Seychelles Marine Spatial Planning Legislative and Policy Review

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EXECUTIVE SUMMARY

This Legislative and Policy Review was prepared for the Seychelles Marine Spatial Planning (MSP) Initiative with the aim of providing guidance for developing and implementing a marine plan for the Seychelles Exclusive Economic Zone. The objectives of the Seychelles MSP Initiative are to address climate change and marine biodiversity protection in support of the Blue Economy, national biodiversity targets, and other national strategies. Stakeholder input comes from the major sectors including fisheries, tourism, port authority, biodiversity conservation, cultural heritage, non-renewable energy, and renewable energy.

This report contains a summary of key legislation, policies and international commitments or conventions from 1932-2015 that are relevant to the MSP Initiative. Each chapter includes information for the themes or sectors covered by the marine plan. The governance and jurisdictional information for each theme or sectors is elaborated upon within each chapter (i.e., there is not a separate chapter for governance). Likewise, the Seychelles Sustainable Development Strategy 2012-2020 and Blue Economy Concept paper are relevant for multiple themes and thus covered in several chapters.

For climate change (Chapter 1), the United Nations Convention on Climate Change 1992 and the Kyoto Protocol 1997 provide the main international obligations for the Seychelles Government. The Nairobi Convention, in its last COP 8 meeting held in June 2015, also called for a regional climate change strategy, which is currently being jointly developed by the Nairobi Convention Secretariat and the Western Indian Ocean Marine Science Association. At the national level, the Seychelles National Climate Change Strategy 2009 gives effect to climate change obligations. The Ministry responsible for addressing climate change is Ministry of Environment, Energy and Climate Change, with assistance from the National Climate Change Committee.

For cultural heritage (Chapter II), the UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage 1972 is the main international commitment that pertains to the marine environment, whilst a Cultural Policy has been developed and the *National Monuments Act 1980* enacted at the national level. The Ministry of Tourism and Culture – Culture Division and the Seychelles Heritage Foundation are responsible for providing policy directions and to conserve and promote the cultural heritage of Seychelles, respectively.

For fisheries (Chapter III), Seychelles is signatory to both the UN Food and Agriculture Organisation and the United Nations Convention on the Law of the Sea and associated agreements: UN Fish Stocks Agreement 1995, the FAO Compliance Agreement 1993, the FAO Code of Conduct for Responsible Fisheries 1995, and UN FAO Port State Measures Agreement 2011, which deal with fisheries management, access by foreign fishing vessels and Illegal, Unregulated and Unreported fishing. Seychelles has signed agreements for management of sharks, and fishing capacity. Seychelles is party to several regional fishery management bodies including the Indian Ocean Tuna Commission. Bilateral Fisheries Partnership Agreements are an important contributor to Seychelles' economy and allow foreign access to fish stocks within Seychelles' Exclusive Economic Zone: a 6-year agreement with France and Spain for purse seine vessels (2014-2020); access agreements with Mayotte and Mauritius; and agreements with Japan and Taiwan for longline vessels but none are currently active. The *Fisheries Act 2014,* the *Fisheries Regulations 1987* and the Fisheries Policy 2005 govern fisheries management in Seychelles. These documents guide the sustainable development of fisheries in line with the international and regional commitments. Piracy is an issue for fisheries and other marine sectors and the Penal Code charges acts of piracy. A Comprehensive Maritime Security Plan of Action has been developed to deal with piracy and maritime security. The Seychelles Fishing Authority is responsible for fisheries management in line with Seychelles international obligations guided by policy directions from the Ministry of Agriculture and Fisheries. The Seychelles Fishing Authority is responsible for fisheries management in line with Seychelles international obligations guided by policy directions from the Ministry of Agriculture and Fisheries. The Seychelles Fishing Authority is responsible for fisheries management in line with Seychelles international obligations guided by policy directions from the Ministry of Agriculture and Fisheries. The Seychelles Fishing Authority is responsible for fisheries management in line with Seychelles international obligations guided by policy directions from the Ministry of Agriculture and Fisheries (MAF). Bilateral partnership agreements are negotiated by the Ministry of Foreign Affairs and SFA.

Infrastructure development (Chapter IV) on land and at sea is governed by the *Town and Country Planning Act 1972* (currently under revision), the *Environment Protection (Impact Assessment) Regulations 1996; whilst* reclamation is governed by the *Reclamation Act 1961*. The Ministry of Land Use and Housing is responsible for giving policy directions regarding national land use, planning and housing and works in close collaboration with the Town and Country Planning Authority. Land Use Plans have been developed for each district and these will be consolidated into the National Land Use Plan.

With regards to Non-renewable Resources (Chapter V), the United Nations Convention on the Law of the Sea provides the framework for exploitation of natural resources within Seychelles EEZ. There are no policy documents to guide development for non-renewable resources though legislation does exist - *Petroleum Mining Act 1976* and the *Environment Protection (Impact Assessment) Regulations 1996*. The President has portfolio responsibility over hydrocarbon matters, whilst PetroSeychelles is the implementing authority for the petroleum sector.

For pollution (Chapter VI), this is dealt with extensively by the Nairobi Convention 1985 and its Protocols; the International Maritime Organisation conventions and the United Nations Convention on the Law of the Sea 1982. National legislation also gives effect to these obligations, in particular the *Environment Protection Act 1994*. The Waste Management Policy 2014-2018 also addresses the issue of pollution to the marine environment, though the document does not address pollution by liquid waste. The Ministry of Environment, Energy and Climate Change is the responsible authority implementing these obligations under the *Environment Protection Act 1994*, whilst the Seychelles Coastguards has jurisdiction over the National Oil Spill Contingency Plan under the *Merchant Shipping Act 1992*.

For biodiversity protection (Chapter VII), the Convention on Biological Diversity is the main international commitment that Seychelles has vis a vis Protected Areas. In 2009, Seychelles committed to 30% marine protection in Rio+20. These obligations are furthered in the newly developed Protected Areas Policy 2013, which legislation will give effect to in 2016, as well

as the National Biodiversity Strategy and Action Plan 2015- 2020. A comprehensive Legal, Policy and Institutional Review was undertaken by the UNDP-GEF project 'Strengthening Seychelles' Protected Area System through NGO Management Modalities' project 2010-2015.

For renewable energy (Chapter VIII), the International Renewable Energy Agency and Nairobi Convention address energy needs for Small Island Developing States. The *Energy Act* was enacted in 2012 and a new Energy policy is currently being developed. The Seychelles Energy Commission has the mandate to implement the *Energy Act*.

Shipping and marine transportation (Chapter IX) are regulated by the *Harbour Act 1932* (last amended in 1991), the *Merchant Shipping Act 1992*, the *Seychelles Ports Authority Act 2004*, and the *Maritime Zones Act 1999*. These pieces of legislation give effect to the obligations that Seychelles has under the International Maritime Organisation Conventions. The Port of Victoria is aiming to expand and develop as detailed in the Seychelles Ports Development Master Plan 2014. The Seychelles Ports Authority is mandated under legislation to administer all matters relating to the port under the *Merchant Shipping Act 1995*, whilst the Seychelles Maritime Safety Administration is the regulatory government body ensuring safe marine transportation. The *Harbour Act 1932* regulates shipping activities within Victoria Harbour and defines the legal boundary of Port Victoria, the boundary of the Fishing Port of Seychelles, and the International Zone. The *Maritime Zones Act 1999* implements the United Nations Law of the Sea Convention 1982 at the national level and provides clear guidance, definitions and coordinates for the internal waters, the archipelagic water, the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf of the Seychelles.

Tourism and recreation (Chapter X) includes marine charters and sports fishing. Seychelles is a member of the United Nations World Tourism Organisation and has commitments with the Convention on Biological Diversity with regards to sustainable tourism development. In the same vein, the Seychelles Sustainable Tourism Label has been developed at the national level. The following pieces of legislation regulate tourism related activities such as sports fishing, boat charter, diving, yachting, paragliding, commercial ski boat, and hirer of water sports equipment: *Control of Hirecraft Act 1973, Licences Act 2010, Beach Control Act 1971* and the *Fisheries Act 2014*. These are supplemented by national tourism policies emanating out of the Tourism Master Plan 2012-2020, e.g. the Boat Charter Policy, 2008; the Recreational Diving Business Policy, 2015; and the Yachting Tourism Policy, 2008.

In conclusion, existing legislation and policies govern most marine uses or themes in the MSP Initiative. There are, however, several gaps in existing legislation and policy and these are noted below with recommendations to address.

1. National legislation does not exist to give effect to Seychelles obligations under the UNFCCC. When a Climate Change Strategy is developed and adopted under the auspices of the Nairobi Convention, it needs to be integrated within the National Climate Change Strategy, especially with regards to marine related activities.

