18 September 2013).

99 'Protected Areas', CBD Decision VII/28 (2004).

have been driven by threats of endangerment or extinction of charismatic species, such as turtles and cetaceans, or by the decline of key commercial species.

An example is the decline in queen conch, which led to a recommendation by the Standing Committee of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 2003 that no imports be allowed from three parties – including Haiti,[100] which is a member of CARICOM. The issues surrounding the management of the queen conch illustrate that there has been a concomitant need for Caribbean states which are parties to CITES and are desirous of trading in listed species, to put in place the relevant mechanisms required by the Convention. In 1999, Jamaica – the largest supplier of conch in the Caribbean – sought to follow the permitting requirements outlined by CITES for an Appendix II species, particularly in light of the regulatory considerations of the leading importer of conch (this being the United States). Accordingly, the National Resource Conservation Authority (NRCA) – Jamaica's management authority under CITES – sought to implement the permit and quota requirements set by the Fisheries Division of the Ministry of Agriculture, and evaluated by the Scientific Authority in accordance with CITES guidelines, in the allocation of the export permits for two exporters. However, the Court of Appeal in the 1999 case of *Natural Resources Conservation Authority v Seafood and Ting*,[101] found that the absence of local legislation specifically authorising the NRCA to implement the national quota meant that, because the Jamaican Parliament had yet to enact local legislation implementing the Convention, the Agency had acted unlawfully in ratifying the decision by the Minister of Agriculture not to award CITES permits to the respondents. The NRCA therefore could not impose the quota on the two exporters. The aftermath of the case saw the passage, in rapid succession, of the Endangered Species Act of 2000 and attendant regulations, such as the Endangered Species (Protection, Conservation and Regulation of Trade) Establishment of Individual Export Quota (Conch, *Strombus gigas*) Regulations (2000), which collectively, firmly embedded CITES' requirements into the law of Jamaica.

Failures to implement CITES in the Caribbean are particularly problematic in light of regional reports drawing attention to the precarious conservation status of the species in the region.[102] The queen conch may again come to be at the centre of a marine management issue – this time involving Belize, another key exporter of the marine delicacy, in light of proposals by the United States that the species be banned from import into that country, and even given stricter protection under CITES.[103] A

[100] The other two parties were Honduras and the Dominican Republic which, along with Haiti, comprise the other two-thirds of the island of Hispañola.

[101] *Natural Resources Conservation Authority v Seafood and Ting International Ltd.; Natural Resources Conservation Authority v. DYC Fishing Ltd* (1999) 58 WIR 269.

[102] See Theile, *Queen Conch Fisheries and Their Management in the Caribbean.* (TRAFFIC Europe, 2001), available at <http://www.trafficj.org/publication/02_Queen_Conch.pdf> (visited 7 June 2013).

[103] In terms of a Decision (Decisions 16.141 to 16.148, 'Regional cooperation on the management of and trade in the queen conch (*Strombus gigas*)') of CITES at its COP 16, March 2013, range states are encouraged to take certain implementing and participatory actions, and the Secretariat is directed to take certain

ban on Belize conch exports to the United States could jeopardise Belize's multi-million dollar queen conch industry since, currently, the United States purchases 95 per cent of Belize's harvest.[104] Belize's position is that it has put measures in place to manage the conch fishery, such as setting a quota (or a total allowable catch) in 2006 of just over a million pounds per year, which represents 75 per cent of the country's assessed maximum sustainable yield. The state has also introduced managed access to the Glovers Reef Marine Reserve and the Port Honduras Marine Reserve – two key fishing grounds for the conch – and is in the process of drafting new fisheries legislation that will incorporate the new managed access regime, as well as stiffer penalties for infractions of fisheries laws.

While it was argued in the *Seafood and Ting* case that Jamaica did not voluntarily elect to be a party to CITES, but felt pressured to do so in order to maintain the conch trade with international trading partners which were parties to the Convention,[105] the case highlighted two critical marine and conservation management issues. First, even in the face of compelling evidence that a species may be overharvested, Caribbean states might be reluctant to put measures in place, perhaps because of certain species' economic importance, and short term planning with respect to their management. This has led to the crash of the West Indian sea urchin (*Tripneustes ventricosus*) fishery in Barbados;[106] and to continued deterioration in the status of the coney (*Cephalopholis fulva*), parrotfish (*Scaridae spp*), red hind (*Epinephelus guttatus*), spiny lobster (*Panulirus argus*) and whelk (*Cittarium pica*).[107] There is also concern about the Nassau grouper (*Epinephelus striatus*) – which is the most commercially important of the groupers in the Caribbean, but which has been recognised as endangered on the IUCN Red List because of overfishing.[108] Reminiscent of the situation with the queen conch, it is perhaps apposite to note that there has been a complete ban on the fishing of Nassau grouper in US federal waters, including the federal waters around Puerto Rico and the US Virgin Islands, since 1990. There is also a ban on fishing in US state waters, and the species is a candidate for the US endangered species list. Nevertheless, regional efforts to list the grouper on CITES or SPAW have, as in the case of the queen conch, been resisted, with the result that conservation mainly occurs at the national level by means of spawning aggregations, closed seasons, fishery management zones and MPAs.[109] Consequently,

steps. See 'Decisions of the Conference of the Parties to CITES in effect after the 16th meeting' at <http://www.cites.org/eng/dec/valid16/16_141-148.php> (visited 9 October 2013).

104 See Caribbean 360, 'Belize going up against', *supra* note 47.

105 *Seafood and Ting*, *supra* note 101, at 269.

106 See, for example, s. 8 of the 1998 Fishery (Management) Regulations (Barbados), *supra* note 49.

107 See, for example, ss. 42–60 of the 2013 Fisheries Regulations (Antigua and Barbuda), available at <http://www.ilo.org/dyn/natlex/docs/ELECTRONIC/93554/109410/F1756349636/ATG93554.pdf> (visited 29 September 2013).

108 See IUCN Red List of Threatened Species, '*Epinephelus striatus*', available at <http://www.iucnredlist.org/details/7862/10> (visited 14 September 2013).

109 A. Cornish and A-M Eklund, *Epinephelus striatus*, in IUCN Red List of Threatened Species, *supra* note 107; and the 2013 Fisheries Regulations (Antigua and Barbuda), *supra* note 107.

the species receives some level of protection, but it would be beneficial if efforts could be consistent throughout the range of the species.

The second critical issue arising from the *Seafood and Ting* case is that states of the region generally have a high ratification/accession rate, but subsequent incorporation of MEAs into national law often does not happen. Additionally, there are often challenges when laws are introduced at the national level, since at times they are not effectively implemented, and tend to merely exist on paper. The issue in the *Seafood and Ting* case arose primarily because of the dualist doctrine[110] inherent in the legal systems of the Commonwealth Caribbean. With the exception of Antigua and Barbuda,[111] the scope of treaty-making is reserved exclusively to the Executive. However, while a representative of the Executive may signal some level of commitment and intention to address an issue, without incorporation and contextualization into national law by the Legislature, an MEA's requirements have no legally binding effect within a country. This situation is considered to be one of the main impediments towards the effective implementation of MEAs in the region.[112] The problems that can arise from the dualist approach have been illustrated in at least two cases other than that of *Seafood and Ting* – the cases of *Acting Chief of Police v Bryan* (1987),[113] and *Talisman (Trinidad) Petroleum Limited v EMA* (2002).[114] In these cases, courts in the British Virgin Islands and Trinidad and Tobago, respectively, tried unsuccessfully to implement requirements under UNCLOS and the 1971 Ramsar Convention respectively, where the states had ratified these conventions but had not specifically incorporated them into their national law.[115]

[110] In essence, a dualist system requires a specific legislative act to incorporate international obligations into a state's national legal system; cf. 'monism', where such obligations are incorporated automatically.

[111] The 1987 Ratification of Treaties Act (Antigua and Barbuda) provides that certain treaties (including virtually all multilateral environmental agreements) cannot enter into force for Antigua and Barbuda unless and until approved by the Parliament of Antigua and Barbuda.

[112] The European Commission (EC) ACP MEAs Programme was launched in 2009 to assist ACP countries in implementing their international obligations through training in negotiation and lobbying skills; harmonized and streamlined national reporting to MEAs; project design and management; and improved information management. Several MEAs (United Nations Convention to Combat Desertification (UN Convention to Combat Desertification in Countries Experiencing Serious Drought and or Desertification, Particularly in Africa, Paris, 17 June 1994, in force 26 December 1996, 33 *International Legal Materials* (1994) 1309, http://www.unccd.int); Convention on Biological Diversity; United Nations Framework Convention on Climate Change and the Kyoto Protocol (Kyoto, 11 December 1997, in force 16 February 2005, 37 *International Legal Materials* (1998) 22); Cartagena Convention and its Protocols; MARPOL 73/78 and its Annexes and London Dumping Convention and its 1996 Protocol) were identified as the most crucial, and their implementation will be addressed under the six priority areas identified by the project – legal, technical, policy, institutional, awareness and financial.

[113] *Acting Chief of Police v Bryan* (1985) 36 WIR 207.

[114] EA 003 of 2002 (Trinidad and Tobago).

[115] For further discussion on this, see Winston Anderson, *Principles of Caribbean Environmental Law* (Environmental Law Institute, 2013) 36–37; and Winston Anderson, 'Implementing MEAs in the Caribbean: Hard Lessons from *Seafood and Ting*', 10 *Review of European Community and International Environmental Law* (2001) 227–233.

The *Westerhaven*[116] cases constitute a further illustration of the challenges faced by dualist legal systems; since, in this instance, although the relevant instrument had been incorporated into national law,[117] its subsequent amendment[118] had not, despite the fact that Belize passed its implementation legislation after the amendment. The effect of this lapse was that the quantum of damages for destruction to the Belize Barrier Reef was substantially reduced, and limited to only physical damage.[119] The reduction in the quantum of the award will most likely prove fatal to efforts to mitigate the damage to the reef, and to restore as far as possible the integrity of the longest section of the Meso-American Barrier Reef System (MBRS).[120] What perhaps makes this situation more untenable is the fact that the Belize Barrier Reef Reserve System, which was designated in 1996 as a World Heritage Site by UNESCO, was in 2009 inscribed on the List of World Heritage in Danger.[121] Given the Region's proclivity for non-implementation of MEAs, the issue of incorporation is likely to persist in the Commonwealth Caribbean, as illustrated by a 2010 study by ECLAC. The study produced profiles on six CARICOM Caribbean states, and demonstrated that most of these states' legally-related interventions on the environment were general in nature, transcended many sectors, and were in the form of non-legally binding plans and policies.[122]

Another serious challenge to the marine environment in the WCR is that of land-based sources of pollution – pollutants which often originate in areas distant from the marine environment, but which nevertheless have deleterious, and at times irreversible, effects on coastal and marine resources. As discussed above, in 1994 UNEP published a report which identified land-based sources of pollution, in particular sewage, as the main pollution threat to the Caribbean Sea.[123] This situation had not changed substantially when UNEP conducted follow-up assessments in 2006[124] and 2012,[125] and is compounded by high levels of tourism on the islands' coastlines. This has translated into an increased volume of sewage being generated and effluent being

[116] *Attorney General of Belize v Westerhaven Schiffahrts*, Claim No. 45 of 2009 (Supreme Court of Belize) and *MS Westerhaven Schiffahrts v Attorney General of Belize,* Civil Appeal No. 19 of 2010 (Court of Appeal, Belize).

[117] The 1976 Limitation of Liability Convention.

[118] The 1996 Protocol to the 1976 Limitation of Liability Convention.

[119] See the discussion in the *Westerhaven* cases, *supra* note 116.

[120] A marine region that stretches over 1 000 km from Isla Contoy at the tip of the Yucatán Peninsula down to Belize, Guatemala and the Bay Islands of Honduras.

[121] Properties which the World Heritage Committee has decided to include on the List of World Heritage in danger in accordance with Art. 11(4) of the Convention.

[122] ECLAC, 'Climate Change Profiles in Select Caribbean Countries', Doc. LC/CAR/L.250/Corr.1 (2010).

[123] UNEP, *Regional Overview of Land-Based Sources of Pollution, supra* note 73.

[124] UNEP, *National Programmes of Action for the Protection of the Coastal and Marine Environment from Land-based Sources of Pollution: The Caribbean Experience*, CEP Technical Report No. 46 (UNEP Caribbean Environment Programme, 2006), available at <http://www.cep.unep.org/publications-and-resources/technical-reports/ceptr46en.pdf> (visited 7 June 2013).

[125] UNEP, *Updated CEP Technical Report No. 33: Land-based Sources and Activities in the Wider Caribbean Region*, CEP Technical Report No. 46 (UNEP Caribbean Environment Programme, 2006), available at <http://www.cep.unep.org/publications-and-resources/technical-reports/Update%20TR%2033%20-Ingles-%20VERSION%20FINAL.pdf> (visited 29 September 2013).

disposed of in the marine environment. In addition, pollutant loads from industrial sources have been estimated to be between 847 749 and 52 117 tonnes per year – levels which have potentially harmful effects for the enclosed body of water.[126] Concern over these threats saw the adoption of the Cartagena Convention in 1983 and the LBS Protocol in 1999 (with the latter finally coming into force in 2010, 11 years after its adoption). However, to date, less than 50 per cent of states in the WCR are parties to the Cartagena Convention and its protocols – a troubling fact given the semi-enclosed nature of the sea. This would seem to be against the spirit of cooperation and regional management envisioned by the Cartagena Convention, and underscored in Article 123 of UNCLOS.[127]

The challenge of pollution from land-based sources is compounded by marine and ship-based pollution, because the Caribbean Sea is one of the most traversed bodies of water for shipping and the transboundary movement of chemical, hazardous and even nuclear wastes.[128] Apart from the regime under the Cartagena Convention (including the 1983 Oil Spills Protocol), many states have acceded to conventions addressing other threats to the marine environment, including dumping (by means of the London Dumping Convention and MARPOL 73/78); the transboundary movement of hazardous waste (under the Basel Convention); and agreements addressing chemical wastes (such as the Rotterdam and Stockholm Conventions). In January 2013, when the text of the proposed Minamata Convention on Mercury was adopted, at least one English-speaking Caribbean state was in attendance.[129]

What this overview illustrates is that while there consistently appears to be both regional and national recognition that marine management and conservation should be a priority issue for action,[130] there continues to be general inertia toward implementing appropriate measures. Perhaps the example of the much needed, but still to become operational, Caribbean Sea Commission, which received the endorsement of the region through UN General Assembly Resolution 63/214,[131] most aptly illustrates the situation. The Caribbean Sea Commission was established on 11 September 2006, with a view to promoting and achieving the preservation and sustain-

[126] UNEP, *Atlas*: *Assessment and Management of Environmental Pollution*, CEP Technical Report No. 53 (UNEP Caribbean Environment Programme, 2012), available at <http://www.cep.unep.org/publications-and-resources/technical-reports/AMEP%20ATLAS%202007-2009.pdf> (visited 29 September 2013).

[127] The basic obligation in Art. 123 of UNCLOS is that '[s]tates bordering an enclosed or semi-enclosed sea should cooperate with each other in the exercise of their rights and in the performance of their duties under this Convention'.

[128] Singh and Mee, 'Examination of Policies', *supra* note 34.

[129] Guyana – possibly because of the challenge the state faces from the use of mercury in small and medium scale gold mining.

[130] For example, the Art. 141 designation (vague as it may be), the *Port-of-Spain Accord* (Port-of-Spain Accord on the Management and Conservation of the Caribbean Environment (Port of Spain, 2 June 1989, available at <http://www.caricom.org/jsp/secretariat/legal_instruments/port_of_spain_accord.pdf> (visited 11 June 2013)); and ECLAC, 'Major Issues in the Management of Enclosed or Semi-Enclosed Seas, with Particular Reference to the Caribbean Sea', Doc. LC/CAR/L.24 (2004).

[131] 'Towards the Sustainable Development of the Caribbean Sea for Present and Future Generations', UNGA Res., 63/214 (2009).

able use of the Caribbean Sea through the formulation of guidelines for coastal and marine management. The Commission will operate under the aegis of the Association of Caribbean States.[132] However, to date it has not been constituted.

In summing up, it may be concluded that, while the Caribbean states do appear to recognize the importance of the marine environment to the region, their approach to its sustainable management and conservation has been 'non-aggressive', to say the least. Perhaps the advent of the additional threat of climate change will see renewed commitment toward a comprehensive approach to marine management; because while the region is not a net contributor to the phenomenon of climate change, it is unquestionable that it will be one of the first areas to be affected.[133] In this vein, the emerging concept of blue carbon science[134] for the management of marine ecosystems will be of tremendous value.[135] Blue carbon science is one device arising under the 1992 United Nations Framework Convention on Climate Change, and proposes to use the 'reducing emissions from deforestation and forest degradation' (REDD) mechanism to conserve coastal and marine ecosystems, while promoting the sequestration of carbon. This, therefore, constitutes another tool in the marine conservation arsenal in the region, which can be combined with efforts to mitigate climate change, as well as ecosystem and species conservation. Belize and Suriname have indicated their interest in pursuing blue-carbon strategies; while Guyana has issued a Draft Low Carbon Development Strategy which aims to address terrestrial carbon sinks, including mangrove ecosystems. In 2009, the Conference of the Heads of CARICOM endorsed the Draft Liliendaal Declaration on Climate Change and Development,[136] which will provide guidance to the region's efforts in respect of climate change adaptation and mitigation.

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[132] The Association of Caribbean States (ACS) is an organization of states, countries and territories in the Caribbean, which was established with the purpose of developing and implementing policies and programmes designed, *inter alia*, to 'develop the potential of the Caribbean Sea through interaction among Member States and with third parties'. To this end, the Association is to promote among its members 'the preservation of the environment and conservation of the natural resources of the region and especially the Caribbean Sea'. Convention Establishing the Association of Caribbean States, Cartagena de Indias, 24 July 1994, available at <http://www.acs-aec.org/sites/default/files/ACS%20Convention%20-%20Matrix%20eng.pdf> (visited 1 October 2013), Art's II and III; for further information on the ACS, see <http://www.acs-aec.org/>.

[133] CCCCC, *Climate Change and the Caribbean*, *supra* note 42.

[134] 'Blue carbon science' is an emerging paradigm which centres on the carbon captured and stored in coastal ecosystems (mangroves, salt marshes and seagrasses) in the form of biomass and sediments and by the world's oceans. For further discussion of blue carbon science, see Christian Nellemann et al (eds), *Blue Carbon – The Role of Healthy Oceans in Binding Carbon: A Rapid Response Assessment* (UNEP and GRID-Arendal, 2009), available at <http://www.grida.no/files/publications/blue-carbon/BlueCarbon_screen.pdf>; and Dan Laffoley and Gabriel Grimsditch (eds), *The Management of Natural Coastal Carbon Sinks* (IUCN, 2009) available at <http://cmsdata.iucn.org/downloads/carbon_managment_report_final_printed_version_1.pdf> (both visited 29 September 2013).

[135] Alana Malinde S. N. Lancaster, *Exploring the Legal Waterfront of Blue Carbon Science in the Caribbean: The Role of Mangroves in Promoting Guyana's Low Carbon Development Strategy and Supporting the Liliendaal Declaration on Climate Change*, Policy Papers on Climate Change Diplomacy and Small Island Developing States (United Nations University, 2013) (forthcoming).