- 2. The legislative and policy framework for sustainable fisheries have been developed according the FAO agreements and UNCLOS, however, the National Plans of Action to reduce the incidental catch of seabirds in longline fisheries and to reduce sea turtle mortality in fishing operations are missing.
- 3. Seychelles *Fisheries Regulations 1987* need to be aligned to the obligations of FAO and UNCLOS agreements and the newly enacted *Fisheries Act 2014*. A new Fisheries Strategy needs to be developed to support the Fisheries Policy 2005.
- 4. In the Town and Country Planning Act 1972, the definition of "land" needs to be modified to include both land covered with sea water and the sea-bed. This definition needs to be carried to the *Physical Planning Bill* when it is enacted.
- 5. In order for there to be a legal basis for the Marine Spatial Plan, the existing provisions of the Town and Country Planning Act 1972, which allow for the demarcation of areas in development plans, must be provided for in either in the new Physical Planning Bill or any other legislation that will be enacted for the demarcation of marine areas throughout the EEZ.
- 6. A reclamation policy must be developed so that future reclamation sites may be demarcated in the marine plan.
- It must be ensured that the District Land Use Plans, The National Land Use Plan, the Victoria Development Plan and Seychelles Strategic Land Use and Development Plan 2015 are all aligned to enable their integration within the MSP Initiative.
- 8. The Petroleum Mining Act 1976, the Petroleum Mining (Pollution and Control) Act 1976 and the Minerals Act 1962 are severely outdated and need updates and/or revisions in light of current and future development in this sector as well as advances in technology to extract non-renewable resources (e.g., deep sea mining).
- 9. There is currently no clear written and approved policy to guide petroleum development in the country. It is important that such a policy be developed to ensure that all interests are adequately represented in the Marine Spatial Plan.
- 10. Regional guidelines on environmental management for oil and gas development are absent but are being developed under the auspices of the Nairobi Convention.
- 11. National guidelines must be developed in line with the Joint Nature Conservation Committee Guidelines for Minimising Risk of injury and Disturbance to Marine Mammals during Seismic Surveys.
- 12. The Waste Management Policy does not currently address liquid waste.
- 13. The provisions of the *Environment Protection Act 1994* for the declaration of one or more coastal zones as protected must be utilised for the better protected on these areas from pollution. No such areas have been declared to date. These areas, once declared, will need to be demarcated in the Marine Spatial Plan.
- 14. The Protected Areas Policy 2013 has been approved but there is no legislation to support it. The Nature Protection and Conservancy Bill is still in draft form and will need to be passed as soon as possible. In addition, other pieces of legislation of relevance to Protected Areas (detailed in Chapter VII) will need to be aligned to the legislation once enacted.
- 15. The *Energy Act 2012* must be revised in order to reflect the proposals in the Energy Policy, in particular in relation to ocean power technologies.

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- 16. Legislation (*Harbour Act 1932* and *Merchant Shipping Act 1995*) regarding shipping and transportation seek to implement Seychelles' international obligations under the IMO Conventions. However, the provisions of both Acts are repetitive, confusing and fragmented. The two pieces of legislation need to be harmonised for ease of reference.
- 17. Legally designated spatial areas for tourism and recreation are few in Seychelles. Beau Vallon is the only area to be demarcated under the *Beach Control Act 1971* for swimming, anchorage and mooring of boats, and waterskiing. Other tourism and recreation areas must be legislated if they want to be included as existing legal boundaries for those activities.

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ABBREVIATIONS AND ACRONYMS

	Derhades Dier of Action
BPoA	Barbados Plan of Action
CBD	Convention on Biological Diversity
COP	Conference of Parties
EEZ	Economic Exclusive Zone
EIA	Environment Impact Assessment
EPA	Environment Protection Act
FAO	Food and Agriculture Organisation of the United Nations
ICESCR	International Covenant on Economic, Social and Cultural Rights
IMO	International Maritime Organisation
IOTC	Indian Ocean Tuna Commission
IRENA	International Renewable Energy Agency
IMO	International Maritime Organisation
ISO	International Standards Organisation
Interpol	International Criminal Police Organisation
IPOA	International Plan of Action
IOSEA	Indian Ocean and South-East Asia
IUCN	International Union for Conservation of Nature
IUU	Illegal Unregulated and Unreported
IWC	International Whaling Commission
LUP	Land Use Plan
MAF	Ministry of Agriculture and Fisheries
MARPOL	International Convention for the Prevention of Pollution from Ships
MEECC	Ministry of Environment, Energy and Climate Change
MLUH	Ministry of Land Use and Housing
MoU	Memorandum of Understanding
MSP	Marine Spatial Planning
MTC	Ministry of Tourism and Culture
NBSAP	National Biodiversity Strategy and Action Plan
NOSCP	National Oil Spill Contingency Plan
NPOA	National Plan of Action
OTEC	Ocean Thermal Energy Conversion
PA	Protected Areas
PoWPA	Programme of Work Protected Areas
SFA	Seychelles Fishing Authority
SIDS	Small Island Developing States
SIOFA	Southern Indian Ocean Fisheries Agreement
SMSA	Seychelles Maritime Safety Administration
SPA	Seychelles Ports Authority
SSDS	Seychelles Sustainable Development Strategy
ТСРА	Town and Country Planning Act
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNFCCC	United Nations Framework Convention on Climate Change
UNWTO	United Nations World Tourism Organisation
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PART I. INTRODUCTION

The **Seychelles Marine Spatial Planning (MSP) Initiative** is a Seychelles government-led process aimed at supporting the sustainable and long-term use and health of the waters surrounding the Seychelles archipelago. Its main objective is to improve the social, cultural and economic wellbeing of the Seychellois people.

The MSP Initiative for the Seychelles Exclusive Economic Zone (EEZ) addresses issues of importance such as climate change, protected areas, food security and the Blue Economy with input from the major sectors of the Seychelles including fisheries, tourism, transportation, renewable energy, biodiversity conservation, cultural heritage, infrastructure development, oil & gas, and renewable energy.

The MSP Initiative supports the Blue Economy concept, which constitutes a framework for sustainable development for developing countries, in particular Small Islands Developing States (SIDS) and coastal states, in addressing equity in access to, development of and the sharing of benefits from marine resources; offering scope re-investment in human development and the alleviation of crippling national debt burdens. The Blue Economy offers a series of opportunities for sustainable, clean, equitable blue growth in both traditional and emerging sectors, i.e. shipping and port facilities, fisheries, tourism, aquaculture, energy, biotechnology and submarine mining, similar themes and uses addressed by the MSP process.¹

This Legislative and Policy Review aims to provide guidance for the MSP process by identifying and summarising relevant Seychelles and international commitments, national laws, and national policies for the themes/uses that are relevant in developing and implementing a Marine Spatial Plan in the Seychelles EEZ.

This review does not attempt to be exhaustive in nature as its focuses on the major international, legal and policy obligations of the country. However, where deemed important for the relevant sectors and in particular for the MSP, strategies and actions plans for these sectors have also been reviewed. Where appropriate, the current marine policy environment in Seychelles will be summarised and any future trends for new possible policies for the themes/uses described.

The governance structure in each of the thematic areas/uses is defined, elaborating on the Ministries, departments, agencies or organisations holding the main responsibility in shaping policy and implementing legislation in each of them.

A list of all international conventions and agreements as well as policies, action plans and governing institutions for each thematic referred to in this document is found in Annexe 1. The status of implementation of these international agreements at the national level is also noted.

¹ Government of Seychelles (2013) "Seychelles Concept Paper on the Blue Economy"

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The methodology used for the review was primarily a desktop study, based upon a literature review, which relied on documented sources such as national legislative instruments, policy documents and relevant regional and national reports. The internet was the primary point source of information and documentation. One to one consultations were also conducted via email.

The Consultant worked within the framework of a Terms of Reference developed for this consultancy (Annexe 2).

PART II. THEMES AND USES

Chapter I. Climate Change

Seychelles' responsibilities for addressing climate change are the result of signing and ratifying the UN Framework Convention on Climate Change 1992 and the Kyoto Protocol 1997. The Nairobi Convention, in its last COP 8 meeting held in June 2015, also called for a regional climate change strategy, which is currently being jointly developed by the Nairobi Convention Secretariat and the Western Indian Ocean Marine Science Association developing. At the national level, the Seychelles National Climate Change Strategy (2009) gives effect to climate change obligations. The Ministry responsible for addressing climate change is Ministry of Environment, Energy and Climate Change, with assistance from the National Climate Change Committee.

GOVERNANCE

The Department of Energy and Climate Change within the Ministry of Environment, Energy and Climate Change (MEECC) has the mandate regarding climate affairs in the country. The National Climate Change Committee has been established to oversee the implementation of the United Nations Framework Convention on Climate Change (UNFCCC) at the national level. The Committee comprises of key stakeholders involved in climate change affairs within the country.