[136] Liliendaal Declaration on Climate Change and Development issued by the 30th meeting of the conference of the heads of government of the Caribbean Community, 2–5 July 2009, Georgetown, Guyana, available

6 Charting new directions in ocean governance in the Caribbean Region

A cursory evaluation of the approaches discussed in this paper depicts a region which has some achievements, but also some shortcomings, in ocean governance. In proceeding in the short and medium-term, the starting point in any prudent effort needs to be stocktaking, and streamlining of efforts to address the management and conservation of the marine environment. Secondly, given the reality of the fiscal, technical and other limitations prevalent in the region, there needs to be a prioritizing of actions. This is especially so for the SIDS of the CARICOM and OECS groupings. Thirdly, the region needs to reassess its approach to addressing existing uses, as well as to adopt a proactive or precautionary approach to emerging uses of the ocean.

An example of the need for proactive and precautionary marine management is presented by the challenge by environmental organization Oceana[137] in Belize to the validity of offshore oil contracts issued by the government of Belize.[138] Oceana petitioned the Supreme Court of Belize on the grounds that the government failed to assess the environmental impact on Belize's ocean, as it was required by law to do, prior to issuing the contracts; and that contracts were awarded to companies that did not demonstrate a proven ability to contribute the necessary assets, funds, equipment, machinery, technical expertise and tools to drill safely. This case also illustrates the emerging need to address diverse and often competing uses of the region's marine environment, because even though oil and gas have the potential to be a fillip for Belize's economy, improper management of that use may have a potentially devastating impact on the Belize Barrier Reef – the 300 kilometre long section of the 900 kilometre long Meso-American Barrier Reef System, which is a central feature of Belize's tourism industry and its economy. Other noteworthy examples of proactivity by environmental NGOs in the region are the actions brought by the Jamaican Environmental Trust in the *Pear Tree Bottom*,[139] *Harbour View*[140] and *Palisadoes*[141]

at <http://www.caricom.org/jsp/communications/meetings_statements/liliendaal_declaration_climate_change_development.jsp> (visited 29 September 2013).

137 See <http://oceana.org/en/making-waves> and <http://oceana.org/en/about-us/history>.

138 *Oceana in Belize; Citizens Organised for Liberty through Action (COLA) and the Belize Coalition to Save Our Natural Heritage v Minister Of Natural Resources* (Claim No. 810 of 2011), 23 April, 2013 (Supreme Court of Belize, 2013).

139 *Northern Jamaica Conservation Association et al v Natural Resources Conservation Authority and National Environmental Planning Agency (No. 1)*, 2006, (Supreme Court of Judicature of Jamaica) Claim No. HCV 3022 of 2005, available at <http://www.jamentrust.org/advocacy-a-law/legal/cases/99-pear-tree-bottom-papers.html> and *Northern Jamaica Conservation Association et. al. v Natural Resources Conservation Authority and National Environmental Planning Agency (No. 2)* 2006, (Supreme Court of Judicature of Jamaica), No. HCV 3022 of 2005, available at <http://www.jamentrust.org/advocacy-a-law/legal/cases/99-pear-tree-bottom-papers.html> (both visited 29 September 2013).

140 *Jamaica Environment Trust and Another v National Water Commission and Others*, 2010, (Supreme Court of Judicature of Jamaica), Claim No. HCV 00114/2010, available at <http://www.jamentrust.org/advocacy-a-law/legal/cases/126-judicial-review-harbour-view-sewage-treatment-plant.html> (visited 29 September 2013).

141 *Jamaica Environment Trust v Natural Resources Conservation Authority and National Environmental Planning Agency* (Supreme Court of Judicature of Jamaica), Claim No. HCV 5674/2010, available at <http://

cases with respect to the conduct and review of EIAs, and the granting of permits by the National Resources Conservation Authority. Other attempts in the cases of *Fisherman and Friends*,[142] *Save Guana Cay*[143] and *Virgin Islands Environmental Council*,[144] where NGOs sought to halt development projects which would have occasioned impacts on the marine environment, have been less successful, but nevertheless demonstrate an increased awareness of threats to the marine environment, as well as public participation and environmental justice when issues of marine and environmental law are concerned.

Fourthly, although there are many existing initiatives, there needs to be greater communication and coordination among Caribbean states – which have different levels of awareness, interest and knowledge. Until now, the main conduit for this coordination has been the RSP for the WCR, but this mechanism needs to be revamped – most notably to allow a complementary relationship with the proposed Caribbean Sea Commission, and with the economic integration agreements present in the region. The latter relationships are arguably critical for the region, since the interface between environment and trade is becoming more perceptible at the regional and global levels – and has been included as a specific area to inform the trade agreements between CARIFORUM[145] states and the European Union under the 2008 Economic Partnership Agreement.[146]

At a national level, there are several challenges – including lack of political will and the effective translation of plans, policies and programmes into concrete medium and long-term actions. Further, given the dualist nature of Commonwealth Caribbean states, there needs to be a more concerted effort to translate international commitments into a discernible regulatory framework. Embarking on this approach is closely tied to stocktaking, streamlining and prioritisation, since the issue of incorporation

www.jamentrust.org/advocacy-a-law/legal/cases/142-judicial-review-roadworks-on-the-palisadoes-strip.html> (visited 29 September 2013).

142 *Fishermen and Friends of the Sea v. The Environmental Management Authority & Anor.* 2005, UKPC 32, available at <http://www.ema.co.tt/cms/images/stories/pdf3/fishermen%20and%20friends%20pc.pdf> (visited 29 September 2013).

143 *Save Guana Cay Reef Association Ltd. and others v. The Queen and others,* 2009, (Judicial Committee of the Privy Council) 44, available at <http://www.jcpc.gov.uk/decided-cases/docs/JCPC_2009_0013_Judgment.pdf> (visited 29 September 2013).

144 *Virgin Islands Environmental Council v. Attorney General and Quorum Island BVI Limited*, 2008, (Eastern Caribbean Supreme Court (Civil)) BVIHCV2007/0185, available at <http://www.eccourts.org/wp-content/files_mf/1359390929_magicfields_pdf_file_upload_1_1.pdf> (visited 29 September 2013).

145 The Caribbean Forum of African, Caribbean and Pacific (ACP) States (CARIFORUM) promotes and coordinates policy dialogue, cooperation and regional integration among the Caribbean ACP states. All 15 members of CARICOM are members of the Forum, as are Cuba and the Dominican Republic. The British and Dutch Overseas Territories and Countries and the French Overseas Departments in the Caribbean (DOMs) have observer status. Caribbean Community Secretariat, 'The Caribbean Forum of African, Caribbean and Pacific (ACP) States (CARIFORUM)', available at <http://www.caricom.org/jsp/community_organs/cariforum/cariforum_main_page.jsp?menu=cob> (visited 18 September 2013).

146 Economic Partnership Agreement between the CARIFORUM States, of the one part, and the European Community, of the other part, 15 October 2008, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:289:0003:1955:EN:PDF> (visited 29 September 2013).

has troubled, and will continue to plague, CARICOM states. While financial and technical challenges will always exist as an impediment to the implementation of MEAs, states need to reconceptualize how they approach accession to and consequent implementation of these agreements. For example, instead of conceptualizing ocean governance efforts in a vacuum, states should first identify how existing legislation can be tailored and made more robust for the needs and realities of the region. Existing legislation and policies can be amended to address marine issues that are not currently regulated and, where this approach is not feasible, entirely new laws can be introduced. Emerging issues which are not provided for by the existing regulatory frameworks include marine spatial planning, transboundary MPAs and biological corridors, and new uses of the marine resource in the region, such as geo-engineering, offshore drilling for oil, gas and minerals by many Caribbean states,[147] and harvesting renewable energy from the sea.[148] While the issue of legislative drafting is fraught with financial and technical challenges, the approach utilised on occasion by both CARICOM[149] and the OECS[150] of drafting model legislation, that can be adopted and/or adapted by individual states, needs to be revisited.

States need to provide a more enabling environment for initiatives which can address more than one conservation challenge at once – for example, enhancing efforts under the Caribbean Challenge, revisiting debt-for-nature swaps, and blue carbon science which can address both ocean governance and climate change issues. Additionally, states could consolidate their efforts, and draw upon the tools available to them for prudent ocean governance. For instance, the use of expedients such as traffic separation schemes and particularly sensitive sea areas (PSSAs) under the MARPOL Convention are non-existent in the region;[151] and many jurisdictions still lack clear procedures with respect to environmental impact assessments and strategic environmental assessments (SEAs), which may be a more relevant tool, given the multi-sectoral nature of the marine environment. These may also boost existing approaches, which could be complemented by emerging paradigms, or tools, which are in embryonic stages. These include the use of marine spatial planning, transboundary MPAs and biological corridors,[152] to name a few.

[147] With the exception of Trinidad and Tobago, where drilling for oil and gas has been ongoing since the 1950s, most CARICOM countries have yet to extract oil and gas, but many have expressed an interest in pursuing this option in an effort to reduce the heavy reliance on importing fossil fuels.

[148] Some states, primarily the OECS groups of states are exploring the harvesting of renewable energy associated with wave, tidal and ocean thermal energy conversion.

[149] Model legislation on occupational health and safety, labour, issues affecting women, sexual harassment and free movement in the Caribbean Single Market and Economy (most in draft).

[150] Model legislation on fisheries and a common fisheries zone (implemented), biodiversity conservation and sustainable use, environmental frameworks and ocean governance (in draft).

[151] See Alana Malinde S. N. Lancaster, *Transboundary Marine Protected Areas for Marine Management & Ocean Governance in the English-Speaking Caribbean* (LAP LAMBERT Academic Publishing, 2014) (forthcoming).

[152] Alana Malinde S. N. Lancaster, 'The Use of Transboundary Marine Protected Areas as a Tool for Marine Management & Ocean Governance in the English-Speaking Caribbean', Thesis for the award of the Master of Laws in Marine & Environmental Law, Marine Environment & Law Institute, Dalhousie University, Halifax, Canada (2010).

Finally, and perhaps most importantly for WCR states – instead of utilizing valuable resources to re-invent wheels, the provisions on cooperation under the RSP should be strengthened both at the intra-regional, as well inter-regional levels. Throughout the world, there are other RSPs, some of which could have lessons which can be adapted, utilized or improved by the WCR. For example, efforts to manage the Baltic[153] and Mediterranean[154] Seas – both semi-enclosed seas like the Caribbean Sea, and managed under similar regional seas programmes[155] and instruments which are similar to the Cartagena Convention, would no doubt be instructive.[156]

7 Conclusions

The marine environment of the Caribbean region is a resource which has tremendous ecological, economic, scientific and social significance, and the importance of this environment will increase in the future. Years of unsustainable use, conservation and management policies which have not been sustained, expanding uses of the marine environment and a feeble regulatory framework, have meant that the marine environment is under increasing stress. Strategies addressing marine management and ocean governance in the Caribbean Community and the Organisation of Eastern Caribbean States have been ongoing since the colonial era, but as the uses of the marine environment increase and become more complex, a change is needed in the approach to management and conservation. It must be highlighted that prudent and successful marine and ocean governance in the region will have to rely on the complex inter-relationship between international environmental law making and the incorporation of international obligations at the national level. This holistic perspective is essential given the *res communis* and transboundary nature of the region's marine environment.

[153] Convention on the Protection of the Marine Environment of the Baltic Sea Area, Helsinki, 22 March 1974, in force 3 May 1980, 13 *International Legal Materials* (1974) 546, <http://www.helcom.fi>.

[154] Convention for the Protection of the Mediterranean Sea against Pollution, Barcelona, 16 February 1976, in force 12 February 1978, 15 *International Legal Materials* (1976) 290, amended to be the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, Barcelona, 10 June 1995, in force 9 July 2007, available at <http://www.unep.ch/regionalseas/regions/med/t_barcel.htm> (visited 13 February 2009).

[155] See <http://www.helcom.fi/>. See also Minna Pyhälä, 'Marine Biodiversity Conservation with a Special Focus on Work Carried Out Under the Helsinki Convention', in Ed Couzens and Tuula Kolari (eds), *International Environmental Lawmaking and Diplomacy Review*, 2006 University of Joensuu – UNEP Course Series 4 (University of Joensuu, 2007) 165–184 .

[156] Lancaster, 'The Use of Transboundary', *supra* note 152.

Development and Implementation of Ocean-Related Multilateral Environmental Agreements in the Caribbean Region

Spencer Thomas[1]

1 Introduction

The development and implementation of ocean-related multilateral environmental agreements (MEAs) in the Caribbean region reflects the economic and social conditions in the Caribbean, where these issues take precedence over environmental considerations. The paper argues that the development and implementation of ocean-related MEAs are conditioned largely on external drivers and the availability of external financial resources. The paper calls for the establishment of a regional and integrated approach for ocean-related MEA governance with the creation of innovative mechanisms for capacity enhancement.

2 The Caribbean context

The Caribbean region is characterized by high levels of biodiversity and species endemism. In fact, the region has been classified as one of the world's biodiversity hotspots[2] with 1 400 fish and marine species. 54 per cent of vertebrates and 59 per cent of plant species are deemed endemic. In Jamaica alone, 28 per cent of the 3 003 plant species are endemic while 66 per cent of the 61 species of reptiles and amphib-

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[2] See generally Conservation International, 'The Biodiversity Hotpots', available at <http://www.conservation.org/where/priority_areas/hotspots/Pages/hotspots_main.aspx> (visited 26 May 2013).

ians are endemic.[3] While environmental degradation is a major feature, there is a high dependence on natural resources to sustain livelihoods.

Conservation and natural resources management are touted as being high on the sustainable development agenda – yet there is a major loss of biodiversity and destruction of ecosystems occurring throughout the region. Approximately one-third of the terrestrial, marine and fresh water species found in the Caribbean are classified as threatened, and several species have been deemed to be extinct.[4] For example, the IUCN Red list evaluated 2 074 Caribbean species and found that 2.2 per cent were extinct. Of the 1 920 terrestrial species, 38 per cent were deemed to be threatened and of the 206 marine species 22 per cent were deemed to be threatened.[5] The condition of the region's coral reefs is a clear example of environmental destruction in this region; in the second half of the twentieth century, the region lost 20 per cent of its coral reefs and, by 2004, 60 per cent of remaining coral reefs were classified as threatened.[6]

The major threats facing Caribbean coral reefs are agriculture and industrial activities, coral bleaching, coral disease, impacts of storms and hurricanes, increased coastal developments, ocean acidification, overfishing, pollution from various sources, sedimentation, and unsustainable tourism. The region is home to 10 per cent of the world's coral reefs, and in addition to their direct environmental value these ecosystems generate significant revenues for the Caribbean economies.[7] The ecosystem services provided by coral reefs in the Caribbean are valued at between US$1.5 billion and US$3.5 billion per annum.[8]

Given the small size of the countries of the region and typical of island economies, the key economic activities, including the key transportation, information and communication infrastructure, are located within the coastal environment. In the Caribbean, it is estimated that about 70 per cent of the population lives along coastal areas.[9] Tourism is a major foreign exchange earner, a source of employment and the most important economic growth engine for the Caribbean economies. The vast

[3] Nicole Brown, Tighe Geoghegan and Yves Renard, *A situation Analysis for the Wider Caribbean Region* (IUCN, 2007), available at <http://cmsdata.iucn.org/downloads/anexo_d_caribbean_situation_analysis__2008_.pdf> (visited 28 June 2013).

[4] *Ibid*.

[5] *Ibid*.

[6] World Resource Institute, *Reefs at Risk in the Caribbean* (WRI, 2004), available at <http://pdf.wri.org/reefs_caribbean_full.pdf> (visited 28 June 2013).

[7] Terry P. Hughes et al, 'Rising to the Challenge of Sustaining Coral Reefs Resilience', 25 *Trends in Ecology and Evolution* (2010) 633–642.

[8] M. C. Simpson et al, *An Overview of Modelling Climate Change Impacts in the Caribbean Region with Contribution from the Pacific Islands* (UNDP, 2009), available at <http://www.caribsave.org/assets/files/UNDP%20Final%20Report.pdf> (visited 28 June 2013).

[9] M. C. Simpson, D. Scott, M. Harrison et al, 'Quantification and Magnitude of Losses and Damages Resulting from the Impacts of Climate Change: Modelling the Transformation Impacts and Costs of Sea Level Rise in the Caribbean' (UNDP, 2010), available at <http://www.caribsave.org/assets/files/Full%20Report%20-%20Jan%202011%20-%20Final%20sml.pdf> (visited 28 June 2013).

majority of the tourism-related infrastructure is found, and tourism-related activities take place, in the coastal zones. The fisheries sector in the Caribbean is key to livelihoods and food security, and shoreline protection is important, given that the region is susceptible to regular storms and frequent hurricanes.

Thus, while there is a heavy dependence on coastal natural resources for economic and social wellbeing, there are increasing pressures on these coastal ecosystems from human based activities, which result in biodiversity loss, ecosystem degradation, and consequent harm to sustainable livelihoods. The nexus between a 'biodiversity hotspot' and a 'vulnerability hotspot' is therefore quite evident, and seems to be reinforcing a downward spiral of accelerating biodiversity loss, reduced resilience, greater vulnerability and economic and social decline.[10] This scenario can best be described as a 'hotspot crisis' and, when coupled with the economic recession faced by these economies,[11] the prospectus for reversal of this trend is rather bleak. As it stands currently, in the main, the economies of the region have limited budget flexibility, which does not provide much space for manoeuvring out of this crisis. With slow growth, debt to gross domestic product ratio averaging 100 per cent, unemployment averaging 25 per cent, poverty averaging 30 per cent and energy imports averaging 40 per cent of export earning,[12] the choices facing these countries with respect to the development and implementation of ocean-related MEAs are quite limited.

3 Challenges with ocean-related MEAs in the Caribbean

The countries of the Caribbean are parties to several ocean-related MEAs. The most prominent ocean-related MEAs in the Caribbean are in the areas of international whaling,[13] marine pollution,[14] marine conservation and protection,[15] oil pollution,[16] and security.[17] All Caribbean countries are signatories to the United Nations Frame-

[10] Caribbean Development Bank, *Annual Economic Review* (CDB, 2012), available at <http://www.caribank.org/uploads/2013/05/AR2012.html> (visited 28 June 2013).

[11] Caribbean Centre for Money and Finance, *Caribbean Economic Performance Report 2011* (CCMF, 2012), available at <http//ccmfuwi.org/files/publications/reportcepr2012> (visited 28 June 2013).

[12] G. A. Bowen, 'The Challenges of Poverty and Social Welfare in the Caribbean', 16 *International Journal of Social Welfare* (2007) 150–158.

[13] International Convention for the Regulation of Whaling, Washington D.C., 2 December 1946, in force 10 November 1948, 161 *United Nations Treaty Series* 72.

[14] For instance, Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 13 November 1972, in force 30 August 1975, 11 *International Legal Materials* (1972) 1294; 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 7 November 1996, in force 24 March 2006, <http://www.imo.org>.

[15] For instance, Cartagena Convention on the Protection of the Wider Caribbean Sea, Cartagena, 24 March 1983, in force 11 October 1986, <http://www.cep.unep.org/cartagena-convention/text-of-the-cartagena-convention>.

[16] For instance, Protocol Concerning Co-operation in Combating Oil Spills in the Wider Caribbean Region, Cartagena, 24 March 1983, in force 11 October 1986; <http://www.cep.unep.org/cartagena-convention>.