INTERNATIONAL COMMITMENTS

United Nations Framework Convention on Climate Change 1992 and the Kyoto Protocol 1997

The UNFCCC entered into force on 21 March 1994 with the ultimate aim of preventing "dangerous" human interference with the climate system. The Convention binds member states to act in the interests of human safety even in the face of scientific uncertainty. The objective of the Convention is to stabilise greenhouse gas concentrations "at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system." It states "such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner."²

The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005. The Kyoto Protocol operationalises the Convention. It commits industrialised countries to stabilise greenhouse gas emissions based on the principles of the Convention whereas the Convention itself only encourages countries to do so. The Protocol sets binding emission reduction targets for 37 industrialised countries and the European community in its first commitment period, binding developed countries through the concept of "common but differentiated responsibility". The Doha Amendment to the Kyoto Protocol was adopted in 2012, launching a second commitment period for the Protocol, starting on 1 January 2013 until 2020.³ Seychelles signed and ratified the UNFCCC in 1992 and 1994

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² www.unfccc.int Accessed August 2015

³ <u>http://unfccc.int/essential_background/kyoto_protocol/items/6034.php</u> Accessed August 2015

respectively; and ratified the Kyoto Protocol in 2005. Seychelles is considered as a Non-Annex 1⁴ Party to the Convention.

The Nairobi Convention 1985

The Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, signed in 1985, was amended and adopted in April 2010. The Convention offers a regional legal framework and coordinates the efforts of the member states to plan and develop programmes that strengthen their capacity to protect, manage and develop their coastal and marine environment sustainably. It also provides a forum for inter-governmental discussions that lead to better understanding of regional environmental problems and the strategies needed to address them; and promotes sharing of information and experiences in the Western Indian Ocean region and with the rest of the world. Coastal tourism is an important industry in the member state countries, whilst at the same time there is an interest in exploring and exploiting potential oil and gas reserves, which could further exacerbate the destruction of critical habitats such as coral reefs, mangroves, beaches and sea grass meadows.⁵

Of relevance to the MSP are the two following Nairobi Convention Protocols: the Protocol Concerning Co-operation in Combating Marine Pollution in Cases of Emergency in the Eastern African Region (adopted in 1985; entered into force on 30 May 1996) and the Protocol for the Protection of the Marine and Coastal Environment of the Western Indian Ocean from Land-Based Sources and Activities (adopted 31 March, 2010). Seychelles is party to the Convention and both Protocols. A Protocol on Integrated Coastal Zone Management is in the process of being developed.

At the 8th Conference of Parties (COP) meeting⁶ of the Nairobi Convention held in June 2015 in the Seychelles, the Contracting Parties called for:

- regional guidelines on environmental management for oil and gas development, and asked countries and partners that are involved in oil and gas development to conduct and implement a regionally coordinated strategic environmental assessment, of social and environmental sustainability of oil and gas in the Western Indian Ocean Region;
- ii. cooperation in improving the governance of areas beyond national jurisdiction, by building on existing regional institutions including the Nairobi Convention and by developing area based management tools such as marine spatial planning to promote the blue economy pathways in the Western Indian Ocean Region, by applying blue or ocean economy approaches as pathways for sustained economic

⁴ Non-Annex 1 Parties are mostly developing countries and are recognised by the Convention as being especially vulnerable to the adverse impacts of climate change. This includes countries with low-lying coastal areas and those prone to desertification and drought. These countries do not have green house emission targets. The Convention emphasises activities that promise to answer the special needs and concerns of these vulnerable countries, such as investment, insurance and technology transfer. http://unfccc.int/parties_and_observers/items/2704.php Accessed August 2015

⁵ <u>http://www.unep.org/NairobiConvention</u> Accessed August 2015

⁶ <u>http://www.unep.org/NairobiConvention/Meetings/COP8/</u> Accessed August 2015

growth, food security, poverty eradication, job creation and environmental sustainability; and

 regional climate change strategy for the Nairobi Convention Area with recommendations that can be integrated into national climate change strategies with options for the development of policies, programmes and projects on climatic variability and climate change.

For the latter, it must be noted that the Western Indian Ocean Marine Science Association and the Nairobi Convention secretariat are preparing a draft Climate Change Strategy for the Marine and Coastal Environment in the Nairobi Convention Area.⁷ COP 8 had set a time line for the finalisation of the document.⁸

NATIONAL POLICIES

Seychelles National Climate Change Strategy 2009

The Strategy provides a coherent and consolidated national response to climate change and proposes the mainstreaming of climate change into sustainable development addressing matters of policy, institutions, capacity building and civil society involvement. The Vision of the Strategy is "to minimise the impacts of climate change through concerted and proactive action at all levels of society". ⁹

The Strategy proposes the five following **strategic priority objectives**¹⁰ to support the Seychelles towards adaptation and developing resilience to climate change and its effects:

- 1. To advance our understanding of climate change, its impacts and appropriate responses as research and monitoring are fundamental to our understanding of the implications and consequences of climate change in the context of Seychelles e.g. programmes to improve our understanding of natural variability, the interplay with human-induced climate change and the impacts of climate change in small islands, in particular the estimations of sea level rise and other oceanographic phenomenon within the Seychelles archipelago. Specific sectors such as coastal areas and fisheries have been highlighted as key research gaps, especially in determining the optimal zoning potential and potential impacts on beaches and port areas.
- 2. To put in place measures to adapt, build resilience and minimize our vulnerability to the impacts of climate change. The coastal zone climate change assessment undertaken

⁷ UNEP/(DEPI)/EAF/COP8/2015/6 available at <u>http://staging.unep.org/NairobiConvention/docs/Draft_Regional_Climate_Change_Strategy_for_the_</u> WIO_Region.pdf Accessed August 2015

⁸ Decision CP8/8: requests the Secretariat to expedite the finalisation of the climate change strategy for the Nairobi Convention Area and circulate the draft strategy for comments by the Contracting Parties by 30 September 2015 and further urge the Contracting Parties to submit their comments by 30 November 2015 for adoption by the Bureau by 31st December 2015; urges Contracting Parties to integrate relevant recommendations of the Climate ChangeStrategy for the Nairobi Convention Area into their national climate change strategies and develop policies, programmes and projects on climatic variability and climate change.

⁹ Seychelles Sustainable Development Strategy (2012-2020) available at <u>http://www.emps.sc/index.php?option=com_content&view=article&id=43&Itemid=83</u> Accessed August 2015

¹⁰ Seychelles Climate Change Strategy 2009 Chapter 9

highlighted the vulnerability of the coastal regions of the Seychelles islands and proposed a number of adaptation actions. Capacity building for adaptation as well as monitoring the effectiveness of adaptation measures are considered priorities.

- 3. To achieve sustainable energy security through reduction of greenhouse gas emissions. Although Seychelles is not required under the UNFCCC and its Kyoto Protocol to implement emission reductions, it is nevertheless of strategic and economic importance that Seychelles reduces its dependence on fossil fuels and embraces low carbon and in particular renewable forms of energy.
- 4. To mainstream climate change considerations into national policies, strategies and plans.
- 5. To build capacity and social empowerment at all levels to adequately respond to climate change. It is proposed that the Strategy be updated and revised on an ongoing basis in response to new challenges and opportunities.

Seychelles Sustainable Development Strategy 2012-2020¹¹

The vision of the Seychelles Sustainable Development Strategy (SSDS) is "to contribute to the realisation of the nation's economic, social and cultural potential through an innovative, knowledge-led approach, being mindful of the need to conserve the integrity of the Seychelles natural environment and heritage for present and future generations".¹²

The detailed action plan¹³ brings together the thirteen thematic areas identified to implement the strategy and Climate Change is considered in all of these thematic areas. The thematic areas are: Social and Human Development; Land Use, Coastal Zone and Urbanisation; Agriculture and Food Security; Fisheries and Marine Resources; Water, Sanitation and Waste Management; Tourism and Aesthetics; The Economics of Sustainability; Sustainable Consumption and Production; Energy and Transport; Climate Change; Education for Sustainability; and Policy, Institutional and Regulatory.

With regards to the Land Use, Coastal Zone and Urbanisation thematic area¹⁴, the Strategy indicates that disaster risk reduction is an important aspect of proper land use planning i.e. ensuring that vital infrastructures are placed at strategic and safe areas. Land use planning is a useful tool in adaptation to climate change in reference to sea level rise, coastal erosion, tsunami risk, storm surges and flooding. More details on this thematic area will be provided in Chapter IV on Infrastructure Development.