[17] For instance, known as the Seabed Treaty is the Treaty on the Prohibition of the Emplacement of Nuclear Weapons and other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the

work Convention on Climate Change,[18] the United Nations Convention to Combat Desertification,[19] the Convention on Biological Diversity,[20] the Convention on International Trade in Endangered Species[21] and the United Nations Convention on the Law of the Sea.[22] Joining these conventions and associated protocols has largely been enabled by externally driven projects using externally generated financial resources earmarked for that purpose by the international community. In several cases, the countries of the region benefited through access of these funds to generate and implement domestic activities required by national law for signing and ratifying or acceding to these agreements. A case in point is the Global Environmental Facility (GEF)[23] enabling activities project for biodiversity conservation implemented by governments in collaboration with an approved executing agency. Many of the countries of the region are currently accessing GEF resources for detailing and implementing the legal, institutional and administrative infrastructure for the ratification of the Nagoya Protocol on Access and Benefit Sharing under the Convention on Biodiversity.[24]

Once ratified, the availability of resources for implementation of MEAs is a major challenge. In many cases the provisions of the MEAs and the obligations of the signatories are not fully incorporated into national legislation, nor is a knowledge-based, data and technical and institutional capacity available on the national level. Given limited budget flexibility at the national level, resources to implement the obligations imposed by international conventions have often been found wanting. Many of these countries lack the national infrastructure, including the establishment of specific enabling institutional and administrative arrangements and the enactment of subsidiary legislation required for national implementation. Thus, there is a heavy reliance on project-based support from the international community. A necessary condition for implementation is the elaboration of a public awareness and education programme, which in many cases is left to an ad hoc and disjointed approach.

In cases where national legislation and regulations exist, there is also the issue of lack of effective enforcement. Added to this are the issues of lack of monitoring, evalua-

Subsoil thereof, London, Moscow and Washington, 11 February 1971, in force 18 May 1972, 606 *United Nations Treaty Series* 267, <http://www.nti.org>.

[18] United Nations Framework Convention on Climate Change, New York, 9 May 1992, in force 21 March 1994, 31 *International Legal Materials* (1992) 849, <http://unfccc.int>.

[19] UN Convention to Combat Desertification in Countries Experiencing Serious Drought and or Desertification, Particularly in Africa, Paris, 17 June 1994, in force 26 December 1996, 33 *International Legal Materials* (1994) 1309, <http://www.unccd.int>.

[20] Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, <http://www.biodiv.org>.

[21] Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington DC, 3 March 1973, in force 1 July 1975, 993 *United Nations Treaty Series* 243, <http://www.cites.org>.

[22] United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, in force 16 November 1994, 21 *International Legal Materials* (1982) 1261.

[23] See <http://www.thegef.org/>.

[24] Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity, Nagoya, 29 October 2010, <http://www.cbd.int/abs/>.

tion and reporting frameworks with the feedback loops for dynamic and relevant management measures.

Even in respect of attendance by national delegates at international meetings, fairly strict reliance on external funding is evident, rather than governments funding the participation of their own delegations. The implementation of ocean-related MEAs has been reduced as a priority in the face of the economic and social realities of the Caribbean countries; while at the same time there is an imperative to leverage international resources for the implementation of such agreements and for economic and social advancement. While it might be argued, and probably rightly so, that the countries of the region are not all at the same level of economic and social condition, it is uncontested that the implementation of ocean-related MEAs must assume greater priority in the face of increasing pressures on ecosystems and the need to sustain and restore ecosystems to safeguard the flow of services necessary for human wellbeing and livelihoods.

4 Possible solutions

The countries of the Caribbean need to establish integrated, regional and innovative approaches and mechanisms toward ocean-related governance and for the protection of the marine environment in the Caribbean region. Such approaches and mechanisms are now being coordinated through regional and sub-regional institutions like the Caribbean Community (CARICOM)[25] and the Organisation of Eastern Caribbean States (OECS).[26] CARICOM is currently coordinating the Caribbean hub of the European Union supported project entitled 'Capacity Building Related to the Implementation of Multilateral Environmental Agreements in the African, Caribbean and Pacific Countries'[27] while the OECS has established an Environmental and Sustainable Development Unit in its Secretariat to support its member states on environmental and sustainable development matters. The OECS member states have signed onto a sub-region wide agreement dubbed the St. George's Declaration of Principles for Environmental Sustainability in the OECS[28] which was adopted for the purpose of defining a policy statement and a framework for sub-regional coordination for environmental governance. Within this framework, each member state is obligated to elaborate a National Environmental Management Strategy and Action Plan, including the establishment of effective structures for stakeholders' engage-

[25] See <http://www.caricom.org>.

[26] See <http://www.oecs.org>.

[27] The project is designed to increase the capacity of Caribbean countries in areas like project management, writing skills, negotiation, lobbying, legal drafting, information management and exchange through the provision of technical assistance, training, policy and advisory support services to implement their obligations under MEAs. See CARICOM, 'Caribbean Hub – Capacity Building Related to the Implementation of Multilateral Environmental Agreements in the African, Caribbean and Pacific Countries', available at <http://www.caricom.org/jsp/community_organs/sustainable_development/capacity_building_meas_acp_caribbean_hub.jsp> (visited 28 June 2013).

[28] St. George's Declaration of Principles for Environmental Sustainability in the OECS, St. George, 16 July 1979, available at <http://www.iadb.org/intal/intalcdi/PE/2009/03209.pdf> (visited 8 June 2013).

ment, institutional and legal frameworks, capacity-building, public awareness and education and for monitoring and assessment of environmental impacts and trends in the status of the region's natural resources. It must be noted, however, that these initiatives are in fact driven and sustained by external resources.

The countries of the Caribbean region are also participating in a new initiative, called the Caribbean Challenge Initiative,[29] which is considered to be the most significant programme for the establishment of marine protected areas within the Caribbean. The initiative calls for the effective conservation of at least 20 per cent of the Caribbean's marine habitat by 2020. The Initiative is supported by the creation of protected area trust funds, funded by a combination of private and public funds and new funding mechanisms developed and implemented on the national level. This is a practical example of the responses required in the Caribbean region for the implementation of national obligations under the various multilateral environmental agreements. This initiative must be seen in the context that the current marine protected areas coverage in the region is about 3 per cent while under the Strategic Plan for Biodiversity of the CBD,[30] the Aichi target number 11 calls for ten per cent of coastal and marine areas to be protected and sustainably managed.[31]

In 2006, for example at the Eighth Meeting of Conference of the Parties to the CBD prior to the agreement on the Strategic Plan, Grenada made a bold declaration mandating the country to 'protect at least 25 per cent of its near shore marine area and at least 25 per cent of its terrestrial area by 2020 as a means to contribute to the sustainable livelihoods of its people and to contribute to the protection of the world's biodiversity'.[32] Thus, significant effort is required to meet the stated obligations and to address the inadequate institutional, legal and policy frameworks and mechanisms for MEA governance.

Such initiatives must be bold and ambitious, and must engender political will and leadership and leveraging of domestic and international resources, for the on-the-ground action required to implement the multilateral environmental agreements through a region-wide and integrated approach.

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[29] For more information, see, for instance, Global Island Partnership, 'Caribbean Challenge Initiative (CCI), available at <http://glispa.org/?page_id=363> (visited 23 May 2013).

[30] 'The Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets', Decision X/2, in Report of the Tenth Meeting of the Conference of the Parties to the Convention on Biological Diversity, Nagoya, Japan, 18–29 October 2010, UN Doc. UNEP/CBD/COP/10/27* (2011).

[31] Target 11 of the Aichi targets reads as follows:

> [b]y, 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

[32] Quoted from Grenada Protected Area System Plan: Identification and Designation of Protected Areas (2009).

In this regard, it is important to note that the Caribbean countries, via the Council of Ministers of the Caribbean Regional Fisheries Mechanism (CRFM-Caricom),[33] have formally endorsed the ten-year Strategic Action Programme for the GEF funded project 'Sustainable Management of the Shared Living Marine Resources of the Caribbean Large Marine Ecosystems and Adjacent Regions'.[34] The main objective of the project is to promote collaboration among Caribbean countries by creating joint strategies for improving the management of fisheries and for the protection of key marine ecosystems. This work is to ensure the future social and economic well-being of the people of the Caribbean.[35]

The Regional Action Programme attached to the project sets out the comprehensive roadmap, regional strategies and actions to address the identified critical threats to the living marine resources and the marine environment – such as habit degradation, the impacts of climate change, pollution and unsustainable fisheries.[36] The project is implemented through the UNDP and involves multiple UN agencies and regional institutions. At the launch of the project, it was pointed out that the 'Caribbean broke the record of largest member of countries to jointly agree on a marine ecosystem-based action programme since the initiation of the GEF activities following RIO Earth Summit in 1992'.[37]

5 Conclusion

The development and implementation of ocean-related MEAs in the Caribbean region must be linked directly to the prospects for enhanced livelihoods. The efforts must be seen as a contributor and integral ingredient for addressing economic and social conditions and treated as critical to addressing the degradation of natural resources and ecosystems to safeguard the flow of ecosystem services necessary for human wellbeing. While it is clear that the region will continue to depend on externally generated resources, given its current economic endowment, MEA implementation must be seen not as a distraction but as an essential element of the solution as the region grapples with the current social and economic conditions. In this regard, the Caribbean development strategy must include higher order priority, the leveraging of domestic and international resources and a comprehensive regional and integrated plan for MEA implementation. This paper calls therefore for bold, ambitious and innovated approaches to be taken for the development and implementation of ocean-related MEAs in the Caribbean.

[33] See <http://www.caricom-fisheries.com/>.
[34] See <http://www.clmeproject.org>.
[35] *Ibid*.
[36] *Ibid*.
[37] 'Caribbean takes major step towards sustainable management of living marine resources', *Caribnews* of 10 June 2013, available at <www.caribnewsnow.com/news/newpublish/home.print.php> (visited 28 June 2013).

Part IV

Interactive Negotiation Skills in the Area of Ocean Governance

The Grenada Ad Hoc Joint Working Group: A Multilateral Simulation Exercise of an Ad Hoc Joint Working Group Meeting on Climate-related Geoengineering[1]

Cam Carruthers[2]

1 Overview

1.1 Introduction

This paper sets out the elements and structure of a negotiation simulation exercise, held in Grenada on 23 and 28–29 August 2012, for the University of Eastern Finland – UNEP Course on Multilateral Environmental Agreements.

The scenario for the negotiation simulation focused on a climate-related geoengineering theme, and involved both substantive and structural/procedural issues. The exercise included negotiations in an Ad Hoc Joint Working Group (AHJWG) on the following four issues:

[1] The materials for this simulation exercise are for professional development purposes only. With the exception of the text of official documents of UNEP and UN bodies, these materials may not be used, reproduced, revised or translated in whole or in part, by any means, without written permission of the authors. They are not intended to represent any official policy, positions or views of any state, organization, legal entity or individual. Any views expressed in these materials are solely those of the authors.

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A. Common understanding of a detailed definition and delimitation of the scope of climate-related geoengineering for purposes of joint consideration and action.
B. Joint technical assessment of need for regulation of scientific research on climate-related geoengineering; and of net and specific climate-related geoengineering deployment impacts.
C. Joint recommendation on applicability of the mandate and appropriate role of participating multilateral regulatory authorities in relation to the deployment and research of climate-related geoengineering; taking into account relevant institutional capacities.
D. Joint recommendation on a possible coordination/advisory body on climate-related geoengineering research and deployment for participating conventions, as well as a recommendation on rules of procedure.

The first two issues had a substantive focus, whereas the last two issues had a governance focus. The simulation scenario was hypothetical but drew on elements derived from recent actual work on climate-related geoengineering led by the Secretatiat of the Convention on Biological Diversity (CBD),[3] involving the United Nations Framework Convention on Climate Change (UNFCCC)[4] and the London Dumping Convention and Protocol (LC/LP).[5]

A supplementary objective of this exercise was to produce discussion and results, including this paper in the Course *Review*, which may be of interest to participants in the forthcoming meetings of the governing bodies in relation to climate-related geoengineering. The climate-related geoengineering theme also provided an opportunity for participants to gain perspective on the complexity of international environmental law-making in the current international environmental governance (IEG) system.

1.2 Importance of procedures and rules of procedure in MEA negotiations

In multilateral environmental agreements (MEAs), decision procedures and/or rules of procedure (rules) are set up to govern activities in decision-making bodies, usually based on a provision in the MEA itself which stipulates that parties are to agree on such rules. A conference or meeting of the parties (COP, MOP) serving as the supreme decision-making body of the agreement takes decisions to implement the

[3] Convention on Biological Diversity, Rio de Janeiro, 5 June 1992, in force 29 December 1993, 31 *International Legal Materials* (1992) 822, <http://www.biodiv.org>.

[4] United Nations Framework Convention on Climate Change, New York, 9 May 1992, in force 21 March 1994, 31 *International Legal Materials* (1992) 849, <http://unfccc.int>.

[5] Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 13 November 1972, in force 30 August 1975, 11 *International Legal Materials* (1972) 1294; 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London, 7 November 1996, in force 24 March 2006, <http://www.imo.org>.

agreement, and reviews and evaluates implementation of the agreement, including related decisions.

Rules of procedure generally regulate the activities of decision-making bodies, including subjects such as agendas, amendments to the rules, conduct of business, decision-making, languages, membership, officers and secretariat functions. Among other things, the rules reflect fundamental principles of transparency and procedural fairness, the latter of which is based largely on the principle of equality of sovereign states. Another principle reflected in the rules is that in international law, authority is ultimately derived from states. While the fundamental principles are common, each set of rules is adapted to its specific context. A good knowledge of the rules of procedure of the forum a negotiator works in is invaluable. Knowing the rules means knowing what one can do to advance or protect one's position, and how to do it.[6]

However, all too often negotiators in multilateral environmental fora have only a limited awareness of the rules that define the arena in which they operate. The rules and related issues may seem either mundane or arcane, and only incidental to the more compelling questions of substance. Negotiators are often more concerned with strategy or technical priorities. Some may not even be aware of the influence of the rules on the process, which can be subtle. Even when no reference is made to the rules they have a profound influence on outcomes. A key example is decision-making: votes are generally avoided, but whether and how consensus is obtained on a given issue may depend to some degree on the understanding of how parties would vote if they did vote. Negotiators who fail to understand the underlying dynamics on such issues can make serious strategic errors.

Indeed, ignorance of the rules can lead to major failures and frustrations with the process, especially since problems may be discovered after key decisions have been taken. It is difficult, if not practically impossible, to undo multilateral process decisions once these have been taken. So it is important to consider strategic issues about decision-making processes and relevant rules early in any multilateral endeavour. Once a process is underway, it may result in a proliferation of sub-processes based on a set of interrelated decisions. While these processes are susceptible to congestion and inertia, it is also possible that they can move toward an unexpected direction or conclusion very quickly, with major outcomes in the balance.

This simulation is designed, in part, to open up certain procedural issues so that participants can strengthen their knowledge and understanding of the procedures and rules as tools for more effective and efficient negotiation of individual and common objectives. The idea is for participants to negotiate conceptual ownership of

[6] For an analysis of the importance of the rules of procedure in a particular MEA see Joanna Depledge, *The Organization of Global Negotiations: Constructing the Climate Change Regime* (EarthScan, 2005), particularly at 80–102.

procedures while they negotiate practical textual solutions. The premise is that the procedures and rules constitute a code which reflects the values and interests of parties and informs the way negotiators work together to take decisions. The rules frame what happens, who can make it happen, when, where and how. The higher the level of common understanding and agreement of the rules in any given body, the more efficiently and effectively that body can operate and reach agreement to attain common objectives.

1.3 Simulation objectives

This negotiation simulation exercise focused on the negotiation of both substantive and procedural issues related to climate-related geoengineering and procedures in an MEA context, in this case a hypothetical meeting of an Ad Hoc Joint Working Group (AHJWG). The general objectives were to promote among participants, through simulation experience:

1) understanding of the challenges and opportunities related to climate-related geoengineering, both in general and in a specific MEA context;
2) understanding of the principles and practices of multilateral negotiation and appreciation of the value and role of the rules of procedure;
3) familiarity with specific substantive and drafting issues; and
4) discussion and appreciation of different perspectives on climate-related geoengineering substantive and institutional issues.

Within the exercise, the specific objective of the AHJWG meeting was to produce agreement on four issues: i) common understanding of a definition and scope for climate-related geoengineering; ii) joint assessment of a need for regulation of scientific research on climate-related geoengineering and of impacts; iii) joint recommendation on appropriate multilateral regulatory authority; and iv) joint coordination/advisory body.

1.4 Scenario

The scenario was set as the first meeting of the Ad Hoc Joint Working Group (AHJWG) on climate-related geoengineering. The negotiation simulation scenario and the issues therein were hypothetical, but based on actual and recent discussions involving:

1) the Convention on Biological Diversity (CBD);
2) the United Nations Framework Convention on Climate Change (UNFCCC); and
3) the London Dumping Convention and Protocol (LC/LP).

The premise of the scenario was that there is an agreement by the parties of the instruments listed above to meet jointly to consider joint approaches to climate-related geoengineering related substantive and procedural issues. The exercise began with the first meeting of the AHJWG and proceeded to four drafting groups. The understanding was that the AHJWG Co-Chairs had already met and developed an approach to propose to parties.

The AHJWG had two Co-Chairs and one rapporteur. Notwithstanding the conceit that the Co-Chairs had already met, they were elected by parties at the opening plenary: one was to represent a developing country and the other a developed country. In addition, the drafting groups each had one facilitator and one rapporteur. The election of these officers took place in the initial plenary meeting (participants were asked to consult ahead of time, as generally happens in MEA fora, to attempt to produce results by acclamation, and they were indeed successful in this regard).

Draft decisions and conclusions were also prepared by the Co-Chairs for the consideration of parties, and are found below in subsection 3.2. The draft texts addressed issues of climate-related geoengineering in implementation, as well as procedural issues related to the joint operation of the parties in the AHJWG.

Each drafting group needed, at least, to address the issue of the substance of the draft text before it, and possibly also the form (decision or conclusion). Drafting groups were established for the following four issue clusters:

A. Common understanding of a detailed definition and scope of geoengineering (subsection 3.2.1).
B. Joint assessment of need for regulation of scientific research on climate-related geoengineering; and of net and specific climate-related geoengineering deployment impacts (subsection 3.2.2).
C. Joint recommendation on appropriate multilateral regulatory authority for deployment and research of climate-related geoengineering (subsection 3.2.3).
D. Joint coordination/advisory body on climate-related geoengineering research and deployment (subsection 3.2.4).

The main features of the terms of reference for the Ad Hoc Joint Working Group are listed below:

1. The Ad Hoc Joint Working Group had to agree upon joint recommendations on all four issues to be forwarded to the next meeting of the Conference of the Parties to each convention for adoption by the parties.
2. Conditions for participation in the Ad Hoc Joint Working Group are listed below:

a) The Ad Hoc Joint Working Group consisted of a maximum of 30 representatives. Each convention nominated up to 10 representatives selected from amongst the parties to that convention to participate in meetings of the Ad Hoc Joint Working Group, giving due consideration to the five United Nations regions.
b) Each convention was responsible for meeting the costs of participation of its representatives who are from developing countries and from countries with economies in transition.

3. The Ad Hoc Joint Working Group was subject to the rules of procedure of all participating conventions, with any conflicts to be resolved by the presiding officers, as appropriate.

1.5 Introduction to the exercise

Each participant played a specific role, representing a party. Participants representing parties were given a fictional background based on experience in one particular convention, but had to represent their national interests on all agreements. Participants were encouraged to play their part faithfully in the overall scenario for the simulation, following both the general and their individual instructions. It was also encouraged that they make alliances and develop coordinated strategies to intervene in support of others, or to take the lead in other cases, where possible. Some roles, including the Co-Chairs, rapporteurs and facilitators, had both to play an active role and to serve the other participants, as in actual MEA processes. Those playing such roles had a specific role in working for a positive outcome in addition to their individual instructions (they were encouraged to signal to the other parties when they took up their partisan roles, for instance by saying 'I'm taking off my Chair's hat …').

Participants were asked to keep in mind their interests and positions with respect to all four issues, but to focus on the issue assigned to their drafting group. The groups were then requested to work to narrow their focus as quickly as possible to identify issues in question that would need to be addressed, and to dispose of issues expeditiously where possible. Participants were encouraged to work hard to achieve the objectives in their individual instructions.

Participants were urged to examine their instructions carefully, and to elaborate interventions with a compelling rationale to advance their positions, for example by drawing on context provided by their twin (see below for an explanation of 'twinning'). Participants were also encouraged to take the initiative and be inventive and to intervene in drafting groups, and in plenary even, if they had no specific instructions on a particular issue, but to ensure that such interventions were consistant with their general or specific approach, tactics or strategy and alliances. Participants were strongly encouraged to seek support for their positions from other participants, and to identify and understand opposition to their positions, including by gathering intelligence about discussion in drafting groups in which they did not participate.

To this end, participants were asked to consider developing joint drafting proposals and making interventions on behalf of more than one party, as well as using regional and negotiation groups as a point of departure (noting that because of the random allocation of positions to participants, it would be much more difficult to construct regional alliances, and that therefore thematic alliances would be more likely). Participants were also asked to think about issues for discussion in the post-mortem which followed the exercise, including issues of both process and substance within the exercise, as well as issues relating to the structure and management of the exercise itself.

The simulation was designed to focus on both the negotiation process as well as the substantive issues, and was designed to be difficult, with failure to reach agreement a real possibility. Unavoidably, a random distribution of positions such as was provided in this simulation resulted in making some parties appear more or less constructive, and indeed for simulation purposes some positions were designed to cause difficulties – some of these being 'major'. The importance of the fact that positions in individual instructions were developed and assigned randomly was emphasized. The positions were entirely hypothetical and not intended to reflect specific positions of particular parties or the views of organizations or individuals.

As was noted for participants, delegates in real MEA processes often face situations similar to this exercise, where they have little opportunity to prepare, but should still define objectives and develop a strategy. Similarly, it was hightlighted that informal diplomacy is where most progress toward agreement on concepts is made, while drafting group and plenary discussion is often required for agreement on specific texts; and that drafting often involves a fine balance between accommodation and clarity. Particularly important for this exercise was the caution that decision-making on final text in plenary may be pro forma, but that there can be surprises; decisions in the plenary are critical and can sometimes move very quickly, at times moving back and forth on an agenda, so that being prepared with an effective intervention at any moment is essential.

The two Co-Chairs, Vice-Chairs/drafting group facilitators had to play an important role, setting up and managing the process – and managing time – to produce agreement. They were encouraged to consult broadly, including with facilitators and party representatives (noting that the simulation organizers were also available to provide advice, as they acted as senior secretariat officials). The key to success was identified as thoughtful organization of the work of the groups, including strategic management of how the smaller drafting groups and the plenary sessions function and were linked.

2 Instructions

2.1 Individual instructions

The core of the simulation was set out in **confidential** individual instructions, each of between 1–2 pages in length. They provided very brief positions and fall-back positions on each of the issues under negotiation, but no rationale or strategy (this had to be developed by each participant). *In some cases, the instructions contained positions that appeared to be mutually incompatible.* It was noted that similar challenges arise for delegates in real MEA processes from time to time, especially in cases where different domestic departments make decisions on different issues, and inconsistencies are not effectively addressed in the development of that party's negotiation mandate. For this exercise, instructions were provided in a simplified form with only simple positions, rather than that of official delegation instructions, which often set out linkages and rationale as well as strategic negotiation approaches. In some cases, instructions stipulated that a particular position was not to be abandoned, and the participant was not to resort to a fall-back without consulting a designated senior official in the state's capital. For simulation purposes the coordinators of the exercise served in this capacity. For further guidance in dealing with procedural and strategic issues, participants were referred to the *MEA Negotiator's Handbook.*[7]

2.2 General instructions

The general instructions, provided to all participants, are below:

1) At a minimum, please review the general and individual instructions and the key simulation documents (subsection 3.1) as well as the rules of procedure for the MEA associated with your role. The remaining material is for reference/use as needed, but should not be overlooked.[8]
2) Each participant will be assigned a role as a representative of a party official and will be asked to rotate into a Secretariat support role at least once in the exercise.[9] Additional **confidential** individual instructions will be provided to each participant.
3) *Participants representing parties* have been sent with full credentials from their governments to participate in the meeting of the AHJWG, using their confidential individual instructions as a guide.[10] Parties *should do their best to achieve the objectives laid out in their instructions.* They should develop a

[7] Cam Carruthers (ed.), *Multilateral Environmental Agreement Negotiator's Handbook,* University of Joensuu – UNEP Course Series 5 (2nd ed., University of Joensuu, 2007), available in English and French at <http://www.uef.fi/en/unep/publications-and-materials>.

[8] See also *ibid*, in particular sections 3.1, 3.2, 3.3, 3.6, 2.4, 4.3 and 5.

[9] There are no IGO or NGO roles in this exercise, based largely on feed-back from participants in other simulations who indicated that they found such roles very limited.

[10] **Confidential** individual instructions have been developed without reference to actual country positions, and it is not necessary for this simulation that participants attempt to follow positions in the real negotiations.

strategy and an integrated rationale to support their positions. Do not share your confidential individual instructions with other participants. Do not concede to a fall-back position without a serious effort to achieve your primary objective (and not on the first day!). If possible, consult with others before the session, to identify and coordinate with those who have similar instructions, and even prepare joint interventions. *You should build alliances and try to support anyone with a similar position who is out-numbered. You should try to identify participants with opposing views, and influence them both in formal negotiations, as well as in informal settings. At any time, you may receive supplementary instructions.* Participants should, of course, always be respectful of each other's views and background.

4) All participants will temporarily play the role of a Secretariat official to support the parties, Co-Chairs, Vice-Chairs and rapporteurs, including in both plenaries and drafting groups, as appropriate (only in a support/advisory role). Participants will rotate into a Secretariat role based on time 'Slots' set out in the table of roles in section 2.3 and in the schedule for the simulation annexed to these instructions (participants may agree among themselves to switch slots – for instance, if elected as Chair). Secretariat officials keep speakers lists, take notes and intervene as needed to respond to parties. They generally focus on matters of procedure and organization of work, as well as issues related to secretariat resources and capacity, but are required to maintain neutrality on issues where there is a divergence of views among parties. When in a secretariat role, participants retain the same convention affiliation areas as when they are in a party role. Participants temporarily in a secretariat role may also switch roles and intervene in their party representative role as a last resort if necessary to maintain their position (when acting as a Secretariat official they should use a secretariat flag; when as a party, their party flag). There is no intended link between a participant's role as a party representative and their temporary functions as a secretariat official.
5) Simulation Coordinators may, as needed, act as senior UNEP officials and/or a designated senior government official in a state's capital authorized to provide supplementary instructions to their delegations. Coordinators will remain as far as possible outside of the simulation and should not be consulted unless necessary. Questions on procedure, etc. should be addressed to the Co-Chairs, drafting group facilitators or Secretariat officials.
6) In the AHJWG plenary, the Co-Chairs sit at the head of the room, with Secretariat officials beside them. Parties will have the opportunity to select a 'flag' or country nameplate (fold it twice, so the name is in the mid panel). To speak, raise your 'flag' and signal the Secretariat official keeping the speakers' list. Secretariat officials will also have name plates.
7) The AHJWG will begin work in plenary. As explained in subsection 1.4, the AHJWG will establish four drafting groups (Groups A-D).
8) The first task for parties is to elect two Co-Chairs for the AHJWG and three Vice-Chairs, one from each of the conventions. The usual practice is that

developing county parties and developed country parties are equally represented as Co-Chairs. For this exercise, given the fact that no voting rules have been adopted under the AHJWG (see subsection 3.2), selection should be based on informal consultations, and decided by consensus.

9) When the AHJWG breaks into the four drafting groups, please join the group identified in your individual instructions. The groups will operate much like an informal drafting group (see the *MEA Negotiator's Handbook*).
10) The four drafting groups must reach agreement on what to report back to the plenary. Each Vice-Chair will act as a facilitator in one of the drafting groups to manage the meeting. Each group will select a rapporteur to compile a report of the discussions (see the *MEA Negotiator's Handbook* on drafting, especially use of brackets).
11) Once elected, Co-Chairs and Vice-Chairs/facilitators must play their roles throughout the negotiation simulation exercise, and generally refrain from openly taking positions, and only do so when explicitly indicating that they are 'taking their Chair's hat off'.
12) Please use only the materials provided, as well as advice and information from other participants, and don't be distracted by internet resources or use any precedent found there or elsewhere (even though this is often a good idea in real life!).
13) The exercise will take place over a two-day period. Participants are encouraged to consult informally before the exercise for nominations to the Co-Chair/Vice-Chair positions and in the evening of the first day to form alliances and broker solutions (as in real life).

2.3 Twinning

Participants in the Joint Contact Group were listed, along with their 'twins' for the exercise, each numbered with respect to their individual instructions.

Each participant was assigned a role as a representative of a party and was eligible to be chosen to play the role of Co-Chair, Vice-Chair/facilitator or rapporteur (see above subsection 2.2); and, in addition, each participant was responsible to play the role of Secretariat official for one time period (see paragraph 4 of the General Instructions in section 2.2). Participants were asked to represent a party that is from a different negotiation group, bloc or region than their own. In order to help them effectively represent this other country, they were 'twinned' with someone from that country, group or region. Accordingly, each participant also had to play a completely separate role as a member of the delegation of their 'twin', providing background information on their country group or region, to help their twin develop the rationale and rhetoric to support their positions. Participants were asked to separate completely this delegation support role for their twin from their own individual instructions and their role as the representative of their twin's country, group or region. Twins were not expected to have their countries allied, nor to work together in

any way in the simulation. Participants were only asked to draw on personal experience and relevant substantive knowledge related to national economics, society, geography, culture, and environmental context, but not on any knowledge they may have of official governmental policy. Participants were encouraged to consult their 'twin' or in some cases twins, in order to draw on their perspective and knowledge to put their negotiation instructions in the context of the country they had been asked to represent.

As noted above, the positions of parties in this exercise were not intended to reflect the actual positions of any state. Accordingly, participants were asked not to seek information or advice on actual positions or political views of governments, but rather to seek advice and support for their hypothetical positions by drawing on any relevant cultural, economic, environmental, geographic orsocial information their twin could provide. Twinning was also intended to promote general understanding of how different perspectives may affect approaches to both substantive and process issues – and to add some depth and dramatic interest to the scenario. Because of the asymmetrical distribution of participation among countries, groups and regions, some participants had more than one twin (though such participants were in the minority).

Participants were encouraged to draw on a cultural reference, local saying or an anecdote from their twin to illustrate a point related to the substance or process of the negotiations (as negotiators often do), and were reminded to always be respectful of each other's views and backgrounds. In addition, all participants were provided with 'flags' or nameplates for use in the formal meeting. Participants in the role of government officials were instructed to select the flag of their 'twin' or the flag of a country from the same region or negotiating group (if known). Individual instructions were developed without reference to actual country positions, and it was not necessary for this simulation that participants attempt to follow such positions. It was suggested, however, that participants develop their positions and interventions with the interests of the regional group of their twin in mind.

The intention was to have each participant twinned with another whose background or experience was different. As many developing country participants as possible were to take on a developed country role and perspective, and vice-versa. Instruction sets and roles were otherwise assigned randomly, but were adjusted for regional, gender and sectoral balance. Participants were 'twinned' and assigned roles and positions based on instruction sets numbered 1–35 (depending on actual course participation, and some roles were re-assigned on the day of the simulation itself).

3 Key simulation documents

3.1 Background material

Participants were provided with key sections of two documents with particular relevance to multilateral discussion of climate-related geoengineering: 'Impacts of Climate Related Geoengineering on Biological Diversity';[11] and 'International regulatory framework for Climate-Related Geoengineering'.[12]

3.2 Draft texts prepared by the Co-Chairs

3.2.1 Common understanding and definition (Group A)

The Ad Hoc Joint Working Group recommends the following for adoption by the Governing bodies of the participating conventions:

The Conference of the Parties,

Decides, that climate-related geoengineering shall be considered to include:

1. [Any technologies that deliberately reduce solar insolation or increase carbon sequestration from the atmosphere on a large scale that may affect biodiversity (excluding carbon capture and storage from fossil fuels when it captures carbon dioxide before it is released into the atmosphere) (decision CBD X/33 of the Conference of the Parties)];

2. [Deliberate intervention in the planetary environment of a nature and scale intended to counteract anthropogenic climate change and/or its impacts (UNEP/CBD/SBSTTA/16/10)];

3. [Deliberate large-scale manipulation of the planetary environment (IPCC 32nd session)];

4. [Technological efforts to stabilize the climate system by direct intervention in the energy balance of the Earth for reducing global warming (IPCC Fourth Assessment Report17)].

[11] Document prepared for the Sixteenth meeting of the SBSTTA, Montreal, 30 April – 5 May 2012, Item 7.3 of the provisional agenda, Note by the Executive Secretary, UN Doc. UNEP/CBD/SBSTTA/16/INF/28 (2012). Lead Authors: Phillip Williamson, Robert Watson, Georgina Mace, Paulo Artaxo, Ralph Bodle, Victor Galaz, Andrew Parker, David Santillo, Chris Vivian, David Cooper, Jaime Webbe, Annie Cung and Emma Woods.

[12] Document prepared for the Sixteenth meeting of the SBSTTA, Montreal, 30 April – 5 May 2012, Item 7.3 of the provisional agenda, Note by the Executive Secretary, UNEP/CBD/SBSTTA/16/INF/29 (2012). The study was prepared by Ralph Bodle with contributions from Gesa Homan, Simone Schiele and Elizabeth Tedsen.

5. [Deliberate intervention in the planetary environment of a nature and scale intended to counteract anthropogenic climate change and/or its impacts through, *inter alia*, sunlight reflection methods or removing greenhouse gases from the atmosphere][land-use, land-management, afforestation, reforestation].

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3.2.2 Joint technical assessment of need for regulation of research and impacts (Group B)

The Ad Hoc Joint Working Group recommends the following for adoption by the Governing bodies of the participating conventions:

The Conference of the Parties,

1. *Requests* the scientific advisory bodies of the participating conventions to enhance cooperation and coordination with respect to joint technical assessment of the need for regulation of scientific research on climate-related geoengineering, and of the net and specific impacts of climate-related geoengineering at the national and global levels, *inter alia* by contributing to the development of indicators, scientific criteria for the identification of environmentally, ecologically or biologically significant risks[, as well as a needs assessment with respect to scientific capacity for such assessment], in a manner consistent with their respective mandates, governance arrangements and agreed programmes of work and with a view to developing a coherent approach on these matters.

2. *Decides* to participate in the joint development of assessment guidelines with the objectives to promote coherence in national technical assessment related to climate-related geoengineering, including in particular with respect to impacts related to biodiversity, ecosystem approach and migratory species.

3. *Decides* to participate in the joint development of technical assessment plans and priorities with the objectives to promote coherence in national technical assessment related to climate-related geoengineering, including in particular with respect to impacts related to biodiversity, ecosystem approach and migratory species.

4. *Invites* Parties to review and consider national circumstances, vulnerabilities, social, scientific, economic and systemic adaptive and institutional capacities.

5. *Invites* Parties to improve and enhance climate-related geoengineering related communication, education and public awareness, including the identification and elaboration of best practices, as well as opportunities for [endogenous] capacity building.

6. *Decides* to strengthen capacity building and technical support to developing countries and countries with economies in transition for coherent national assessment of net and specific climate-related geoengineering related impacts at the national level.

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3.2.3 Joint recommendation on roles and applicability of authorities (Group C)

The Ad Hoc Joint Working Group recommends the following for adoption by the Governing bodies of the participating conventions:

The Conference of the Parties,

[X. *Decides* to recognize the applicability of the provisions of [the Convention on Biological Diversity] [The London Convention / Protocol] [the United Nations Framework Convention on Climate Change] and its [Conference of the Parties] as the [primary][only] multilateral authority and decision-making body in matters related to Climate-related geoengineering and biodiversity] [with the exception of the specific multilateral authorities listed below].

[X. *Decides* that the Convention on Biological Diversity is recognized as the [primary] multilateral authority and decision-making body in matters related primarily to Climate-related geoengineering and biodiversity][including in particular XX].

[X. *Decides* that with respect to [X]-specific climate-related geoengineering issues the London Convention and London Protocol and its [Conference of the Parties] [Meeting of the Parties][respectively] [is][are] recognized as the [primary] multilateral [authority][authorities] and decision-making [body][bodies]in matters related to Climate-related geoengineering and disposal at sea] [including in particular XX].

[X. *Decides* that with respect to [X]-specific climate-related geoengineering issues the United Nations Framework Convention on Climate Change and the Kyoto Protocol] and its [Conference of the Parties][Meeting of the Parties][respectively] [is][are] recognized as the [primary] multilateral [authority][authorities] and decision-making [body][bodies] in matters related to Climate-related geoengineering and climate change] [including in particular XX].

[X. *Takes note* that climate-related geoengineering issues may arise in relation to matters that related to other multilateral legal instruments, and that the [supreme decision-making body][Conference of the Parties] of each such body

must be recognized as having the competency to take decisions in relation to its [treaty] [mandate] [provisions].

X. *Calls upon* the United Nations Environment Programme, the United Nations Educational, Scientific and Cultural Organization; working together with other bodies of the secretariats of multilateral environmental agreements and other international bodies, in particular the International Union for Conservation of Nature, to develop modalities for programmatic cooperation of the participating conventions in their work programmes in relation to geoengieering.

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3.2.4 Joint coordination/advisory body (Group D)

The Ad Hoc Joint Working Group recommends the following for adoption by the Governing bodies of the participating conventions:

For adoption by Supreme Body of relevant treaty organization:

The Conference of the Parties (mutatis mutandis),

1. *Calls for* continued improvement in cooperation and coordination between the participating Conventions.

2. *Requests* the scientific advisory bodies of the participating conventions to enhance cooperation and coordination with regard to geoengineering, [including in particular with respect to climate change,], in a manner consistent with their respective mandates, governance arrangements and agreed programmes of work and with a view to developing a coherent approach on these matters.

3. *Decides* that a joint advisory body of the participating conventions, to be known as the Joint Advisory Board, is hereby established.

4. *Decides* that the Joint Advisory Board shall consist of 5 members from each of the participating conventions chosen by the governing body of each with due regard for regional and gender balance.

5. *Decides* that the functions of the advisory board shall be:
(a) to review geoengineering related decisions and resolutions of participating treaty organizations as well as decisions of the Governing Council of the United Nations Environment Program;
(b) to further elaborate joint services and functions;
(c) to advise on joint activities in the field and their implementation in accordance with the One UN initiative.

6. *Decides* that the meetings of the Joint Advisory Board shall be serviced jointly by the secretariats of the participating conventions.

7. *Decides* that one Chairperson and one co-Chairperson be elected from its members by the expert group to preside over its work, and selected on a rotating basis from each of the participating Conventions.

8. *Decides* that the Joint Advisory Board shall meet annually.

9. *Decides* that, in order to conduct ongoing business of the Parties within the context of the Ad Hoc joint working group, the rules of procedure of the participating conventions Basel, Rotterdam and Stockholm conventions will be applied concurrently as far as possible, *mutatis mutandis*.

10. *Invites* Parties and others to make contributions through the special trust fund to ensure the participation of representatives of developing country Parties and Parties with economies in transition in the joint expert group.

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Selected Rules of Procedure:[13]

The materials for this exercise contained a set of selected rules of procedure from each of the three participating MEAs, related to conduct of business, language, participation and voting. Rules on these issues were considered particularly relevant. Rules from each of the conventions were included to provide an additional area of complexity and difference of views among parties, and is considered to be relevant and realistic in any situation similar to the scenario of the exercise, where different decision-making in multiple MEAs may be sought. Specifically, rules from the CBD,[14] the UNFCCC,[15] and the London Dumping Convention[16] were included.