With regards to the Fisheries and Marine Resources thematic area¹⁵, the Strategy notes that the effects of climate change will be playing an ever increasing important role in fisheries development as changing environmental patterns will have to be mitigated both for the coastal demersal fishery and for the open oceanographic pelagic fisheries. Sector-level strategies to adapt to climate change and other challenges are not mutually exclusive and

¹¹ available at <u>http://www.emps.sc/index.php?option=com_content&view=article&id=43&Itemid=83</u> Accessed August 2015

¹² Seychelles Sustainable Development Strategy 2012-2020 Volume 1

¹³ SSDS Volume 2

¹⁴ SSDS Volume 2 Chapter 3 pages 25-33

¹⁵ SSDS Volume 2 Chapter 6 pages 76-82

include fishery and market diversification, improved services, development of mariculture and sustainable fisheries management. Please refer to Chapter III on Fisheries for further details on this SSDS thematic area.

The following Goals and Strategic Objectives have been developed for the cross cutting thematic area of climate change and are found below in Table 1.¹⁶ According to the Strategy this is an important consideration, as climate change will impact all the components of sustainable development and the country as a whole and this thematic area aims at ensuring that climate change issues are featured in decision-making, planning and implementation of actions.

Table 1. Goals and strategic objectives climate change (Source: SSDS 2012-2020)

Goal 1: **Mainstreaming climate change adaptation challenges into national sustainable development agenda** with **Strategic Objectives** (1) To advance our understanding of climate change, its impacts and appropriate responses; and (2) To put in place measures to adapt, build resilience and minimize our vulnerability to the impacts of climate change, especially in critical sectors.

Goal 2: Enhanced Actions on Mitigation of Climate Change. Addressing emissions of greenhouse gases is an important opportunity to move towards renewable and greener forms of energy. This goal seeks to reduce national emissions and also secure long-term energy security. **Strategic Objectives**: (1) Promote energy efficiency and renewable energy resources to form essential pillars of future mitigation actions, taking into account national circumstances; and (2) Promote the relevant emission trading mechanism and REDD-plus nationally.

Goal 3: Enhanced Actions on Finance, Technology Transfer and Capacity Building to support action on mitigation and adaptation. The Strategy states that Climate Change is such a complex issue that an appropriate framework for financing, technology transfer and capacity building is required. This goal will support all actions related to addressing climate change and all its implications in the long term. **Strategic Objectives**: (1) Develop policy direction and strategies to encourage and enhance action on technology development and transfer of environmentallyfriendly technologies; (2) Scale up financial resources and investment to support action on mitigation and adaptation; and (3) To build capacity and social empowerment at all levels to adequately respond to climate change.

Chapter II. Culture

For cultural heritage, the UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage 1972 is the main international commitment that pertain to the marine environment, whilst a Cultural Policy has been developed and the *National Monuments Act 1980* enacted at the national level. The Culture Division, within the Ministry of Tourism and Culture (MTC) and the Seychelles Heritage Foundation are responsible for providing policy directions and to conserve and promote the cultural heritage of Seychelles respectively.

¹⁶ SSDS Volume 2 Chapter 12 pages 233-258

GOVERNANCE

The Culture Division within the Ministry of Tourism and Culture is responsible for giving policy directions regarding culture in the country. The Seychelles Heritage Foundation was established by the *Seychelles Heritage Foundation Act 2006*. The objectives of the Foundation under the Act are to identify, conserve and promote the cultural heritage of Seychelles; to encourage broader public participation in activities deigned to promote the cultural heritage of Seychelles; to generate the resources necessary for the achievement of the purposes of this Act and utilise them for such purposes; to endeavour to win international support for activities designed to promote the heritage of Seychelles; to advise the Government on matters relating to the cultural heritage of Seychelles; and to manage designated heritage sites having regard to their value to cultural tourism. One site so designated, of relevance to the MSP, is the Bel Ombre Treasure site.¹⁷

INTERNATIONAL COMMITMENTS

UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage 1972

Seychelles acceded to the Convention in 1980. The country has one marine site inscribed on the World Heritage List under the Convention, Aldabra Atoll, in 1982, and one terrestrial site, Vallee de Mai Nature Reserve, in 1983. No additional marine sites were added to the tentative list in 2013, only the terrestrial sites of Mission Ruins of Venn's Town and Silhouette Island were added.

Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States 2005¹⁸

The Strategy developed under the auspices of UNESCO, addresses overarching issues regarding the implementation of the Plan of Action for the sustainable development of SIDS. Of relevance to the MSP are the following actions addressed by the Strategy: Climate change and sea-level rise; Management of wastes; Coastal and marine resources; Energy resources; Tourism resources; Biodiversity resources; and Culture, including recognition of the importance of cultural identity in advancing sustainable development, the need to develop cultural industries and initiatives, the development and implementation of national cultural policies and legislative frameworks, and measures to protect cultural heritage.

Other relevant international Conventions are: International Covenant on Economic, Social and Cultural Rights 1966, which Seychelles acceded to the Covenant in 1992; the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage 2003; and the UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001, the latter to which Seychelles is not yet a party.

¹⁷ Seychelles Heritage Foundation Act 2006 section 4

¹⁸ available at <u>http://www.unesco.org/new/en/natural-sciences/priority-areas/sids/about-unesco-and-sids/mauritius-strategy/</u>Accessed August 2015

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United Nations Convention on the Law of the Sea 1982

The Convention states that all objects of an archaeological and historical nature found in the Area, defined as the seabed and ocean floor and subsoil thereof¹⁹, beyond the limits of national jurisdiction, shall be preserved or disposed of for the benefit of mankind as a whole. Particular regard must be paid to the preferential rights of the State or country of origin, or the State of cultural origin, or the State of historical and archaeological origin.²⁰

NATIONAL LEGISLATION

National Monuments Act 1980

The Act provides for the designation of national monuments²¹. Monument is defined as "any ancient or national monument; any area of land which is of archaeological or historical interest or which contains objects of such interest; any old building or other structure; any other object (whether natural or constructed by man) of aesthetic, archaeological, historical or scientific value or interest".²² National monuments so designated with relevance for the MSP include the Victoria Harbour Lighthouse. Further monuments and sites are designated as Protected Areas under *Environment Protection (Environment Impact Assessment) EIA Regulations 1996.* Annexe 3 to this report lists these sites.

NATIONAL POLICY

Cultural Policy of the Republic of Seychelles 2004

The Cultural Policy of the Republic of Seychelles was adopted in 2004 and governs all aspects of the protection, promotion, preservation, conservation, and expression of the Cultural Heritage of Seychelles, including all forms of artistic expressions.

Seychelles Sustainable Development Strategy 2012-2020

The thematic area on Tourism and Aesthetics²³ has the following goal and strategic objective referring to culture: **"Goal 2: Enhance the economic benefits of tourism for the local communities.** This goal seeks to foster the involvement of local communities in the tourism sector, to develop tourism projects and activities that can provide economic, cultural, social and environmental benefits, which meet the needs of the local people. **Strategic Objective:** (2) To preserve and promote the cultural heritage and traditional."

Chapter III. Fisheries, including Piracy and IUU

Seychelles is signatory to both the UN Food and Agriculture Organisation and the UN Convention on the Law of the Sea and associated agreements (UN Fish Stocks Agreement 1995, the FAO Compliance Agreement 1993, the FAO Code of Conduct for Responsible Fisheries 1995, and UN FAO Port State Measures Agreement 2011, which deal with fisheries management, access by foreign fishing vessels and Illegal, Unregulated and Unreported (IUU) fishing. Seychelles also has signed agreements for management of sharks, and fishing

¹⁹ United Nations Convention on the Law of the Sea 1982 Article 1

²⁰ UNCLOS Article 149

²¹ National Monuments Act 1980 section 5

²² National Monuments Act section 2

²³ SSDS Volume 2 Chapter 8 Page 138

capacity. Seychelles is party to several Regional Fishery Management Organisations (RFMOs) including the Indian Ocean Tuna Commission. Bilateral Fisheries Partnership Agreements are an important contributer to Seychelles' economy and allow foreign access to fish stocks within Seychelles' EEZ. Last year, a 6-year agreement was renewed with France and Spain for purse seine vessels (2014-2020). There are also access agreements with Mayotte and Mauritius. Other agreements have existed with Japan and Taiwan for longline vessels but none are currently active. The *Fisheries Act 2014*, the *Fisheries Regulations 1987* and the Fisheries Policy 2005 govern fisheries management in Seychelles. These documents guide the sustainable development of fisheries in line with the international and regional commitments. Piracy is an issue for fisheries and other marine sectors and the Penal Code charges acts of piracy. A Comprehensive Maritime Security Plan of Action has been developed to deal with piracy and maritime security.

The Seychelles Fishing Authority is responsible for fisheries management in line with Seychelles international obligations guided by policy directions from the Ministry of Agriculture and Fisheries (MAF). Bilateral partnership agreements are negotiated by the Ministry of Foreign Affairs and SFA.

GOVERNANCE

The Ministry of Agriculture and Fisheries is responsible for giving policy directions regarding fisheries nationally. The Seychelles Fisheries Agency (SFA) was established in 1984 by the *Seychelles Fishing Authority (Establishment) Act, 1984.* The functions of SFA are to promote, organise and develop fishing, fishing industries and fishing resources in Seychelles; to assist in the formulation and in the implementation of the national policy with respect to fishing, fishing industries and fishing resources; to conduct negotiations, or engage in meetings, seminars or discussions, with regard to fishing or fisheries or the establishment or operation of fishing industries, whether at a national or international level, on behalf of the Republic or otherwise; and to identity the manpower training requirements of Seychelles EEZ include conducting surveillance operations, in conjunction with the Seychelles Coastguards, in relation to fishing operations in the exclusive economic zone or in the waters super adjacent to the continental shelf. The SFA also has the mandate to monitor the catch of all fishing vessels; and to carry out scientific and development research.²⁵

Regional Fishery Management Organisations

Seychelles is a member of the Indian Ocean Tuna Commission (IOTC) and several Regional Economic Organisations that address fisheries issues. These organisations are detailed below. Seychelles cooperates with the International Commission for the Conservation of Atlantic Tunas and the Commission for the Conservation of Antarctic Marine Living Resources.

Seychelles is also a member of the South West Indian Ocean Fisheries Commission, which is an advisory FAO body with a mandate to promote the sustainable development and

²⁴ Section 5 Seychelles Fishing Authority (Establishment) Act 1984 section 5

²⁵ SFA (Establishment) Act section 6

utilisation of (non-tuna) fishery resources in coastal waters of the region. The Commission is responsible for promoting sound fisheries management and enhancing regional cooperation on fisheries policies.

Seychelles is also actively participating in negotiations for the establishment of the Southern Indian Ocean Fisheries Agreement (SIOFA). The Agreement focuses on regional cooperation on high seas fishing of non-tuna and tuna-like resources. The objectives of SIOFA are to ensure the long-term conservation and sustainable use of the fishery resources in the Southern Indian Ocean through enhanced cooperation between the Contracting Parties. The Agreement will also place much emphasis on the needs of developing States and Small Island Developing States (SIDS) bordering the area covered by the Agreement.²⁶

Indian Ocean Tuna Commission²⁷

The Indian Ocean Tuna Commission (IOTC) is an intergovernmental organisation responsible for the management of tuna and tuna-like species in the Indian Ocean and adjacent seas. It works to achieve this by promoting cooperation among its Contracting Parties (Members) and Cooperating Non-Contracting Parties in order to ensure the conservation and appropriate utilisation of fish stocks and encouraging the sustainable development of fisheries. The objective of the Commission is to promote cooperation among the Contracting Parties (Members) and Cooperating Non-Contracting Parties of the IOTC with a view to ensuring, through appropriate management, the conservation and optimum utilisation of stocks covered by the organisation's establishing Agreement and encouraging sustainable development of fisheries based on such stocks. The Commission draws its functions and responsibilities from UNCLOS obligations.²⁸

Seychelles is an active member of IOTC, hosts the secretariat and co-chairs annual meetings of the Commission. As a member, Seychelles provides the IOTC secretariat with a list of all foreign fishing vessels in excess of 24 m authorized to fish in the Seychelles EEZ. Fisheries statistics are submitted annually to the IOTC based on requirements specified under Resolution 98/01 (mandatory statistical requirement for IOTC members). These include specifications of all vessels registered in Seychelles, catch and effort statistics reported in the Seychelles EEZ and length frequency data. These data are used in stocks assessments carried out during the various annual working group parties. Seychelles also actively participates in annual Scientific Committee meetings and endeavours to implement Committee recommendations. The Seychelles also chairs meetings of the Compliance Committee.²⁹

INTERNATIONAL COMMITMENTS

United Nations Food and Agriculture Organisation

Seychelles is party to the United Nations Food and Agricultural Organisation (FAO). The FAO plays a leading role in international fisheries policy and the following four agreements are considered important for the Seychelles:

²⁶ FAO Seychelles Country Review

²⁷ www.iotc.org Accessed August 2015

²⁸ www.iotc.org Accessed August 2015

²⁹ FAO Seychelles Country Review

- FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas 1993 (FAO Compliance Agreement)³⁰The agreement addresses straddling fish stocks and highly migratory fish stocks. Seychelles ratified the FAO Compliance Agreement in 1994.
- Code of Conduct for Responsible Fisheries 1995. The Code of Conduct for Responsible Fisheries supplements the FAO Compliance Agreement and the UN Fish Stocks Agreement (detailed below). The Code of Conduct, a voluntary instrument adopted by the FAO Conference,³¹ may be used to guide policy or legislative development at national level.³²
- 3. Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing 2009. The Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IUU), approved by FAO in 2009, aims to prevent illegally caught fish from entering international markets through ports. Under the terms of the treaty, foreign vessels are required to provide advance notice and request permission for port entry; countries are required to conduct regular inspections in accordance with universal minimum standards; offending vessels are denied use of port or certain port services; and information sharing networks will be created.
- 4. The International Plan of Action on Illegal, Unreported and Unregulated Fishing (IPOA-IUU). The IPOA-IUU was adopted by FAO in 2001. Its objective is to prevent, deter and eliminate IUU fishing by providing all States with comprehensive, effective and transparent measures by which to act, including through appropriate regional fisheries management organisations established in accordance with international law. The IPAO is voluntary and Seychelles has developed a National Plan of Action (NPOA) on IUU.

In 1999, member countries of the FAO developed the *International Plan of Action for the Conservation and Management of Sharks (IPOA- Sharks)*. The IPOA–Sharks suggests that members develop a National Plan of Action if their vessels conduct targeted fishing for sharks or if they regularly catch sharks in fisheries targeting other species. Seychelles developed the Seychelles National Plan of Action (NPOA) for the Conservation and Management of Sharks in 2007.

In 1998, member countries of FAO developed the *International Plan of Action for reducing incidental catch of seabirds in longline fisheries* (IPOA–Seabirds). The IPOA–Seabirds suggests that members develop should conduct an assessment of their longline fisheries to determine if a problem exists with respect to incidental catch of seabirds. If a problem exists, States should adopt a National Plan of Action for reducing the incidental catch of seabirds in longline fisheries. Seychelles has not developed this NPOA.

³⁰ <u>http://www.fao.org/fishery/topic/14766/en</u> Accessed August 2015

³¹ in Resolution 4 of 1995

³² ibid.

In 2005, the *Guidelines to Reduce Sea Turtle Mortality in Fishing Operations*³³ were adopted, following which it was recommended that all regional fisheries bodies and management organisations implement those guidelines. Subsequently, the IOTC requested member states of the Commission to implement the guidelines.³⁴ Seychelles being a member of the IOTC is bound by this Resolution but no national plan of action has been developed yet.³⁵

United Nations Convention on the Law of the Sea 1982³⁶

Seychelles was one of the first countries to sign the United Nations Convention on the Law of the Sea (UNCLOS) in 1994. This convention establishes a comprehensive legal regime covering all aspects of the seas and oceans. These include: universally agreed limits on the territorial sea, contiguous zone and the exclusive economic zone and the continental shelf; the regimes of innocent passage through the territorial sea, transit passage through straits used for international navigation and archipelagic sea lanes passage through archipelagic waters; a framework for conservation and utilisation of the living marine resources; a new regime for the deep seabed beyond national jurisdiction; new rules for protection and preservation of the marine environment from pollution; new rules on marine and scientific research; and, the peaceful settlement of disputes concerning the interpretation and application of the provisions of the Convention.³⁷

With regard to fisheries, the Convention establishes a regime for the conservation and management of fisheries resources on the basis of the area they occupy³⁸ or the types of fish stocks³⁹ that occur in them. States are required to conserve and manage living marine resources in the areas that are within their jurisdiction or the areas over which they exercise sovereign rights. States are also required to cooperate to conserve and manage specific stocks, particularly straddling fish stocks and highly migratory species without prejudice to the rights of the coastal state where such stocks occur within their jurisdiction or in areas where the coastal state exercises sovereign rights. There are varying degrees of rights and duties of states with respect to the conservation and management of fisheries resources and the factors that have to be taken into account in different regimes. However, the common basic principle of conservation and management of fisheries resources that applies in many of these regimes is that the allowable catch shall be determined and that conservation measures be adopted to maintain or restore populations of harvested species at levels which can produce maximum sustainable yield, as qualified by relevant environmental and economic factors.⁴⁰ Annex I to the Convention provides a list of Highly Migratory Species.