4 Review of the exercise

The following is a brief summary of the proceedings and analysis based on observations made by the facilitators during the simulation as well as the post-mortem conducted immediately following the simulation, written evaluations from participants, and notes from additional verbal feedback.

[13] Reference was made to section 3.1.1 of Carruthers, *MEA Negotiator's Handbook*, *supra* note 4, for an overview of the subjects most commonly covered by rules of procedure in MEAs.

[14] Annex to Decision I/1 ('Rules of procedure for the Conference of the Parties') and Decision V/20 ('Operations of the Convention'), as abridged for this exercise.

[15] 'Adoption of the rules of procedure', UN Doc. FCCC/CP/1996/2 (1996), as abridged for this exercise.

[16] The First Meeting of Contracting Parties to the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 30 October – 3 November 2006, agenda item 4.1.

There were 25 official participants in all, not including the facilitators and the other resource people who supported or played various roles in respect of the simulation.[17] The participants were mainly from Ministries of Foreign Affairs or from ministries responsible for environmental matters of their respective countries. Academia and governmental and non-governmental organizations active in environmental matters were also represented.

This was the sixth time that a simulation exercise based on the same organizational model has been run in a UEF/UNEP course and had a paper based on it published in this *Review*. In each exercise, there has been a different substantive focus, while at the same time each has included key issues related to the rules of procedure. This is the third time that the exercise was set to run over two full days. The positive results achieved were largely the product of the creativity of the participants in overcoming the challenges of the exercise. The facilitators only incrementally allowed increased room for agreement by providing slightly more flexibility in additional individual instructions 'from capitals' to participants.

The results were considered to be a success by the facilitators and by all of the participants who provided feedback.[18] In particular, one participant wrote: '[t]hat was probably one of the most important skills I have improved over the course'. An additional perspective was that, '[a]s far as the drafting is concerned, this exercise helped me to evaluate the importance of workshops and the difficulty to reach agreement when various views are put forward'. Another said, '[t]he simulations helped me better understand the UN drafting negotiation procedures'. More specifically, one noted: '[t]here are more complexities in this field than I was aware. It also showed me the importance of reading the drafts carefully as there are many parties who want different things and it can cause you to get nothing for your country if you are not vigilant'. Considering the whole course, another comment was: '[e]xcellent methods, specially the simulation exercises'.

Some drew attention to soft-skills development, commenting that they gained '[… b]etter understanding of the different means to reach my objectives (informal relations, humour, irony etc.)'. And another said, more generally, that '[n]egotiation is not an easy task and requires a lot of patience and social abilities'.

From the feedback, it appears that this negotiation workshop is generally seen as one of the most valuable outputs of the Course, implying therefore that the Course organizers should put considerable effort into its instructions and preliminary guidance. Concerns expressed related to interest in having a deeper bibliography, more time and more instruction, including earlier access to the materials.

[17] There were 14 women and 11 men, from the following countries: Antigua and Barbuda, Barbados, Cameroon, Colombia, Cuba, Finland, Germany, Guyana, Haiti, Ivory Coast, St. Lucia, Spain, Trinidad and Tobago and St. Vincent and the Grenadines.

[18] The introduction to the exercise was rated at 4.6/5 by the participants in terms of relevance; and 4.6/5 in terms of quality. Participation in the exercise was rated at 4.8/5.

In the debriefing session, one of the key areas of focus was *the first objective of the simulation: the understanding of the challenges and opportunities related to climate-related geoengineering, both in general and in a specific MEA context*. There was considerable positive feedback about the substantive support and information provided by facilitators. Most agreed that understanding of these substantive issues was derived from preceding lectures, but that debate in the exercises, and the continuing involvement of the lecturers on the substance, helped most participants to deepen their understanding of the issues and different perspectives thereon.

With respect to *the second objective: understanding of the principles and practices of multilateral negotiation and appreciation of the value and role of the rules of procedure,* it was emphasized by the simulation organizers that the goal of the exercise had not been that all groups would successfully achieve consensus on results. Rather, it was revealed that the objective had been to present participants with irresolvable or nearly irresolvable issues, so that there would be more than usual pressure on the rules and procedures of MEA negotiation, and, in turn, more pressure on participants to use – or even misuse – the rules.

It was noted that a number of participants had specific instructions to be obstructionist, and to use rules of procedure aggressively. However, participants were congratulated on their perseverance and creativity, as the outcome produced a higher than expected amount of agreed text, with only a few outstanding issues reflected in bracketed text from one drafting group. There was considerable discussion among participants, including several with considerable negotiation experience, about how best to negotiate high stakes procedural issues, such as a motion to over-rule the Chair which was put forward in the final session. The facilitators of the exercise noted that the Chair of that session, as well as those involved in putting forward the motion, all managed their roles effectively. They were organized and thoughtful, and managed to maintain good diplomatic relationships even while making very forceful interventions.

It should be emphasized that the simulation was designed to produce a situation where agreement was very difficult, if not even impossible; where participants would be confronted with results that would be untenable within the terms of their instructions; and where they would be forced to grapple with the constraints of the rules of procedure, as well as the frustrations of being unable to reach agreement. The underlying objective was to highlight the importance of knowing the rules of procedure in the very rare instances where participants could be involved in actual negotiations with such difficulties. It should also be noted that this kind of situation does not reflect the reality for most negotiators in most MEA fora, most of the time. And in the end, participants overcame many of the numerous challenges in the scenario and were able to reach agreement on most of the necessary texts, with only a few issues remaining for the final plenary.

However, as discussed in the 'post-mortem' with participants, it needs to be understood that although such instances might be rare and therefore not reflect typical negotiations, the techniques conveyed through the exercise remain both useful and valid. It is relatively common for a few parties to have serious difficulties at some point in any MEA meeting, often having to consider the possibility of blocking consensus. In these situations, the importance of the rules of procedure increases, as parties may seek procedural solutions. The assumption behind this objective is that many negotiators could be better prepared to deal with such challenges. It should be noted that some instructions, and the roles of some groups, were somewhat exaggerated in order to give these participants stronger roles, and to contribute to the interlocking sets of challenges confronting participants.

Most of the challenges facing participants were based on actual experience, all were based on real issues, and only a few of the instructions were somewhat unrealistic. One of the concerns noted by participants was the lack of detailed explanations for positions, some of which contained internal contradictions. Apparent internal contradictions appear to be relatively common in MEA fora, and so were purposefully included in the simulation. The facilitators recalled that participants were intentionally being challenged to impose a coherent logic on their set of positions, in part because delegates in real negotiations often face such challenges, as domestic interests are not always easy to reconcile. They also noted that because positions were allocated to different participants in a random manner, there would be contradictions. There may be room in the future to improve the way in which these contradictions are organized and presented.

With respect to procedural and strategic issues, both participants and facilitators offered their views and perspectives based on their experiences. Most of the questions involved subjective assessments of different kinds of negotiation tactics and strategies. Much of the discussion focused on the motion to over-rule the Chair put forward in the final plenary session. As noted above, the participants were able to make forceful interventions in line with their instructions, and yet maintain a diplomatic approach that was largely realistic. It was emphasized that such a motion has to be regarded as extremely rare in actual MEA negotiations. However, participants agreed that this situation in the exercise helped in gaining an appreciation of how the rules can be used, and a higher level of comfort that they will be able competently to handle high stakes procedural issues in the future.

With respect to *the third objective: familiarity with specific substantive and drafting issues,* participants noted in particular that the divergence of positions and views forced them to consider the balance between clarity and 'constructive ambiguity' required to reach agreement, as well as a number of comments about the utility of the course sessions on negotiation and drafting techniques which preceded the simulation, as well as the *MEA Negotiator's Handbook*. Several participants indicated that

they would be interested in more instruction on technical drafting issues, as well as in a glossary of technical terms.

On *the fourth and final objective: discussion and appreciation of different perspectives on climate-related geoengineering substantive and institutional issues*, the resource people noted with appreciation that all participants took the exercise seriously and the simulation, indeed, reflected real-life multilateral discussions on the subject. The resource people also noted with interest that the assigned convention affiliations of the different party representatives did not generate conflict along convention lines.

Other issues raised in the post-mortem included a comparison with approaches and feedback from previous years. It was noted by the organizers that, in line with participant responses in previous simulation exercises, participants in this exercise were provided an introduction and materials several days before the exercise took place; they were not given detailed substantive background to their instructions; and nor were they provided with detailed rationales for the linkage – or lack of linkages – between their positions. Instead, participants were encouraged to develop their own rationales and given the freedom to do so. Similarly, again in response to feedback from a previous simulation exercise, there were no NGO or IGO roles. Some participants noted this absence, and it was discussed how the simulation might be adapted to bring in these perspectives. For the same reasons, full-time Secretariat roles were also not included in this simulation, and participants took turns to play Secretariat roles only for brief 'time slots'. Feedback on this arrangement was positive. The mere presence of participants in Secretariat roles allowed the Chair of a session the opportunity to consult and seek advice. And indeed, participants in Secretariat roles were able to provide substantive support and advice by, among other things, identifying applicable rules of procedure, or other relevant material for the Chair, while allowing the Chair to focus on the flow of discussion. Other participants were faced with managing logistical demands of parties, and helped to organize interaction with Course support staff providing services such as document reproduction. While these activities were often simple and practical, many participants noted that they gained an appreciation of Secretariat roles and perspectives, including on substantive issues, such as institutional or procedural issues which would have implications for Secretariat management. There was general agreement that this approach was preferable to having one or more participants dedicated entirely to a Secretariat role or roles, where they would have less scope to intervene and engage on substance.

Specific comments were received which highlighted the importance of being confronted with a demanding and frustrating situation in an exercise, in that this helped the participants to recognize the importance of abstract-sounding rules. It was also apparent that the participants appreciated being 'pushed'. While the objective of the simulation was not to explore any MEA rules per se, some participants also indicated an interest in being provided with more background information.

Most participants indicated that the twinning of roles and the mutual mentoring between roles was a particularly useful way of exploring and learning about different perspectives; as well as of initiating further discussion on the issues, and on regional and country-specific views. Twinning was also conducive to improving social interaction by enabling participants to get to know their fellow participants. In particular some noted that 'role reversal' was 'a great opportunity' to put themselves in 'someone else's shoes'.

However, as in previous years, several participants expressed some disappointment that they had not been able better to engage with their twins and draw out more relevant views and perspectives, largely owing to the limited time frame of the exercise. Others suggested that the concepts could have been better explained, or that twinning could have been set up earlier in the course, or even before the course began. Unfortunately, when information was provided on how efforts were made to optimize north-south and regional matching, and that participation of specific individuals is often uncertain right up until a day before the beginning of the course, no obvious solutions were found.

During the discussion with participants, the organizers emphasized that the twin relationship is, at least in part, intended to allow each participant to play the role of a technical advisor on the delegation of their twin, and vice versa. It was highlighted that in this technical advisor role, they only advise their twin, and do not intervene in any other way, but they provide country specific background information on their country's economy, environment and society. Participants found that this concept helped them better understand 'twinning', and recommended that it should be given greater emphasis, or highlighted more, in the introduction to, and supporting materials for, the exercise.

It was noted and recognized that advance reading of the simulation materials would be useful in this regard, and that the extended two-day format also helped to strengthen the twinning aspect of the simulation. In general, there was strong support for the extended two-day format.

In this simulation, it was clear that those in Chairing roles were kept working hard on substantive and procedural issues, so that keeping track of the real and simulation names of all participants became a concern. Based on comments from previous simulations, the Chairs in this simulation were given greater flexibility to design the process and to respond to developments in the simulation. This was particularly challenging, and increased the intensity of the simulation. However, the Chairs were closely supported by participants in Secretariat roles, and effectively used their time between and during sessions to consult with each other. Participants congratulated their Chairs on dealing effectively with rules of procedure, issues and motions, and felt that the Chair who had to deal with a motion to over-rule did an excellent job of continuing to manage the meeting effectively. It was noted by participants that

the Chairs were effective in moving the parties toward agreement, and there was some discussion of whether a Chair in an actual MEA would move so quickly from declaring that they see no objection to concluding: 'so decided!'. When informed that this does indeed often occur, a discussion followed about the need for the Chair to exercise careful judgement, and to act in line with his or her assessment of the general will of the parties, as well as the danger for the Chair if he or she were to over-step the role as servant of the parties. Among other things, the organizers and participants found that they had developed a good practice of limiting the time for interventions, and were encouraged to find that this kind of approach is, from time to time, employed in actual negotiations.

Finally, there was considerable discussion and debate on the meaning of strategies for identifying room for consensus, 'swing votes' and moderates as well as blocking consensus (both in technical terms related to the rules of procedure, but also in strategic terms), how to deal with parties threatening to block consensus, and how to deal with situations when a majority of parties seek agreement against the strong objection of one or more isolated parties. As with substantive issues related to climate-related geoengineering, there were different views and different values expressed in relation to consensus. In particular, there were different views on how MEA decision-making may evolve in the wake of the UNFCCC Copenhagen (COP 15) and Cancun (COP 16) results, with almost equally divided opinions. Some participants emphasized the need for the rules to provide parties with the flexibility needed to produce meaningful decisions that work for the majority of parties, while others emphasized the need to respect the principle that no party should be bound against its will, and a recognition that if this principle is not respected, it could also have practical implications where parties avoid certain kinds of multilateral engagement.

Annex A: Schedule for the the Grenada AHJWG simulation exercise

THURSDAY	**23rd August 2012**
Session 17 4.30 – 5.30. p.m.	Introduction to the Geoengineering negotiation workshop – Slot 1.

SATURDAY	**25rd August 2012**
Session ** TBD	Informal consultations (optional) – Slot 1.

TUESDAY	**28th August 2012**
Session 23 9.00 – 10.30 a.m.	Plenary - Slot 2.
10.30 – 11.00 a.m.	**TEA/COFFEE BREAK**
11.00 a.m. – 12.30 p.m.	Drafting Groups – Slot 3 (cont.)
12.30 – 2.00 p.m.	**LUNCH BREAK**
2.00 – 3.30 p.m.	Drafting Groups – Slot 4 (cont.)
3.30 – 4.00 p.m.	**TEA/COFFEE BREAK**
4.00 – 5.30 p.m.	Plenary – Slot 5 (cont.)

WEDNESDAY	**29th August 2012**
9.00 – 10.30 a.m.	Drafting Groups - Slot 6 – Plenary (cont.)
10.30 – 11.00 a.m.	**TEA/COFFEE BREAK**
11.00 a.m. – 12.30 p.m.	Drafting Groups - Slot 7 (cont.)
12.30 – 2.00 p.m.	**LUNCH BREAK**
2.00 – 3.30 p.m.	Drafting Groups - Slot 8 (cont.)
3.30 – 4.00 p.m.	**TEA/COFFEE BREAK**
4.00 – 5.30 p.m.	Plenary - Slot 9 - Plenary (cont.)

N.B. – This schedule is subject to change by agreement of the Parties.

The International Whaling Commission, the St Kitts and Nevis Declaration, and the Rio+20 Outcome Document Paragraphs on Oceans Governance: An International Negotiation Simulation Exercise[1]

Ed Couzens[2]

1 Introduction

This paper presents a multilateral simulation exercise run on the 2012 Course, which exercise was designed to introduce participants to negotiation skills through simulating the experience of drafting and debating a legal text, in a fairly hostile atmosphere. The setting chosen was a fictitious meeting of the International Whaling Commission (IWC);[3] a body which is often characterized as being prone to bitter disputes.[4]

It is the hope of the organizers of the University of Eastern Finland – United Nations Environmental Programme Course on Multilateral Environmental Agreements that papers such as those presented in the present volume (and previous volumes) of the

[1] The workshop described in this paper was prepared for the ninth UEF-UNEP Course on Multilateral Environmental Agreements. Where the materials are used for educational purposes, it would be appreciated if suitable acknowledgement could be made.

[2] BA Hons LLB (Wits) LLM Environmental Law (Natal & Nottingham) PhD (KZN); Attorney; Associate Professor, School of Law, University of KwaZulu-Natal, Durban, South Africa; e-mail: couzens.ed@gmail.com.

[3] See <http://www.iwc.int>.

[4] These disputes reach even to the very nature of the Convention itself, with some of its contracting governments denying that it is a multilateral agreement which is environmental in its nature; and others arguing that it is.

Review will provide educational value. Much discussion, planning and research is required in the devising of, and preparing toward, the negotiation exercises presented on the Courses. The papers which explain the exercises then provide, hopefully, not only records of the exercises; but also tools which teachers and lecturers can use when training diplomats, negotiators and students in international environmental law-making and diplomacy.

The intention was that the participants would effectively run the exercise themselves. While fictitious, the exercise was designed so that it would have a realistic atmosphere – the positions which the participants adopted being intended generally to reflect positions which might be adopted by the country which they were representing. While pointers as to negotiating positions were given, participants were expected also to conduct their own research. In this way, it was also intended that participants would learn about the substantive issues in an area of oceans governance which many would not have been familiar with. Of course, the issues dealt with would be common to many other debates around oceans governance.

Each participant was assigned a state (a 'contracting government' to the International Convention for the Regulation of Whaling (ICRW)[5]) to represent. Where possible, each participant was assigned to a state with a view unlike that of the state which the participant normally represents or resides in.[6]

The scenario presented concerned a Draft Resolution put forward by a contracting government (Grenada; co-sponsored by St Kitts and Nevis, St Lucia and St Vincent and the Grenadines). Each participant was given a copy of the proposed resolution – a document which was designed to be contentious and to contain numerous provocative suggestions. The essential possibilities of the exercise were that the Draft Resolution could be taken off the agenda completely; could be agreed upon by consensus; or could be voted on. If voted upon, as a resolution a simple majority would be required for adoption. The proposed resolution could also be amended before being adopted by consensus or voted upon.

There were 25 participants, where there were in mid-2012 89 contracting governments to the ICRW.[7] For the exercise, the 25 were allocated to pro- or anti-whaling positions in rough proportion to reality (in other words, a small majority of anti-whaling parties, with a number of possible swing states). It was intended that it would not be certain going into a vote that a majority would be obtained.

[5] International Convention for the Regulation of Whaling, Washington D.C., 2 December 1946, in force 10 November 1948, 161 *United Nations Treaty Series* 72.

[6] There were 25 participants on the 2012 Course, from 15 different countries: Antigua and Barbuda; Barbados; Cameroon; Colombia; Côte d'Ivoire; Cuba; Finland; Germany; Grenada; Guyana; Haiti; Spain; St Lucia; St Vincent and the Grenadines; and Trinidad and Tobago.

[7] At time of writing there are 88.

While a successful vote would not have the practical effect of amending either the text of the ICRW or its Schedule,[8] a resolution carries significant political momentum with it and is thus of importance.[9]

This negotiating exercise was intended to educate the Course participants on, firstly, issues of substance concerning oceans governance; on, secondly, issues of negotiation and strategy such as coalition building and the winning of support; on, thirdly, textual interpretation through increasing understanding of working with the language of MEAs; and, finally, on procedural understanding by simulating a meeting with Rules of Procedure and of Debate and, possibly, the conducting of a ballot. Specifically, the participants were required to 'wrestle with' the meaning, and implications, of various original texts for an elderly treaty (the ICRW) and its Schedule, a recent Declaration, and a lengthy recent Outcome Document – as well as Rules of Procedure and Rules of Debate. The issues needed to be fairly carefully chosen so as to be simple enough that they could be easily understood in the limited time frame available for the exercise; yet at the same time sufficiently complicated, especially in the necessary interactions between different international instruments, to educate and reward the efforts of participants with high levels of education and expertise (although not necessarily commensurate levels of knowledge of the specific issues).

The structure of the exercise was to take the International Whaling Commission (IWC) and posit a rethinking thereof in light of the oceans-related clauses in the Outcomes Document 'The Future We Want',[10] from the Rio+20 Summit which was held in June 2012 – with consideration also of the IWC's St Kitts and Nevis Declaration of 2006.[11]

2 Oceans Governance

2. 1 The International Whaling Commission

At a time when the world's states seem to be moving toward synergies and clusterings of international instruments,[12] almost to a 'biodiversity of conventions', the ICRW is one which is generally left out of such thinking.[13] It sometimes appears, even, that

[8] See <http://www.iwcoffice.org/cache/downloads/6awoj71tmhkw8gwows440k8kc/schedule.pdf> (visited 27 December 2012). The Schedule has been amended regularly and provides the means by which the contracting governments make changes to species listing, catch methods, catch quotas and other matters.

[9] Consider, for instance, the St Kitts and Nevis Declaration, adopted by the International Whaling Commission in 2006 (Resolution 2006:1). This is the only Resolution in recent years to have been 'won' by the pro-whaling contracting governments to the IWC. It was successful by a majority of one vote; but in subsequent years the anti-whaling contracting governments have not, despite regaining the majority, sought to overturn the Resolution.

[10] See <http://www.uncsd2012.org/thefuturewewant.html>.

[11] Resolution 2006:1. See *supra* note 8.

[12] For examples, see the various papers in Tuula Honkonen and Ed Couzens (eds), *International Environmental Law-making and Diplomacy Review 2011* (University of Eastern Finland-UNEP, 2013).

[13] On this, see Ed Couzens, 'How the Whale got its Impasse', in Ed Couzens and Tuula Honkonen (eds),

other MEAs simply defer to the International Whaling Commission and treat issues of whale conservation as 'untouchable'. It seems, therefore, that there is at least a degree of careful avoidance of the whaling issue-area in recent multilateral environmental agreements. One possible reason for this is that states attach so much importance to whaling that they can only get agreement elsewhere by excluding the issue-area. Another possible reason is that states are so worried by the possibility of contaminating newer treaties with the conflict that has marked the IWC for decades that they prefer to exclude the issue-area.[14] It is hard to see why, otherwise, it should be felt necessary that ICRW-related issues be expressly excluded from the ambits of newer conventions.

Nevertheless, as 'apex predators', cetaceans are sited at or near the tops of the food pyramids of many of the ecosystems in which they occur; and have extraordinarily important roles to play within their environments. The precedent value of decisions made by the IWC concerning cetaceans[15] is potentially of great significance for the areas in which they occur; and the issues raised in cetacean management often overlap with, or are common to, other oceans-related issues. Such issues might include climate and environmental change; conflict between different users in oceanic environments; ecosystem and habitat protection; fisheries and the exploitation thereof; food security; international cooperation; state sovereignty; and the status of the high seas.

As such, this was selected as a useful issue-area on which to base a negotiation exercise for the 2012 Course on Multilateral Environmental Agreements – the special theme of which was 'Ocean Governance'.[16]

2.2 'The Future We Want'

In June 2012 the Rio+20 United Nations Conference on Sustainable Development was held; this being ten years after the World Summit on Sustainable Development (Johannesburg, 2002), and twenty after the original 'Rio Conference' – the United Nations Conference on Environment and Development, 1992. While history will be the judge of its true value, at the moment it appears as though Rio+20 did not produce any commitments of real significance. The most important result was the adoption of a lengthy 'Outcome Document' titled 'The Future We Want'.[17] Probably the most that can be said for this document, at time of writing, is that it reiterates many of the 'soft law' principles of sustainable development which are slowly gaining traction toward, hopefully eventually, becoming binding customary law. Under the

International Environmental Law-making and Diplomacy Review 2008 (University of Joensuu-UNEP, 2009) 81–88.

[14] *Ibid*.

[15] 16 species of so-called 'great whale' are under the management auspices of the IWC.

[16] See <http://www.uef/unep/courses/2012>.

[17] See <http://sustainabledevelopment.un.org/futurewewant.html>.

heading 'Oceans and seas', paragraphs 158 to 177 concern issues relevant to oceans governance.

These sections will be scanned (summarized) here, with particular aspects relevant to oceans governance isolated. The full texts of all the paragraphs mentioned were available to the Course participants. In paragraph 158, the signatories

> recognize that oceans, seas and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical to sustaining it, and that international law, as reflected in the United Nations Convention on the Law of the Sea, provides the legal framework for the conservation and sustainable use of the oceans and their resources[;]

and record that '[w]e therefore commit to protect, and restore, the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity'. In paragraph 159, the signatories 'recognize the importance of the United Nations Convention on the Law of the Sea[18] to advancing sustainable development'; in paragraph 160 the signatories 'recognize the importance of building the capacity of developing countries'; and in paragraph 161 they 'support the Regular Process for Global Reporting and Assessment of the State of the Marine Environment'.

The signatories then, in paragraph 162, 'recognize the importance of the conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction' and 'commit to address[ing], on an urgent basis, the issue of the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, including by taking a decision on the development of an international instrument under the United Nations Convention on the Law of the Sea'; in paragraph 163 'note with concern that the health of oceans and marine biodiversity are negatively affected by marine pollution'; 'note', in paragraph 164, 'the significant threat that alien invasive species pose to marine ecosystems'; and, in paragraph 165, 'note that sea-level rise and coastal erosion are serious threats'. The parties 'call', in paragraph 166, 'for support to initiatives that address ocean acidification and the impacts of climate change on marine and coastal ecosystems and resources; and 'stress', in paragraph 167, 'our concern about the potential environmental impacts of ocean fertilization'. In paragraph 168 the signatories 'commit to intensify[ing] our efforts to meet the 2015 target as agreed to in the Johannesburg Plan of Implementation to maintain or restore stocks to levels that can produce maximum sustainable yield on an urgent basis'. In paragraph 169 the signatories 'urge States parties to the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks to fully implement that Agreement'. In paragraph 170 the signatories 'acknowledge that illegal, unreported and unregulated

[18] United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, in force 16 November 1994, 21 *International Legal Materials* (1982) 1261.

fishing deprive many countries of a crucial natural resource and remain a persistent threat to their sustainable development'; and, in paragraph 171, 'call upon States that have signed the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing to expedite procedures for its ratification with a view to its early entry into force'.

The signatories then, in paragraph 172, 'recognize the need for transparency and accountability in fisheries management by regional fisheries management organizations'; and, in paragraph 173, 'reaffirm our commitment in the Johannesburg Plan of Implementation to eliminate subsidies that contribute to illegal, unreported and unregulated fishing and overcapacity'. In paragraph 174, the signatories 'urge the identification and mainstreaming of strategies by 2014 that further assist developing countries'; and, paragraph 175, 'commit to observ[ing] the need to ensure access to fisheries and the importance of access to markets, by subsistence, small-scale and artisanal fisherfolk and women fish workers'. The signatories then, in paragraph 176, 'also so recognize the significant economic, social and environmental contributions of coral reefs'; and, in paragraph 177, 'reaffirm the importance of area-based conservation measures'.

Also relevant, perhaps, under the heading 'VI. Means of implementation', is the 'reffirmation' in paragraph 252 'that the means of implementation identified in Agenda 21, the Programme for the Further Implementation of Agenda 21, the Johannesburg Plan of Implementation, … are indispensable for achieving the full and effective translation of sustainable development commitments into tangible sustainable development outcomes'; and the 'reiterat[ion] that each country has primary responsibility for its own economic and social development' and that 'the role of national policies, domestic resources and development strategies cannot be overemphasized'.

3 Instructions and materials

3.1 Role assignation

Each participant was assigned to represent a state (a contracting government to the International Convention for the Regulation of Whaling). Where possible, each participant was assigned to a state with a view generally understood to be different to that of the state from which the participant came. The assigning of roles in a negotiation exercise is always a difficult balancing act, as it is useful also to include within groups (within the exercise) some participants who are familiar with the views of that group (or region). Other considerations in assigning roles include such things as taking the experience levels, as far as these can be ascertained, of the participants into account; and separating from each other participants who might be expected to have similar views – with all of this needing to be done very quickly where the exercise is run, as this one was, near the beginning of the Course.

Each participant was then given a brief indication of the 'philosophy' which would be expected to drive the position of the state which he or she was to represent.[19] The states chosen were divided into three essential groups – 'sustainable use group' states;[20] 'like-minded group' states;[21] and 'middle of the road' states. The numbers of states which fell into each group were intended basically to reflect the comparative positions within the real IWC negotiations.[22] In the following three subsections of this paper, examples are given of the types of 'core' instructions given to states within 'groups'. The groupings were given to each participant in order to assist them with identifying parties with whom they wished to speak. Not every roleplayer falls necessarily into a group.

3.1.1 'Sustainable use group' states

Grenada

Member of the 'sustainable use' group. Is not an active whaling country, but does support sustainable use and generally speaks in support of national sovereignty and the need to ensure food security, and would be expected to support pro-whaling moves. As the host country and as the main sponsor of the Draft Resolution, Grenada can be expected to push hard to have the Draft adopted. Would be expected to meet with Japan and also with the other Caribbean IWC members.

LIKE-MINDED GROUP MEMBERS
Australia, Belgium, Brazil, Denmark, Panama, Poland, the Netherlands, South Africa, United Kingdom, United States
SUSTAINABLE USE GROUP MEMBERS
Grenada, Iceland, Japan, Norway, Palau, South Korea, St Lucia, St Kitts and Nevis, St Vincent and the Grenadines
BUENOS AIRES GROUP MEMBERS
Argentina, Brazil, Panama
CARIBBEAN GROUP MEMBERS
Grenada, St Lucia, St Kitts and Nevis, St Vincent and the Grenadines
EUROPEAN UNION MEMBERS
Belgium, Denmark, Poland, the Netherlands, United Kingdom

[19] These instructions could perhaps have been more extensive, so as to afford the participants more assistance, but time was very limited and so the approach was taken of giving participants only 'core direction'.

[20] With Iceland, Japan and Norway as its most prominent members, this is the group of contracting governments which consistently argues and votes in favour of a resumption of commercial whaling.

[21] Although states such as Australia, Germany, New Zealand, and the UK are often described – on their own – as being the 'Like-minded Group', in fact it is a fairly large group of states basically including all of the EU states and others which consistently argue and vote against moves to resume commercial whaling.

[22] This intention is never easy to stick to, as on an exercise like this there are always unexpected absences and for various reasons some Course participants occasionally, and unexpectedly, do not take part in the exercise. Of course, the way in which this affects the efforts of the participants to form alliances and build coalitions is reflective of reality.

3.1.2 'Like-minded group' states

Australia

Member of the 'Like-minded group'. Is currently engaged, as plaintiff, in litigation with Japan in the International Court of Justice – with Australia seeking to have Japan's scientific permit whaling declared illegal. Is considered one of the leaders of the anti-whaling movement and takes a hard line against any form of whaling, with the exception of aboriginal subsistence whaling. Would be expected to be at the forefront of opposition to any moves that might lead to whaling being resumed in any form. Has a high degree of national awareness on the issue, and probably the most demanding of all national constituencies to try to satisfy. Would be expected to organize a meeting with the 'Like-minded Group' members.

3.1.3 'Middle of the road' states

Switzerland

European state, but not an EU member. Is not a member of the 'Like-minded Group'. Would be expected to be most sympathetic to the anti-whaling position, but could take a position unlike that of the majority of the anti-whaling contracting governments should Switzerland be convinced that this is correct. However, this is more likely to take the form of an abstention than a vote in favour of any move toward resuming commercial whaling, or against the anti-whaling position. Is not expected necessarily to attend any coordinated meetings, but might be sought out by various other IWC contracting governments seeking to explain their positions.

3.2 Preparatory documents

In preparation, each participant had been given – several weeks before the 2012 Course began – the texts of a number of instruments. These were the International Convention for the Regulation of Whaling, of 1946;[23] the Protocol thereto, of 1956;[24] the Schedule thereto;[25] the Rules of Procedure thereto;[26] and the Rules of Debate thereto.[27] It was hoped that each participant would therefore be familiar with these texts by the time the exercise began. This preparation was crucial[28] as the exercise was

[23] Available at <http://www.iwcoffice.org/commission/convention.htm>.

[24] Available at *ibid*.

[25] The Schedule to the ICRW contains amendments which the contracting governments have made to the operation of the Convention. The ability so to amend operating procedures arguably gives the Convention an inherent degree of flexibility; however, a 75 per cent majority is required to carry an amendment, if consensus is not reached.

[26] Available at <http://www.iwcoffice.org/commission/procedure.htm>.

[27] Available at *ibid*.

[28] Although probably observed more in the breach! A constant topic of debate amongst the resource persons involved with the UEF – UNEP Course on Multilateral Environmental Agreements is how best to persuade participants to prepare adequately, given that most participants have busy diplomatic, or other,

designed essentially to concern both matters of interpretation of legal text and matters of procedure. Initial instructions were then given to the participants shortly before the exercise took place.[29]

Participants did have the opportunity, using internet resources, to inform themselves as to their allocated country's position in order to supplement their brief instructions. In addition, it was suggested to the participants that they could make the effort to inform themselves as to other countries' positions; in order potentially to strengthen their negotiating positions. Participants were warned that if they did not fully inform themselves as to their own (allocated) countries' positions, then they might find themselves embarrassed by other participants knowing more about the first participant's (allocated) country.[30]

A Chair was appointed by the main organizer of the exercise. This office corresponded to the current (at the time of the exercise) Chair of the IWC – i.e. St Lucia.[31] The choice of Chair is always a difficult one, and the drafters of some exercises prefer to leave it to the participants themselves to elect office-bearers[32] – but this is difficult when the exercise documentation needs to be handed out near the beginning of the Course. On the one hand, it is advisable to seek a fairly experienced ('strong') participant for this role, as it is a difficult position – being both office-bearer and simultaneously representing a state; on the other hand, it might be considered preferable to leave experienced participants 'in the field' to contribute to the debate and to assist less experienced participants.

Participants were encouraged to form alliances – some of which suggested themselves naturally.[33] Others arose which might not have been realistic had this been the real IWC. Participants ought to have recognized that they could get better results if united. Each participant was also given a mock draft resolution (put forward by Grenada; co-sponsored by St Kitts and Nevis, St Lucia and St Vincent and the Grenadines).

careers. Probably the best that can be done is to encourage as much preparation as possible, but then to present a negotiation exercise which does not rely on this preparation; and so an exercise which will be enhanced by preparation but which will not run the risk of failing if the preparation is not adequate.

29 The exercise took place on a single day, 23 August 2012.

30 Although these descriptions are in the main accurate for each state's current stances in respect of IWC negotiations, and participants had the opportunity to bolster these instructions with internet-based research on their allotted states, it does not ultimately matter – for purposes of the exercise – that the participants had all of the details correct. The exercise was designed to teach negotiation skills, rather than knowledge beyond the basic. It is worth noting here that many of the participants in the 2012 exercise were from states which are not members of the IWC, and of which it would not be expected that there would be a high degree of knowledge about the whaling debate.

31 The Commissioner to the IWC for St Lucia, Jeannine Compton-Antoine, was elected as Chair of the IWC at the 64th Meeting of the IWC in July 2012.

32 See, for instance, the paper by Cam Carruthers in Part IV of the present *Review*.

33 According to the brief position statements furnished to the participants.

It is important to note that within the IWC there is a significant difference between a proposed Schedule amendment and a resolution, in that a Schedule amendment can be passed only with a three-quarters majority while a resolution can be passed by a simple majority. This meant that there was a good chance, with appropriate alliance-building, that the resolution would be passed.

The actual exercise, then, was for the participants to deal with the mock resolution – and for them to choose to take it off the table; to drive it to a vote; to adopt it by consensus; or to amend it and to choose one of the above options in respect of the amended version.

4 Exercise documentation

4.1 The St Kitts and Nevis Declaration, 2006

In order to assist the participants, particularly those from states not normally represented in the IWC, the real text of the St Kitts and Nevis Declaration of 2006 was supplied. It was intended that this would provide 'ammunition' for debate. The resolution is essentially the only resolution 'won' by the pro-whaling ('sustainable use') contracting governments in the IWC in approximately thirty years; and it provides both a useful summary of the sustainable use approach to whaling and a critique of the majority position within the IWC. The mock Draft Resolution then made reference to this Declaration, which meant that consideration of the Declaration formed an essential part of the exercise.

IWC
Resolution 2006-1
ST KITTS AND NEVIS DECLARATION

EMPHASISING that the use of cetaceans in many parts of the world including the Caribbean, contributes to sustainable coastal communities, sustainable livelihoods, food security and poverty reduction and that placing the use of whales outside the context of the globally accepted norm of science-based management and rule-making for emotional reasons would set a bad precedent that risks our use of fisheries and other renewable resources;
FURTHER EMPHASING that the use of marine resources as an integral part of development options is critically important at this time for a number of countries experiencing the need to diversify their agriculture;
UNDERSTANDING that the purpose of the 1946 International Convention for the Regulation of Whaling (ICRW) is to 'provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry' (quoted from the Preamble to the Convention) and that the International Whaling Commission (IWC) is therefore about managing whaling to ensure whale stocks are not over-harvested rather than protecting all whales irrespective of their abundance;

NOTING that in 1982, the IWC adopted a moratorium on commercial whaling (paragraph 10 e of the Schedule to the ICRW) without advice from the Commission's Scientific Committee that such measure was required for conservation purposes;
FURTHER NOTING that the moratorium which was clearly intended as a temporary measure is no longer necessary, that the Commission adopted a robust and risk-averse procedure (RMP) for calculating quotas for abundant stocks of baleen whales in 1994 and that the IWC's own Scientific Committee has agreed that many species and stocks of whales are abundant and sustainable whaling is possible;
CONCERNED that after 14 years of discussion and negotiation, the IWC has failed to complete and implement a management regime to regulate commercial whaling.
ACCEPTING that scientific research has shown that whales consume huge quantities of fish making the issue a matter of food security for coastal nations and requiring that the issue of management of whale stocks must be considered in a broader context of ecosystem management since eco-system management has now become an international standard.
REJECTING as unacceptable that a number of international NGOs with self-interest campaigns should use threats in an attempt to direct government policy on matters of sovereign rights related to the use of resources for food security and national development;
NOTING that the position of some members that are opposed to the resumption of commercial whaling on a sustainable basis irrespective of the status of whale stocks is contrary to the object and purpose of the International Convention for the Regulation of Whaling;
UNDERSTANDING that the IWC can be saved from collapse only by implementing conservation and management measures which will allow controlled and sustainable whaling which would not mean a return to historic over-harvesting and that continuing failure to do so serves neither the interests of whale conservation nor management;

NOW THEREFORE:

COMMISSIONERS express their concern that the IWC has failed to meet its obligations under the terms of the ICRW and,
DECLARE our commitment to normalising the functions of the IWC based on the terms of the ICRW and other relevant international law, respect for cultural diversity and traditions of coastal peoples and the fundamental principles of sustainable use of resources, and the need for science-based policy and rulemaking that are accepted as the world standard for the management of marine resources.[34]

[34] Available at <http://www.iwc.int/meetings/resolutions/resolution2006.htm> (visited 27 December 2012).

4.2 The Draft Resolution for the exercise, 2012

Each participant was then supplied with the Draft Resolution which was to be the subject of their negotiation exercise.