³³ FAO 2009b

 $^{^{\}rm 34}$ IOTC Resolution 09/06 and Resolution 12/04

 ³⁵ <u>http://www.iotc.org/science/table-progress-implementing-npoa-sharks-npoa-seabirds-and-fao-guidelines-reduce-sea-turtle-mortality</u> Accessed 23 Oct 2015
 ³⁶ http://www.un.org Accessed August 2015

³⁷ <u>http://www.un.org/depts/los/convention_agreements/texts/unclos/UNCLOS-TOC.htm</u> Accessed August 2015

³⁸ defined as the internal waters, archipelagic waters, and territorial seas, exclusive economic zones, continental shelf areas and high seas under UNCLOS

³⁹ defined as straddling stocks, highly migratory species, marine mammals, anadromous stocks and catadromous species under UNCLOS

⁴⁰ <u>http://www.fao.org/fishery/topic/14839/en</u> Accessed August 2015; Part IV, Part VII S 2 UNCLOS

United Nations 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, 1995 (UN Fish Stocks Agreement)

The purpose of the Agreement is to facilitate the implementation of certain provisions of UNCLOS concerning the conservation and management of straddling fish stocks and highly migratory fish stocks. It sets out principles for the conservation and management of those fish stocks and establishes that such management must be based on the precautionary approach and the best available scientific information. The Agreement elaborates on the fundamental principle, established in the Convention, that States should cooperate to ensure conservation and promote the objective of the optimum utilisation of fisheries resources both within and beyond the exclusive economic zone. The Agreement attempts to achieve this objective by providing a framework for cooperation in the conservation and management of those resources. It promotes good order in the oceans through the effective management and conservation of high seas resources by establishing, among other things, detailed minimum international standards for the conservation and management of straddling fish stocks and highly migratory fish stocks; ensuring that measures taken for the conservation and management of those stocks in areas under national jurisdiction and in the adjacent high seas are compatible and coherent; ensuring that there are effective mechanisms for compliance and enforcement of those measures on the high seas; and recognizing the special requirements of developing States in relation to conservation and management as well as the development and participation in fisheries for the two types of stocks mentioned above.⁴¹ The Agreement complements the FAO Compliance Agreement, 1993 and the FAO Code of Conduct for Responsible Fisheries 1995.

Seychelles ratified UNCLOS in 1994, signed the Agreement for implementation of provisions of UNCLOS 1982, relating to conservation and management of straddling fish stocks and highly migratory fish species in 1996 and subsequently ratified the agreement in 2001.

NATIONAL LEGISLATION Fisheries Act 2014

The *Fisheries Act 2014* provides for the efficient and effective management and sustainable development of fisheries in accordance with international norms, standards and best practice and an ecosystem approach to fisheries; for the licensing of fishing vessel, and regulates sport fishing, fishing activities.

The Act provides the SFA with the mandate to effectively manage and sustainable develop fisheries in accordance with (a) internationally recognised norms, standards and best practices including the United Nations Convention on the Law of the Sea 1982 and the FAO Code of Conduct for Responsible Fisheries 1995, Indian Ocean Tuna Commission Conservation and Management measures; and (b) an ecosystem approach to fisheries which ensures that the development and management of fisheries addresses the multiple needs and desires of the society without jeopardising the options for future generations to benefit

⁴¹ <u>http://www.un.org/depts/los/convention_agreements/convention_overview_fish_stocks.htm</u> Accessed August 2015

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from the full range of goods and services provided by marine ecosystems (Table 4).⁴² The *Fisheries Act* seeks to implement the international and regional fisheries obligations that Seychelles is party to. Provisions of the *Fisheries Act* are found in Annexe 4 to this report.

As provided for under the *Fisheries Act*, the SFA has the mandate to prepare and keep under review a plan for the management of a fishery.⁴³ To this end, the Praslin Artisanal Trap and Line Fishery Co-Management Plan 2013 (revised in 2015) has been developed and the Demersal Fisheries Management Plan for the Mahe Plateau is its final stages of preparation. A Mariculture Master Plan is currently being developed as well.

Fisheries Regulations 1987

The *Fisheries Regulations 1987* were made under the previous *Fisheries Act 1987* and are in the process of being revised to conform to the 2014 Act. Until such time, the provisions of the 1987 Regulations remain in force.

The provisions that might be most relevant to the MSP are contained in the following 15 regulations: requirements and conditions of licence for a fishing vessel (Regs 3 and 6); designation of No fishing Zones (First Schedule); licences for use of nets, including demersal nets (Regs 10 and 14); designation of Shell reserves (Reg 11; Third Schedule); protection and regulation of shells; permit for blasting of coral reefs; designation of protected areas where the use of any net which is operated by being dragged across the sea bed is prohibited (Reg 15); prohibition to place any net in any reef pass or channel in such a way as to obstruct the passage of fish (Reg 16); required dimensions of casier (Reg 17); prohibition on use, possession, sale of a spear gun for fishing (Reg 18); regulation on homard (Reg 19); licensing of fishing sea cucumbers (Reg 19A); regulation on female crustaceans (Reg 20); return to the sea of protected aquatic organism unintentionally caught (Reg 22); protection of fish or other aquatic organism from in any net, trap, line, fish aggregating device or other fishing gear (Reg 23); aquaculture (Reg 24); prohibition on landing or transhipping of any fish caught contrary to international management measures (Reg 24A); and the regulation of live trade of wild finfish and other marine species (Reg 25A).

Foreign vessels are prohibited from fishing within nine zones within the EEZ – Industrial Fishing Exclusion Areas (Map - Annexe 5, Table 2). These areas may also be considered as "no-take" areas (or fisheries reserves) under the MSP.

Table 2. Fisheries exclusion zones in Seychelles (Source: Fisheries Regulations 1987)

Zone 1: Comprising an area around Mahe Island and Seychelles Bank with the boundary running as follows: From Point 1 (Latitude 5° 22.0'S and Longtitude 57° 23.0'E) to Point 2 (Latitude 3° 40.0'S and Longtitude 56° 06.9'E) to Point 3 (Latitude 3° 30.0'S and Longtitude 55° 11.0'E) to Point 4 (Latitude 3° 55.0'S and Longtitude 54° 23.0'E) to Point 5 (Latitude 4° 44.0'S and Longtitude 56° 08.0'E) to point 6 (Latitude 5° 38.0'S and Longtitude 56° 08.0'E) to point 7 (Latitude 6° 34.04'S and Longtitude 56° 02.0'E) to Point 8 (Latitude 6° 34.0'S and Longtitude 56° 23.0'E) and back to Point 1, the Point of commencement.

Zone 2: Comprising an area around Platte Island with the boundary running as follows: From Point 1

⁴² Fisheries Act 2014 section 4

⁴³ Fisheries Act section 5

(Latitude 6° 06.3'S and Longtitude 55° 35.6'E) to Point 2 (Latitude 5° 39.0'S and Longtitude 55° 35.6'E) to Point 3 (Latitude 5° 39.0'S and Longtitude 55° 10.0'E) to Point 4 (Latitude 6° 06.3'S and Longtitude 55° 10.0'E) and back to Point 1, the point of commencement.

Zone 3: Comprising an area around Coetivy Island with the boundary running as follows: From Point 1 (Latitude 7° 23.0'S and Longtitude 56° 25.0'E) to Point 2 (Latitude 6° 53.0'S and Longtitude 56° 35.0'E) to Point 3 (Latitude 6° 53.0'S and Longtitude 56° 06.0'E) to Point 4. (Latitude 7° 23.0'S and Longtitude 55° 56.0'E) and back to Point 1, the point of commencement.

Zone 4: Comprising an area around the Fortune Bank with the boundary running as follows: From Point 1 (Latitude 7° 35.0'S and Longtitude 57° 13.0'E) to Point 2 (Latitude 7° 01.0'S and Longtitude 56° 56.0'E) to Point 3 (Latitude 7° 01.0'S and Longtitude 56° 45.0'E) to Point 4 (Latitude 7° 16.0'S and Longtitude 56° 40.0'E) to Point 5 (Latitude 7° 35.0'S and Longtitude 56° 49.0'E) and back to Point 1, the point commencement.

Zone 5: Comprising an area around the Amirantes Islands, with the boundary running as follows: From Point 1 (Latitude 5° 45.0'S and Longtitude 53° 55.0'E) to Point 2 (Latitude 4° 41.0'S and Longtitude 53° 35.6'E) to Point 3 (Latitude 4° 41.0'S and Longtitude 53° 13.0'E) to Point 4 (Latitude 6° 09.0's and Longtitude 52° 36.0'E) to Point 5 (Latitude 6° 33.0'S and Longtitude 53° 06.0'E) and back to Point 1, the point of commencement.