DOC IWC65/RES/1
DRAFT RESOLUTION 2012-1 ON IMPLEMENTATION OF THE ST KITTS AND NEVIS DECLARATION AND THE RIO+20 OUTCOME STATEMENTS ON OCEANS GOVERNANCE

SPONSORED BY GRENADA;
CO-SPONSORED BY ST KITTS AND NEVIS, ST LUCIA AND ST VINCENT AND THE GRENADINES

RECALLING that the 2006 ST KITTS AND NEVIS DECLARATION EMPHASISED that the use of cetaceans in many parts of the world including the Caribbean, contributes to sustainable coastal communities, sustainable livelihoods, food security and poverty reduction and that placing the use of whales outside the context of the globally accepted norm of science-based management and rule-making for emotional reasons would set a bad precedent that risks our use of fisheries and other renewable resources; FURTHER EMPHASISED that the use of marine resources as an integral part of development options is critically important at this time for a number of countries experiencing the need to diversify their agriculture; ACCEPTED that scientific research has shown that whales consume huge quantities of fish making the issue a matter of food security for coastal nations and requiring that the issue of management of whale stocks must be considered in a broader context of ecosystem management since eco-system management has now become an international standard; REJECTED as unacceptable that a number of international NGOs with self-interest campaigns should use threats in an attempt to direct government policy on matters of sovereign rights related to the use of resources for food security and national development; and NOTED that the position of some members that are opposed to the resumption of commercial whaling on a sustainable basis irrespective of the status of whale stocks is contrary to the object and purpose of the International Convention for the Regulation of Whaling;

NOTING that the outcome document "RIO+20 THE FUTURE WE WANT" STRESSES (Para. 158) the importance of the conservation and sustainable use of the oceans and seas and of their resources for sustainable development, including through their contributions to poverty eradication, sustained economic growth, food security and creation of sustainable livelihoods and decent work, while at the same time protecting biodiversity and the marine environment and addressing the impacts of climate change; RECOGNIZES (Para. 160) the importance of building the capacity of developing countries to be able to benefit from the conservation and sustainable use of the oceans and seas and their resources; URGES (Para. 169) States parties to the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea relating

to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks to fully implement that Agreement and to give, in accordance with part VII of the Agreement, full recognition to the special requirements of developing States; URGES (Para. 174) the identification and mainstreaming of strategies by 2014 that further assist developing countries, in particular the least developed countries and small island developing States, in developing their national capacity to conserve, sustainably manage and realize the benefits of sustainable fisheries, including through improved market access for fish products from developing countries; and COMMITS (Para. 175) to observe the need to ensure access to fisheries and the importance of access to markets, by subsistence, small-scale and artisanal fisherfolk and women fish workers, as well as indigenous peoples and their communities, particularly in developing countries, especially small island developing States;

REITERATING from the 2006 ST. KITTS AND NEVIS DECLARATION that it is UNDERSTOOD that the purpose of the 1946 International Convention for the Regulation of Whaling (ICRW) is to 'provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry' (quoted from the Preamble to the Convention) and that the International Whaling Commission (IWC) is therefore about managing whaling to ensure whale stocks are not over-harvested rather than protecting all whales irrespective of their abundance; **RECALLING** that in 1982, the IWC adopted a moratorium on commercial whaling (paragraph 10(e) of the Schedule to the ICRW) without advice from the Commission's Scientific Committee that such measure was required for conservation purposes; **REPEATING THE UNDERSTANDING** that the moratorium which was clearly intended as a temporary measure is no longer necessary, that the Commission adopted a robust and risk-averse procedure (RMP) for calculating quotas for abundant stocks of baleen whales in 1994 and that the IWC's own Scientific Committee has agreed that many species and stocks of whales are abundant and sustainable whaling is possible; and **REPEATING CONCERN** that after 20 years of discussion and negotiation, the IWC has failed to complete and implement a management regime to regulate commercial whaling;

RE-EMPHASISING that scientific research has shown that whales consume huge quantities of fish making the issue a matter of food security for coastal nations and requiring that the issue of management of whale stocks must be considered in a broader context of ecosystem management since eco-system management has now become an international standard; **REJECTING ONCE AGAIN** as unacceptable that a number of international NGOs with self-interest campaigns should use threats in an attempt to direct government policy on matters of sovereign rights related to the use of resources for food security and national development; **NOTING WITH INCREASED CONCERN** that the position of some members that are opposed to the resumption of commercial whaling on a sustainable basis irrespective of the status of whale stocks is contrary to the object and purpose of the International Convention for the Regulation of Whaling; and **RE-EMPHASISING WITH INCREASED UNDERSTANDING** that the IWC can be saved from collapse only by implementing conservation and management measures which will allow

controlled and sustainable whaling which would not mean a return to historic over-harvesting and that continuing failure to do so serves neither the interests of whale conservation nor management;

NOW THEREFORE:

CONTRACTING GOVERNMENTS TO THE INTERNATIONAL WHALING COMMISSION EXPRESS their deep and increasing concern that the IWC has failed, and continues to fail, to meet its legal obligations under the terms of the ICRW;

DECLARE their commitment to normalizing the functions of the IWC based on the text of the ICRW, on respect for cultural diversity and traditions of coastal peoples, on the fundamental principles of sustainable use of resources, on the need for science-based policy and rulemaking that are accepted as the world standard for the management of marine resources, and on the recent recognition of these things as imperatives in the 2012 document "RIO+20 THE FUTURE WE WANT";

RESOLVE to work expeditiously toward the approval, by 2014 at the latest, of the Revised Management Scheme (RMS) required in order to implement the Revised Management Procedure (RMP), with the firm intention of implementing the RMP by 2016 at the latest;

AND AGREE THAT the review of Schedule Paragraph 10(e), which ought to have been undertaken by 1990 at the latest, will take place by 2016 at the latest.

5 Expectations of the exercise

The intention was that the participants would, from the beginning of the actual negotiating, run the exercise themselves – under the direction of their Chair. The originator of this negotiation exercise played the role of the Secretary of the IWC – not involved in the negotiations, but sitting alongside the Chair and assisting with procedural issues. In addition, another senior resource person from the Course sat alongside, playing the role of the IWC Head of Science, to assist where necessary.

The exercise would then be followed by a lecture from the originator, including an assessment of the exercise, explanation of how the results of the exercise differed from or were similar to what would probably have happened in reality – given the history of the IWC. In this respect, issues of form and substance from the 63rd and 64th Meetings of the IWC, held in 2011 and 2012, would be highlighted in order to put into context the experience which the participants would just have gained.

6 The exercise

The entire exercise took the form of debate in plenary session, with certain 'breakaway' negotiating sessions.

6.1 The opening session

The Chair, from St Lucia, welcomed the delegates to the 65th Meeting of the International Whaling Commission. Russia asked whether all dues had been paid; and the Chair confirmed that all had been. The United States then asked whether the Meeting was quorate; and the Chair confirmed that it was.

Russia thanked the government of Grenada for hosting the Meeting; and then noted, with concern, that the proposed Chair was a Draft Resolution co-sponsor. Russia indicated that there was no personal objection; but that there was the 'possibility of a conflict of interest arising'. The Chair indicated her gratitude for her appointment; and, on Russia's query, indicated that there had been conferral within the small island developing states and that it was felt that it 'would be a tragedy if the commitment could not be met, that it would set a bad precedent, and that all are passionate about the issues'. The United States indicated that it wished to affirm full confidence in St Lucia as Chair; that it was cognizant of potential conflict, but was aware of her full ability. Australia said that it understood Russia's concern, but had confidence in the Chair. Poland then thanked the Chair – at which point Russia intervened to ask Poland to clarify in respect of which body it was speaking. Poland indicated that it was 'simply expressing gratitude and expressing confidence'. Other contracting governments to indicate confidence in the Chair then included Grenada and Japan. Russia, however, then indicated that it objected to any intervention based on any consensus by the European Union, rather than by a party – 'as the EU is not a contracting government'. Poland said that it thought that it had indicated the sentiments of the EU. Belgium indicated that it shared the trust in the current Chair; and Denmark indicated that it gave full support to its EU colleagues in thanking Grenada and supporting St Lucia as Chair. Denmark indicated that Poland would represent the EU. Russia then said that as there was a feeling of consensus on the Chair it would not make use of its right to object; but wished to point out that whatever common practice might be in other multilateral environmental agreements, the EU was not a member of the IWC. Australia said that the Chair had overwhelming support and suggested that that brought the argument to a close. The Chair then said that she would not take the trust placed in her lightly; and thanked Grenada for hosting the Meeting.

Grenada said that it was 'an honour to welcome all delegates to Grenada'; and then referred to the 'Future We Want' document, which it said was 'very important'. Grenada pointed out that 'we only have one planet and that we should take care of

it'. Grenada then described the region as being 'a necklace of multicultural islands'; and concluded by expressing the hope that 'we' would have wisdom.

The Chair then asked whether there was consensus on the Agenda.

65th International Whaling Commission Meeting, 2012
(DRAFT) AGENDA

1. Convening of the meeting
2. Confirmation of Chair
3. Adoption of the Agenda, including voting procedure
4. Opening of Plenary
5. Submission of Draft Resolution IWC65/Res/1 by Grenada
6. Closing of Plenary

Japan indicated that it would like the procedure of secret ballots to be adopted. St Kitts and Nevis, after taking the opportunity to thank Grenada for hosting the Meeting, supported the adoption of the secret ballot. St Kitts and Nevis pointed out that the secret ballot was the standard voting procedure in democracy; and that it was essential to protect smaller economies, whereas an open procedure could create 'diplomatic problems'. Russia indicated that it would not oppose a secret procedure, but reminded all that every effort should be made to reach consensus. Grenada said that it supported the secret ballot, as it wished to protect its economy. Poland agreed that consensus should be strived for, but agreed that ballots should be secret.[35] The Chair then suggested a 20 minute break.

6.2 The second session

The Chair declared the 65th Meeting open; and then invited the distinguished delegate from Grenada to introduce its Draft Resolution. Grenada explained that the Draft Resolution was the result of many meetings and that it was sponsored by Grenada, St Kitts and Nevis, St Lucia, and St Vincent and the Grenadines. Our desire, said Grenada, is to discuss all parts of the document and to take a decision. 'We think', said Grenada, 'that we need to go ahead and finish the work begun in St Kitts and Nevis'.

The Chair then said that it would be greatly appreciated if interventions could be short, concise, and kept to one minute.

St Kitts and Nevis thanked Grenada and said that it would like to support; and that it would like to recall the St Kitts and Nevis Declaration, which had marked a cor-

[35] This was unexpected, given that the negotiating position of the European Union contracting governments in the IWC is in reality firmly against Japan's regular proposals to operate by way of a secret ballot.

nerstone. In the Declaration, the IWC expressed support for sustainable whaling for the first time in two decades; with the Declaration being adopted by a majority of contracting governments. Norway then thanked Grenada for sponsoring the Draft Resolution and for the warm welcome. Norway pointed out that there is a great emphasis on marine biodiversity in the Caribbean; and explained that Norway believes that the sustainable use of cetaceans contributes to sustainable development. Norway explained that it was concerned about illegal fishing; and that it wanted to reiterate now the purpose of the 1946 treaty – to 'make possible the orderly development of the whaling industry'. South Korea thanked the government of Grenada for hosting the Meeting; and then, associating its intervention with that of Norway, explained that it wanted to ask all contracting governments to vote in favour. The Chair queried whether this was a suggestion that South Korea wanted all to vote in favour; or to adopt by consensus. South Korea indicated that it hoped for consensus.

Russia asked whether the entire document was open for comment, or whether it was only the first page being discussed. The Chair said that at this stage general comments were being sought. Russia then said that more discussion would be needed before consensus could be reached. Japan associated itself with South Korea; and suggested mandating the Scientific Committee to establish whether it was time to restart sustainable whaling.

Australia said that it was resolutely opposed to whaling and that it supported the moratorium. Australia said that blue whales in the Antarctic were down to one per cent of their original population, with humpback whales down from 1.5 million to 20 000, and that this situation has come about largely because of commercial whaling. Australia then said that commercial whaling is camouflaging behind scientific permit whaling, with the whales ending up in restaurants – and that it was clear that any new approach must put an end to Article VIII whaling.[36] Poland indicated that it was strongly in favour of whale conservation and that it was convinced that these discussions were critical – what is needed being a fully functional body to control conservation and management worldwide. Poland suggested marrying agriculture with the issue of whaling; but that food security should be addressed in another forum. Argentina gave its support to maintaining the moratorium; opposed 'so-called scientific permit whaling'; and gave support to the creation of sanctuaries. Argentina noted that the perception of whales has changed and that non-consumptive use is now supported.

Russia thanked Grenada for the proposal. Russia then reminded the assembly that it had lodged an objection to the 1986 moratorium;[37] but that it has 'consistently refrained from conducting whaling, showing political will'. However, said Russia,

[36] Scientific permit whaling being provided for in Art. VIII of the ICRW.

[37] Russia does hold such a reservation. The moratorium (technically a 'zero quota') was agreed to at the 1982 meeting; and commenced from the beginning of the 1986 'coastal season' and the 1985/1986 'pelagic season'. Paragraph 10(e) of the Schedule to the ICRW.

'since 1986 some countries whale under scientific permits'; with Russia adding that it sees such permits as 'a disguise for commercial whaling'. However, Russia added that it saw some merit in the Draft and would be open for negotiations to amend and provide for a favourable scientific basis and for inspection. South Korea said that all are here to decide on our future and on how to protect our resources – and that that future should be decided by consensus. South Korea then said that it supports sustainable whaling by research; and that it wants more information to save its own marine biodiversity. Finally, South Korea proposed analyzing the Draft sentence by sentence in order to 'take a good decision'.

Grenada said that it thinks that food security might not be the first thing on some country's agendas, but that for many it is. The Netherlands thanked Grenada; then supported Poland's view on food security issues. The Netherlands said that it understands food security; but that whales are not the reason fish stocks are low, this being 'the work of man'. The Netherlands then suggested changing 'food security'[38] to 'sustainability of livelihoods'; and insisted that commercial whaling cannot be the starting point for sustainable use.

St Vincent and the Grenadines thanked Grenada and congratulated 'Madame Chair' on her election; then explained that what was being talked about was a national interest for some, and that some countries need to kill some whales for subsistence. St Vincent and the Grenadines added that it had been given a reasonable quota of four whales a year.[39] Denmark thanked the Caribbean states for tabling the Resolution; and said that Denmark was looking for 'a constructive discussion toward concerns'. Denmark confirmed that Poland was representing the EU states. Belgium associated itself with Poland and said that there were 27 states; then thanked Grenada for hosting the Meeting and for bringing forward the Draft Resolution. Belgium then thanked St Vincent and the Grenadines, explained that Belgium wanted to underline the issue of food security, especially for indigenous people, and said that Belgium looked forward to a constructive exchange. Ghana congratulated Grenada for being an 'amazing host'; then gave full support to Grenada's Resolution, which Ghana said 'encourages you to really think about the issue of food security'.

The United States congratulated 'Madame Chair' and thanked Grenada as hosts. The United States then 'applauded the noble position of Russia' in not taking any whales commercially despite its reservation. 'All nations need to exercise caution', said the US, and 'we seem to have little confidence in our ability to analyze the consequences of our actions' – we 'need caution and more meaningful research'. The US said that it understands the concept of food security; but that the concept of whaling as an integral part of food security 'seems far-fetched'. The US added that it recognizes

[38] The term 'food security' appearing three times in the opening paragraph of the Draft Resolution.
[39] This is the usual quota given to St Vincent and the Grenadines by the IWC in recent years.

the situation of small island developing states, but larger countries have a responsibility to be more cautious.

Norway said that it would like to emphasize that there are different ways of whaling and different practices. Norway is, it said, also not bound by the 1982 moratorium[40] since it has been whaling and hunting on a small scale by indigenous methods.[41] Norway then noted the numerous mentions of poverty reduction and offered to try to 'look for synergies to enrich the document'; as with Australia, said Norway, it would like to remind that denying the practice of whaling was not realistic for some countries. Japan then said that whaling through scientific permit whaling is sustainable; and asked whether we shall protect whales or human beings, 'as we have just heard how important whaling is for some regions'? We should consider, Japan went on, the role of this Commission – to ensure stocks are not exhausted, but 'today used to protect all'. There are other conventions, like the Convention on Biological Diversity, to do this, said Japan. The Netherlands said that it took note of Japan's views, but that it was of the view that the convention is to ensure conservation and the proper development of whale stocks, so cannot be considered separately.[42]

Palau said that it supports sustainable use and food security issues; but that scientific evidence shows a great decline in whales in Palau, so it had an exclusive economic zone to protect all marine mammals – and that it had established a sanctuary to support them. The UK said that there is no justification for whaling – especially commercial, but that provision was made for some by humane means. The UK strongly suggested marrying the precautionary principle with food security. Russia then made what it called a clarification point – that the 1986 IWC moratorium allows for aboriginal whaling for indigenous communities,[43] so that, said Russia, 'what we are discussing here is not small type – we're discussing large-scale industrial whaling which is banned. We should be able to come up with a scheme for large-scale, not' … At this point, Russia was interrupted by Poland's raising a point of order, saying that it (Poland) would like to move for an adjournment and that the issue was exhausted.

Grenada said that the best option would be to close comments; before noting that the Caribbean countries think that it is not totally true that whales and food security are not linked. We want, said Grenada, to remark that we include a specific sentence that 'whales consume huge quantities of fish and that food security of whales affects food security of countries'. 'Indigenous peoples have rights', added Grenada, 'including the right to develop'.

[40] As explained above, the '1982' and the '1986 moratorium' are references to the same instrument.

[41] Norway holds a reservation to the moratorium.

[42] The words used in the Preamble to the ICRW are that: '[the contracting governments have] decided to conclude a convention to provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry'.

[43] The moratorium is on 'killing for commercial purposes of whales from all stocks'. Paragraph 10(e) of the Schedule to the ICRW. Aboriginal subsistence whaling is thus not affected by the moratorium.

6.3 The third session

On resumption, after a short break, the Chair said that she appreciated the desire to reach consensus. St Kitts and Nevis said that it agreed with the text. The Chair asked for other comments. Poland said that the delegate from Poland and the EU … Russia interrupted with a point of order, and objected to any reference being made to the EU. Poland said that it had understood this issue to have been clarified. Poland then said 'our intervention must be clear' – in respect of the word 'recalling', they wished to use 'noting' instead of 'recalling'. Poland then said that the fifth sentence was emotional. The Netherlands indicated its full support. Australia gave support. Iceland suggested that the use of the phrase 'emotional reason' was necessary in context. Australia suggested looking at the staggering statistics on decline of humpback whales – 'from 1.5 million to 1.3 per cent'. Iceland responded that Australia had reiterated Iceland's position, which is based on science; and that leaving it in would ensure that 'we are all on the level'. Attention then turned to considering the draft text:

> **RECALLING** that the 2006 ST KITTS AND NEVIS DECLARATION EMPHASISED that the use of cetaceans in many parts of the world including the Caribbean, contributes to sustainable coastal communities, sustainable livelihoods, food security and poverty reduction and that placing the use of whales outside the context of the globally accepted norm of science-based management and rule-making for emotional reasons would set a bad precedent that risks our use of fisheries and other renewable resources; …

St Kitts and Nevis suggested that 'we could take out' the three words 'for emotional reasons'. Iceland said that it accepted the deletion. Grenada said that it had no objection, but wanted to point out that 'emotional reasons' meant 'not only who's fishing but who's pushing' – and that it wanted to remark that it was speaking about science-based information. St Kitts and Nevis said that, in respect of replacing 'recalling' with 'noting', the Declaration was a decision taken; and that it would like to 'recall' it. Poland then raised a point of order, and indicated that its understanding was that there had been agreement on this point. The Chair said that she would take Poland's point on board. Grenada said that it did not agree and that it wanted 'recalling'. The Netherlands supported Poland and pointed out that Grenada had not objected; and then added that the Netherlands was of the view that the Chair had closed the paragraph. St Kitts and Nevis said that its understanding was that 'we would discuss the paragraph in one go'; and that it was 'not a strong argument we've deleted' as '"noting" is too weak language'.