Zone 6: Comprising an area around Alphonse Island with the boundary running as follows: From Point 1 (Latitude 7° 21.5'S and Longtitude 52° 56.5'E) to Point 2 (Latitude 6° 48.0'S and Longtitude 52° 56.5'E) to Point 3 (Latitude 6° 48.0'S and Longitude 52° 32.0'E) to Point 4 (Latitude 7° 21.5'S and Longitude 52° 32.0'E) and back to Point 1, the point of commencement.

Zone 7: Comprising an area around the islands of Providence, Farquhar and St. Pierre and Wizard Reef with boundary as follows: From Point 1 (Latitude 10° 20.0'S and Longtitude 51° 29.0'E) to Point 2 (Latitude 8° 39.0'S and Longtitude 51° 12.0'E) to Point 3 (Latitude 9° 04.0'S and Longtitude 50° 28.0'E) to Point 4 (Latitude 10° 30.'S and Longtitude 50° 46.0'E and back to Point 1, the point of commencement.

Zone 8: Comprising an area around Cosmoledo and Astove Islands with the boundary running as follows: From Point 1 (Latitude 10° 18.0'S and Longtitude 48° 02.0'E) to Point 2 (Latitude 9° 34.0'S and Longtitude 47° 49.0'E) to Point 3 (Latitude 9° 23.0'S and Longtitude 47° 34.0'E) to Point 4 (Latitude 9° 39.0'S and Longtitude 47° 14.0'E) to Point 5 (Latitude 10° 18.0'S and Longtitude 47° 36.0'E) and back to Point 1, the point of commencement.

Zone 9: Comprising an area around Aldabra and Assumption Islands, with the boundary running as follows: From Point 1 (Latitude 9° 54.0'S and Longtitude 46° 44.0'E) to Point 2 (Latitude 9° 10.0'S and Longtitude 46° 44.0'E) to Point 3 (Latitude 9° 10.0'S and Longtitude 46° 01.0'E) to Point 4 (Latitude 9° 59.0'S and Longtitude 46° 01.0'E) and back to Point 1, the point of commencement. The areas of the zones described in this Schedule are shown in red lines on charts ML/ADN/73B deposited in the office of the Director of Surveys.

Fisheries (Shark Finning) Regulations 2006

The Regulations regulate the fishing of sharks⁴⁴ by prohibiting any person on board a fishing vessel⁴⁵ to remove fins from sharks except under and in accordance with an authorisation, with conditions, issued by the SFA.

Licences (Fisheries) Regulations 1987

⁴⁴ defined as "all species of shark (elasmobranchii taxon)" under Reg. 2

⁴⁵ defined as "a foreign-owned fishing vessel licensed to fish in Seychelles Waters or a local fishing vessel 24 metres or more in length fishing within or outside Seychelles Waters" under Reg. 2

The Regulations, made under the *Licences Act 2010*, provide for the licensing of foreign and local fishing vessels. Other relevant legislation important for the management of fisheries and marine resources include the following:

- The *Maritime Zones Act 1999*, which establishes the boundaries for Seychelles' maritime zones, the territorial sea, archipelagic waters, contiguous zone as well as the exclusive economic zone and the continental shelf;
- The *Environment Protection Act 1994*, which serves to ensure that all development and activities, including fisheries, are subject to environmental controls; and
- The National Parks and Nature Conservancy Act 1969, which provides the legal instrument to establish and manage marine protected areas for fisheries conservation, as well as other purposes.⁴⁶

NATIONAL POLICY

The Fisheries Policy 200547

The long-term policy of the Government of Seychelles for the fishing industry is "the promotion of sustainable and responsible fisheries development and optimisation of the benefits from this sector for the present and future generations." This policy statement focuses principally on the promotion of sustainable management and responsible fishing practices, to provide food, employment, income, foreign exchange earnings, and the effective protection of the marine eco-system.⁴⁸

The main objective of the Fisheries Policy is to promote conservation and management of marine resources in order to ensure the sustainability and long-term viability of the industry. Where the best scientific evidence is unavailable, a precautionary approach to management will be adopted. The remaining objectives, in no particular order of priority, include the generation of the maximum amount of employment; the maximization of revenue from fisheries and other related activities; the promotion of an integrated economy; the enhancement of food supply and food security; the promotion of safety at sea; and to maintain Port Victoria as the major tuna landing/ transhipment port in the Western Indian Ocean. The Policy aims to place emphasis on developing services and facilities aimed at encouraging more long liners to frequent Port Victoria so that it remains the main tuna landing/transshipment port in the region. This entails investing in port infrastructure and other facilities as well as ensuring that the services provided are efficient and cost effective.⁴⁹

⁴⁶ FAO (2005) "Seychelles Country Review: Implementation of Global Fisheries Mandates and Initiatives" available at <u>http://www.fao.org/docrep/009/a0477e/a0477e11.htm</u> Accessed August 2015

⁴⁷ Republic of Seychelles (2005) "For the Sustainable and Responsible Development of the Fishing Industry: The Fisheries Policy of Seychelles"

⁴⁸ Fisheries Policy Chapter 2

⁴⁹ ibid.

To ensure the efficient development of the fishing industry as a whole and to attain the stipulated objectives, Government's policies for the sector will focus on the following seven areas:

- 1. **Research and Development**: Research programmes will be undertaken to guarantee that the most appropriate technologies and techniques are employed, that the resources are exploited in a sustainable manner and that the long-term viability of the industry is safeguarded. Research will be conducted in all aspects of fisheries including biological research, ecology, technology, environmental science, economics, social science, aquaculture and nutritional science. Further development will be directed towards the distribution of fishing effort to the offshore resources and target new and under exploited stocks having due regard to economic viability and resource sustainability: Efforts will be directed towards the participation of the fishing community in the development of the outer islands as a viable fishing area with a view to optimising economic benefits; Government undertakes to promote further research on the socio- economic impact on fishing communities and the country as a whole in order to ensure that the management measures do not have any negative effects on the livelihoods of the fishing communities; Aquaculture research and development will focus on consolidating the actual production and facilitate development in new breeding techniques for suitable species by promoting responsible research and development in this field and ensuring that this development is ecologically sustainable, and allows the rational use of resources shared by aquaculture and other activities. Aquaculture will be promoted with the aim of minimising adverse environmental changes and related economic and social consequences.
- 2. Resource Management: The Government will adopt a conservation and management policy based on the best scientific evidence available, and in the absence of such information, management decisions will favour a precautionary approach to promote the objectives of sustainability and the optimisation of benefits. In order to achieve this Government will promote the use of satellite imagery and geo- graphical information systems as an aid for fisheries research, decision- making and management as well as promote responsible fishing practices through appropriate use of information technologies and technical know-how.
- 3. To ensure better management of its fisheries, the Government will increasingly adopt **ecosystem-based approaches** to management of resources, combined with operational management plans for each fishery or resource. Management measures will be put in place for the recreational and sport fishery; Government will actively encourage co-operation with other States in the region and distant water fishing nations harvesting shared/highly migratory fish stocks, as well as participate in management bodies to ensure the long-term sustainability of these stocks. Furthermore, research activities in support of fishery conservation and management as well as research on marine resources and on the effects of climatic, environmental and socio-economic factors will be actively promoted.
- 4. **Monitoring, Control and Surveillance**: Government will intensify its effort to ensure that the marine resources within its Exclusive Economic Zone are exploited in accordance with national laws and regulations and to guarantee that vessels flying the Seychelles' flag at all times adhere to international laws and management regulations.
- 5. International Agreements and Co-operation: Government will continue to grant

SEYCHELLES MARINE SPATIAL PLAN INITIATIVE

fishing rights, through the signing of fishing agreements to other distant water fishing nations and fishing entities to fish in its Exclusive Economic Zone taking into account the state of the stock and economic returns. Licenses to foreign fishing vessels will be issued until such time the country is capable of harvesting the tuna resources in its EEZ. Seychelles will intensify its effort for more fruitful and beneficial co- operation with other States, international agencies, financial institutions and educational establishments for the smoother development of the fishing industry.

- 6. **Legislative Framework:** Government will enact laws and regulations for the better protection and management of the marine resources and will ensure that national regulations are in accordance with international laws.
- 7. Other areas of focus for the policy include the Institutional Framework; Investment; Trade and Commerce; Employment, Human Resource Development and Training; and Infrastructure Development. For the latter, this area will continue to be a priority for the government in its quest to maintain Port Victoria as the main tuna landing/ transhipment port in the region. This will be done in close partnership between the public and private sectors through the Seychelles Ports Authority and by improving the efficiency, productivity and quality of services in Port Victoria to reduce turnaround time in port and investigating the possibility of making the Port Victoria a 24-hour operational port. Government will identify and make available the required resources in order to provide the necessary infrastructure, services and shore base facilities for the development of shore-based installations for the fisheries sub-sectors.⁵⁰

Seychelles Sustainable Development Strategy 2012-2020

In its chapter addressing the thematic area on Fisheries and Marine Resources⁵¹ the goals and strategic objectives were developed to address fisheries management for commercial fisheries including mariculture (Table 3).