After some further discussion, Russia indicated that it would consider an objection. Russia said that it wished to comment on the following paragraph:

> … **ACCEPTED** that scientific research has shown that whales consume huge quantities of fish making the issue a matter of food security for coastal nations and requiring that the issue of management of whale stocks must be considered in a broader context of ecosystem management since eco-system management has now become an international standard; …

Russia argued that scientific research is not conclusive on this issue and there is a need to require minimum standards on data. 'Too strong wording', said Russia, 'blames whales for depletion of fish stocks, but world fisheries have skyrocketed and we expect an increase to 172 million tonnes in 2013'. 'If we follow on this line', continued Russia, 'we would have to reduce the human population as well as whales'. Russia then argued for the deletion of the words 'scientific' to 'that'. Japan then expressed the view that 'we cannot proceed without seeing this in writing'.

> … **ACCEPTED** that scientific research has shown that whales consume huge quantities of fish making the issue a matter of food security for coastal nations and requiring that the issue of management of whale stocks must be considered in a broader context of ecosystem management since eco-system management has now become an international standard; …

St Kitts and Nevis concurred about deleting the whole paragraph as the Declaration was adopted in 2006 – saying that 'if we change the paragraph we change the whole of the Declaration'. Australia gave strong support to the modification suggested by Russia. St Kitts and Nevis said again that the decision of 2006 cannot be changed.

> … **[NOTING]** that the 2006 ST KITTS AND NEVIS DECLARATION EMPHASISED that the use of cetaceans in many parts of the world including the Caribbean, contributes to sustainable coastal communities, sustainable livelihoods, food security and poverty reduction and that placing the use of whales outside the context of the globally accepted norm of science-based management and rule-making would set a bad precedent that risks our use of fisheries and other renewable resources; …

Poland then raised a point of order, saying that 'this is not to amend and cannot distill that agreement – this is a new document and trying to address the issue before this body'. Iceland then suggested that 'similar paragraphs overleaf discuss similar things'; and that by changing the beginning the end would be changed. The Chair said that the objection was to the words used; and that 'when we reach that part of the text we will decide'. The Chair then ordered that the plenary reconvene at 14h00 after lunch.

6.4 The fourth session

After the lunch break the Chair asked Russia and St Kitts and Nevis to respond. St Kitts and Nevis indicated that it was pleased to say that there was agreement to delete 'the words in yellow'.[44] The Chair then ruled that the sub-paragraph was now closed. Norway, however, raised a point of order and asked about Panama, Finland and Brazil. The Chair stated that Finland and Panama were not present, and that she could not say about Brazil. Australia indicated that Brazil was 'not feeling well'. The Chair moved on to the fourth sub-paragraph of the first paragraph. Australia indicated that it was 'not supportive' of this, and stated that the role of NGOs is critical in many governments – providing a safeguard for government. Australia added that the role of NGOs has been 'very admirable' in respect of whaling, and that there seems to be a campaign to blacklist NGOs. Poland supported the proposition by Australia, and suggested that this sub-paragraph be deleted. Iceland supported the view of Australia and Poland that 'it needs to be revised'.

> … **REJECTING ONCE AGAIN** as unacceptable that a number of international NGOs with self-interest campaigns should use threats in an attempt to direct government policy on matters of sovereign rights related to the use of resources for food security and national development; …

Norway then thanked Grenada for the 'nice lunch'. The United States said that it could see no good that could come from an unwarranted attack on any group, that the NGO role is debated, and that the paragraph should be deleted as it adds nothing to the substantive issue and creates discomfort. St Kitts and Nevis then proposed limiting speaking time for speakers. The Chair promptly ruled that the time limit would be established at one minute. Ghana then spoke, to associate itself with Australia and Poland. Grenada said that it thought it was not necessary to change whole sentences; and that this could send the wrong message to the community. Grenada's suggestion was 'RECALLING state sovereignty'; and proposed the following wording:

> … **RECALLING** that state sovereignty is the basis of international cooperation and urging all actors to respect international and national legal norms as appropriate; …

Poland supported Grenada. Denmark supported Poland and strongly supported the proposition by Grenada. Belgium aligned itself with Poland and Denmark; and expressed gratitude to Grenada. Korea strongly supported 'the last formulation'. The Netherlands strongly supported Grenada. St Kitts and Nevis then said that it would like to 'create awareness that it's 14h45'; and that it 'would like to get [it] adopted'.

[44] The verbatim record of the exercise is unclear at this point as to which words were meant. The participants were, by this stage, tracking suggested changes on screen.

Russia thanked Grenada and St Kitts and Nevis for their wisdom in difficult aspects; and said that the wording by Grenada should be accepted. Further, Russia suggested that the accepted word is 'stakeholder' [rather than 'actor']. Russia supported St Kitts and Nevis on time, 'not because of wanting to get to the beach but to get our job done'. St Vincent and the Grenadines gave its support. Japan said that it 'can support'. There was then general applause.

Attention then turned to the final sub-paragraph:

> … and NOTED that the position [of some members] that are opposed to the resumption of commercial whaling on a sustainable basis irrespective of the status of whale stocks is contrary to the object and purpose of the International Convention for the Regulation of Whaling; …

South Africa gave its support.[45] The Chair then ruled that there was consensus. Poland, however, said it would like to recommend that the paragraph be deleted as it 'reflects the position of some members and is not essential to the matter at hand'. Grenada said that it would agree to delete 'of some members'; but did not want the whole paragraph deleted. The Chair asked for clarification. Japan suggested adopting the text 'as it reads'.

Turning to the next paragraph, Switzerland thanked Grenada for hosting and for drafting the text; then said that it was 'fine' with the text from the Outcomes Document, but that paragraph 158 is not given full recognition – and that the most binding part is a commitment to restore marine biodiversity, etcetera. Switzerland said that it believes this to be a critical part of the document and proposed that the entire section be added to the text.[46] Russia supported this; as did St Kitts and Nevis, Poland and Norway.

> … **NOTING** that the outcome document "RIO+20 THE FUTURE WE WANT" STRESSES (Para. 158) the importance of the conservation and sustainable use of the oceans and seas and of their resources for sustainable development, including through their contributions to poverty eradication, sustained economic growth, food security and creation of sustainable livelihoods and decent work, while at the same time protecting biodiversity and the marine environment and addressing the impacts of climate change – we therefore commit to protect and restore, the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity, enabling their conservation and sustainable use for present and future generations, and to effectively apply an ecosystem approach and the precautionary approach in the management, in accordance with international law, of activities impacting on the marine environment, to deliver

[45] This would be an unlikely intervention in reality.

[46] The proposed addition being a 'commit[ment] to protect, and restore, the health, productivity and resilience of oceans and marine ecosystems, and to maintain their biodiversity'.

> on all three dimensions of sustainable development; RECOGNIZES (Para. 160) the importance of building the capacity of developing countries to be able to benefit from the conservation and sustainable use of the oceans and seas and their resources; URGES (Para. 169) States parties to the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks to fully implement that Agreement and to give, in accordance with part VII of the Agreement, full recognition to the special requirements of developing States; URGES (Para. 174) the identification and mainstreaming of strategies by 2014 that further assist developing countries, in particular the least developed countries and small island developing States, in developing their national capacity to conserve, sustainably manage and realize the benefits of sustainable fisheries, including through improved market access for fish products from developing countries; and COMMITS (Para. 175) to observe the need to ensure access to fisheries and the importance of access to markets, by subsistence, small-scale and artisanal fisherfolk and women fish workers, as well as indigenous peoples and their communities, particularly in developing countries, especially small island developing States;

The Chair then ruled that the next sub-paragraph was closed, with support from Poland. The text being:

> … **RECOGNIZES** (Para. 160) the importance of building the capacity of developing countries to be able to benefit from the conservation and sustainable use of the oceans and seas and their resources; …

The next sub-paragraph was left unchanged; and then the next was closed, with support from Poland and Palau, the text being:

> … **URGES** (Para. 174) the identification and mainstreaming of strategies by 2014 that further assist developing countries, in particular the least developed countries and small island developing States, in developing their national capacity to conserve, sustainably manage and realize the benefits of sustainable fisheries, including through improved market access for fish products from developing countries; …

The Chair then declared the next sub-paragraph closed, the text being:

> … and **COMMITS** (Para. 175) to observe the need to ensure access to fisheries and the importance of access to markets, by subsistence, small-scale and artisanal fisherfolk and women fish workers, as well as indigenous peoples and their communities, particularly in developing countries, especially small island developing States; …

The paragraph was then closed by the Chair.

Russia and Japan suggested some amendments to the first sub-paragraph of the next paragraph, Japan arguing that they were necessary to clarify 'what is role of this Convention, as to manage whaling, not to protect whales'; after which the Chair closed with the text being:

> **… REITERATING** from the 2006 ST. KITTS AND NEVIS DECLARATION that it is UNDERSTOOD that the purpose of the 1946 International Convention for the Regulation of Whaling (ICRW) is to 'provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry' (quoted from the Preamble to the Convention) and that the International Whaling Commission (IWC) is therefore about managing whaling to ensure whale stocks are not over-harvested rather than protecting all whales as the purpose of the IWC is specified in the Convention as safeguarding for future generations the great natural resources represented by the whale stocks; …[47]

Australia advised that it wished to delete the next sub-paragraph; the text being:

> … **RECALLING** that in 1982, the IWC adopted a moratorium on commercial whaling (paragraph 10(e) of the Schedule to the ICRW) without advice from the Commission's Scientific Committee that such measure was required for conservation purposes; …

There was evidence in 1982, said Australia, and to leave the paragraph standing would be a 'serious indictment of the IWC'. Japan responded that it could not accept the deletion of the paragraph as it was 'stating the facts exactly'. Australia, however, indicated that it held to its view and that the paragraph 'leaves the IWC as a pack of jokers'. Poland then suggested the deletion of the words 'without advice'. South Africa agreed with Poland. Japan said that it could not agree with Poland and South Africa. The Netherlands said it took note of Japan's views, but strongly supported Poland. The Chair suggested bracketing the text.

> … [**RECALLING** that in 1982, the IWC adopted a moratorium on commercial whaling (paragraph 10(e) of the Schedule to the ICRW) [<u>without advice</u> from the Commission's Scientific Committee that such measure was required for conservation purposes;]] …

The United States suggested a compromise could read 'without *adequate* advice'. Japan said that it was fine with the United States' proposal. Poland said that it would abstain from making a recommendation, but would like the matter kept open. The Chair then suggested an adjournment of five minutes for Japan, Poland and Australia to meet.

[47] In reality this sub-paragraph would probably have occasioned far more debate.

6.5 The fifth session

On resumption, Japan explained that it could agree with the EU proposal of altered wording; and Australia, on the basis that it had initially said that it would support deletion, indicated that there was consensus. The sub-paragraph then read:

> … **RECALLING** that in 1982, the IWC adopted a moratorium on commercial whaling (paragraph 10(e) of the Schedule to the ICRW) without adequate/sufficient advice from the Commission's Scientific Committee that such measure was required for conservation purposes; …

The Chair then turned to the next sub-paragraph and asked if there were any objections to it. Argentina suggested deleting the words running from 'and that' to 'possible'; the text being:

> … **REPEATING THE UNDERSTANDING** that the moratorium was intended as a temporary measure, that the Commission adopted a robust and risk-averse procedure (RMP) for calculating quotas for stocks of baleen whales in 1994 and that the IWC's own Scientific Committee has agreed that sustainable whaling may be possible. …

Australia said that from its view there was a very strong reason to keep the moratorium. Iceland said that it could not support a deletion which 'negates the work of the Scientific Committee'. Poland referred to Rule E3(b)[48] and said that it is 'impossible to lift the Schedule'. Japan associated itself with Iceland; and said that it would 'like the text as it stands in the beginning'. Russia stated that the results of the Scientific Committee 'cannot be taken as conclusive at this stage'. Russia then reminded contracting governments of its reservation in 1986 as in its view the moratorium was established without scientific advice – and said that it would like more scientific input. Denmark aligned itself with Poland, and then said that it 'would like to restate that we do support the Polish' and emphasized that 'the grounds for removing this is procedural as we are not in a position to commit the Commission to amending the Schedule in the Future'. Denmark indicated also that it did not support Argentina. Ghana then said 'we seriously care about the marine environment'; and that it supported Iceland and Japan.

[48] This rule reads:

> [a]ction in pursuance of Article V shall contain the text of the regulations proposed to amend the Schedule. A proposal that does not contain such regulatory text does not constitute an amendment to the Schedule and therefore requires only a simple majority vote. A proposal that does not contain such regulatory text to revise the Schedule but would commit the Commission to amend the Schedule in the future can neither be put to a vote nor adopted.

Rule E3(b) of the IWC Rules of Procedure.

Australia said that it supported Russia – and that Australia 'has every evidence to suggest a lot of evidence extracted from old records', that many countries are misguided, and that 'populations are much lower'. Norway pointed out that it also had an objection, which has not been withdrawn; and that it supported 'Russia and European colleagues and would like to see changes'. Grenada then proposed deletion or change; and said that it was not necessary to delete the reference to the Scientific Committee 'as speaking about fact'. 'If we delete', said Grenada, 'we won't have support further for own data'; and then suggested adding the words 'IWC's own Scientific Committee has to be strengthened', so that the text would read:

> … **REPEATING THE UNDERSTANDING** that the moratorium which was clearly intended as a temporary measure should be revised, that the Commission adopted a robust and risk-averse procedure (RMP) for calculating quotas for stocks of baleen whales in 1994 and that the IWC's own Scientific Committee has to be strengthened. ~~and that the IWC's own Scientific Committee has agreed that many species and stocks of whales are abundant and sustainable whaling is possible~~ and that the IWC's own Scientific Committee has agreed that many species and stocks of whales are abundant and sustainable whaling is possible …

The Netherlands then suggested a new formulation. Japan said that while it appreciated The Netherlands' proposal, it would still like the original text in place. Australia concurred with the Netherlands. The Chair suggested that Japan and the Netherlands consult. Iceland asked whether it could be part of the discussion. The Chair indicated that Iceland should first give its opinion; whereupon Iceland indicated that it supported Japan. After consideration, and indication from Japan that the next sentence would 'take care of Grenada's concern about scientific whaling', the Chair declared the paragraph closed.

> … **REPEATING THE UNDERSTANDING** that the moratorium was intended as a temporary measure, that the Commission adopted a robust and risk-averse procedure (RMP) for calculating quotas for stocks of baleen whales in 1994 and that the IWC's own Scientific Committee has agreed that sustainable whaling may be possible. …

Discussion then turned to the next section of the text:

> … **REPEATING CONCERN** that after 20 years of discussion and negotiation, the IWC has failed to complete and implement a management regime to regulate commercial whaling;

With no objections to this; consideration turned to the next sub-paragraph:

> … **RE-EMPHASISING** that scientific research has shown that whales consume huge quantities of fish making the issue a matter of food security for coastal na-

> tions and requiring that the issue of management of whale stocks must be considered in a broader context of ecosystem management since eco-system management has now become an international standard; …

Norway suggested deleting this – supported by Grenada, Poland, St Kitts and Nevis, Russia and St Vincent and the Grenadines. Tanzania congratulated Grenada on the 'fine arrangements'; but then indicated that it was 'puzzled on statements from the Caribbean on food security as it had thought it was a concern shared with us'. Tanzania said that it would like to address the food security issue and see it reflected later on. St Kitts and Nevis said that in respect of the food security issue, 'we think we can agree we could delete [this] as issue of food security has been raised before in several parts'; and asked whether this would be acceptable to Tanzania. Tanzania indicated that they could agree on this.

The Chair then directed the Commission to the words:

> … **RE-EMPHASISING WITH INCREASED UNDERSTANDING** that the IWC can be saved from collapse only by implementing conservation and management measures which will allow controlled and sustainable whaling which would not mean a return to historic over-harvesting and that continuing failure to do so serves neither the interests of whale conservation nor management; …

Norway said that it would like to include a reference to a 'strong and sustainable IWC'. Australia said that, from its perspective, it did not like the sub-paragraph which it saw as 'endeavouring to hold the IWC hostage'. Australia said that it was proposing a 'concrete proposal to save the IWC' with nine key points: in summary, explained by Australia, these included issues such as 'no new whaling', 'climate change', 'sanctuaries', and so forth. Australia explained that it would engage later on these. Japan said that it could support Norway; but suggested deletion of the word 'conservation':

> … **RE-EMPHASISING WITH INCREASED UNDERSTANDING** that the IWC can be saved from collapse by implementing ~~conservation and~~ management measures which will continue to allow sustainable and controlled whaling <u>for indigenous people</u> …

Poland supported Norway. Grenada supported Norway, but with the change suggested by Japan. Iceland supported Japan. The Netherlands supported Norway and Poland, but 'without the end part'.

Belgium expressed its gratitude for being able to go 'forward in a compromise way', which would bring parties together. Japan said that the words 'for indigenous people' would need to be deleted. Iceland concurred with Japan. Korea proposed the use of the word 'local' instead of 'indigenous'. Various formulations were then considered.

… and … **RE-EMPHASISING WITH INCREASED UNDERSTANDING** that the IWC can be saved from collapse by implementing ~~conservation and~~ management measures

which will continue to allow sustainable and controlled whaling for indigenous people

and with strong and solid financial and technical efforts toward an improved monitoring and evaluation systems and measures which will allow controlled and sustainable whaling which would not mean a return to historic over-harvesting and that continuing failure to do so serves neither the interests of whale conservation nor management;

and with strong and solid financial and technical efforts toward an improved monitoring and evaluation systems and measures which will allow controlled and sustainable whaling for indigenous people.

and with strong and solid financial and technical efforts toward an improved monitoring and evaluation systems and measures which will allow controlled and sustainable whaling.

and with strong and solid financial and technical efforts toward an improved monitoring and evaluation systems and measures which will allow controlled and sustainable whaling for local people.

and with strong and solid financial and technical efforts toward an improved monitoring and evaluation systems and measures which will allow controlled and sustainable whaling for coastal communities.

The Chair ruled that there was no consensus on the point; and the exercise concluded at this junction, without adoption of a final text.

8 Conclusion

In the end, the exercise yielded a result rather out of kilter with what might have happened in real life,[49] although many of the arguments which were raised over both procedure and substance were realistic. Some participants probably did not understand the full implications of their instructions; so, for instance, in real life the anti-whaling contracting governments would not have agreed to Japan's early proposal to conduct votes by way of a 'secret ballot' should there be a vote. Markedly, the par-

[49] Although it needs to be conceded that the proposed resolution on which the exercise was based was not realistic, in the sense that it raised issues in an unsophisticated way, and was deliberately provocative.

ticipants did seem to treat the exercise more as a drafting exercise, with their object being to agree to a text – with the possibility of there not being a text at the end not really featuring.

Nevertheless, it appeared, from informal reactions afterward, that the exercise achieved its purpose. Participants considered international legal issues with which only a few were familiar; many successfully argued from positions which would not have reflected their countries' usual positions;[50] debate became vigorous; and the participants were required to engage with difficult questions, both of procedure and of substance, in the course of the exercise. Even more importantly, perhaps, the exercise gave many of the participants a taste of the techniques of international negotiation.

Informal feedback after the exercise indicated further that participants had found the exercise valuable both as to substance and as to procedure.[51] It was apparent, during the exercise, that many of the participants had made the effort to research their designated countries' positions; and also those of other contracting governments. Most participants appeared to take the exercise seriously; which may reflect the fact that they were all selected for the Course initially as being persons either already involved in international environmental negotiation, or with the potential to become so involved.

[50] See *supra* section 1 ('Introduction'); and section 3.1 ('Role assignation').

[51] Informal feedback also from resource persons on the Course, many of whom were experienced international negotiators, indicated also that they had perceived the exercise to have been successful.