Table 3. Goals and strategic objectives for fisheries (Source: SSDS 2012-2015).

Goal 1 Manage demersal, semi-pelagic and pelagic resources in the Seychelles EEZ sustainably. The aim of this goal is to ensure long-term sustainability of the fisheries through research, development, capacity building, resource management, appropriate transfer of technology and wise investments.

Strategic Objectives: (1) To develop and implement a wide range of policies which would ensure long-term sustainability of the fishing industry; (2) To implement integrated management plans based upon available scientific data for demersal resources; (3) To implement integrated management plans based upon available scientific data for semi-pelagic resources; and (4) To implement an integrated management strategy for pelagic resources based upon available scientific data.

Goal 2: Develop a sustainable mariculture industry in Seychelles with **Strategic Objectives**: (1) To assess the mariculture potential and its economic feasibility in the Seychelles EEZ taking into consideration the requirements of each specie to be farmed; (2) To evaluate the impacts of various forms of mariculture activities and develop policies and guidelines to address those impacts; and (3) To develop opportunities for foreign investors and eventually Seychellois entrepreneurs to invest in mariculture activities.

⁵⁰ Fisheries Policy Chapters 4 and 5

⁵¹ SSDS Volume 2 Chapter 6

FISHERIES PARTNERSHIP AGREEMENTS

Seychelles has one Fisheries Partnership Agreement (FPA) with the European Union (EU). The six-year renewable access agreement with EU is for 40 purse seine vessels and 6 surface longlines (Table 4)⁵². The Framework Agreement⁵³ and its Protocol⁵⁴ govern the legal framework addressing the FPA.

Table 4. Seychelles-European Union Partnership Agreement (Source: EU 2014).

Duration of the Agreement: 6 years renewable (2.11.2013 – 1.11.2019) Duration of the Protocol: 6 years (18.1.2014 - 17.1.2020) Initialisation: 10.5.2003 Nature of the FPA: Tuna Fishery Agreement Financial contribution: 1st and 2nd Years: 5 530 000 € per year, of which 2 600 000 € is dedicated to the support of the fisheries sector of Seychelles. **3rd to 6th Years: 5 000 000 €** per year, of which 2 500 000 € is dedicated to the support of the fisheries sector of Seychelles. Advances: Tuna seiners: Annually incremental from 38 500 € to 52 500 € (Years 4 and 5 - 49 000 €) (ref catches: 700 t) Surface longliners =or< 250 GRT: Annually incremental from 4 950 € to 6 750 € (Years 4 and 5 -6 300 €) (ref catches: 90 t) Surface longliners > 250 GRT: Annually incremental from 6 600 € to 9 000 € (Years 4 and 5 - 8 400 €) (ref catches: 120 t) Reference tonnage: 50.000 t./year

Seychelles also has current access agreements with Japan for freezer longline fleets. The Japanese agreement comprises two parts, the principal agreement concerning terms and conditions of access, and the second providing Goods and Services to Seychelles.⁵⁵ Given the effect of the Somali piracy issue, since 2009, the Japanese and Seychelles Government agreed on the automatic extension of the agreement until such a time comes when the piracy problem is duly resolved and the Seychelles EEZ becomes possible to operate in once more (signed in August 2014).

Seychelles also has access agreements with Mayotte and Mauritius. The Seychelles Mauritius agreement is for 5 tuna purse seiners and 10 tuna longliners. This agreement (terminating in June 2015) has been extended until 11th December 2015, whilst a new agreement is being negotiated.⁵⁶

⁵² <u>http://ec.europa.eu/fisheries/cfp/international/agreements/seychelles/index_en.htm_</u>Accessed August 2015

⁵³ Adopted by Council Regulation (EC) No 1562/2006 of 5.10.2006 (OJ L290 of 20.10.2006)

⁵⁴ Provisional application adopted by Council Decision 2014/5/EU of 16.12.2013 (OJ L4, 9.1.2014).

 ⁵⁵ Bergh E. (2012) "Implementation of a Regional Fisheries Strategy For The Eastern-Southern Africa and Indian Ocean Region: Comprehensive Review of MCS Capacity in the ESA-IO Region"
 ⁵⁶ Information provided by SFA October 2015

ANTI-PIRACY AND MARITIME SECURITY

Article 65 of the *Penal Code 1955* provides for the offence of the act of piracy, which is defined as including any illegal act of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft and directed (i) on the high seas, against another ship or aircraft, or against persons or property on board such a ship or aircraft; and (ii) against a ship, an aircraft, a person or property in a place outside the jurisdiction of any State. It also includes any act of voluntary participation in the operation of a ship or an aircraft with knowledge of facts making it a pirate ship or a pirate aircraft.

There is currently no national legislation providing for military escorts/arms on board ships/fishing vessels. Seychelles has, however, developed national guidelines on the use of arms on board vessels based on the Firearms and Ammunition Act 1973 and the International Standards Organisation (ISO) Guidelines for armed maritime guards have been developed through the ISO/PAS 28007:2012, Ships and marine technology – Guidelines for Private Maritime Security Companies providing privately contracted armed security personnel on board ships. These guidelines provide for international minimum standards for the shipboard deployment of armed security guards to be used by flag States. In addition to the International Maritime Organisation (IMO), ISO/PAS 28007 is backed by major international corporations, intelligence and law enforcement agencies such as INTERPOL, the European Commission and the Contact Group established by the UN Security Council Resolution 1851. The document contains essential information for private maritime security companies, and for ships selecting service providers and addresses security management system elements such as resilience, planning, resources, training and awareness, communication and documentation. It outlines operational requirements for dealing with issues such as scene and casualty management, incident reporting and investigation, health and safety, and customer complaints. ISO/PAS 28007 also includes recommendations for performance evaluation such as monitoring, audits, management and continual improvement. Implementation will help security companies demonstrate their ability to provide privately contracted armed personnel on board ships.⁵⁷

Seychelles has developed the Seychelles Comprehensive Maritime Security Plan of Action (SCMPSA) Rolling Plan I 2010-2040 to deal with the piracy. The Plan will be updated to cover all aspects of maritime security. Support is also given through the Seychelles – United Kingdom Memorandum of Understanding 2012, which establishes a Regional Anti-Piracy Prosecutions Intelligence Coordination Centre in Seychelles.

Chapter IV. Infrastructure Development

Infrastructure development (Chapter IV) on land and at sea is governed by the *Town and Country Planning Act 1972* (currently under revision), the *Environment Protection (Impact Assessment) Regulations 1996; whilst* reclamation is governed by the *Reclamation Act 1961*. The Ministry of Land Use and Housing is responsible for giving policy directions regarding national land use, planning and housing and works in close collaboration with the Town and

⁵⁷ http://www.iso.org/iso/news.htm?refid=Ref1717_Accessed August 2015

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Country Planning Authority. Land Use Plans have been developed for each district and these will be consolidated into the National Land Use Plan.

GOVERNANCE

The Ministry of Land Use and Housing (MLUH) is the governing authority for Land Use, Planning and Housing within the country and is responsible for giving policy directions on these matters. The Ministry consists of the following departments: the Lands and Survey Division, the Project Implementation Unit, the Housing and Loans Unit and the Center for Global Information Systems. MLUH has the administrative authority over *The Town and Country Planning Act 1972* (TCPA). The Act establishes the Town and Country Planning Authority (Planning Authority)⁵⁸ responsible for the implementation of the Act.

Other pieces of legislation under the administrative authority of MLUH include the *Land Reclamation Act 1961* and the *Removal of Sand and Gravel Act 1982*. Details on these pieces of legislation are given below.

NATIONAL LEGISLATION

Town and Country Planning Act 1972

Under the TCPA, the Planning Authority is responsible for preparing a development plan for the whole of Seychelles, including a plan indicating the manner in which land in Seychelles may be used and the stages by which any such development may be carried out.⁵⁹ Land, in the context of the TCPA, is defined as "including land covered with water, the sea-bed, and buildings and other things attached to land".⁶⁰ Development is defined as "the carrying out of building, engineering, mining or other operations in, on, over or under any land".⁶¹

For the purposes of the MSP it is important to note that a development plan may define the sites of proposed reclamation areas and nature reserves.⁶² A development plan may also make provisions for providing for the control of land by zoning or designating for specific uses in relation to community planning; for allocation of lands for game and bird sanctuaries and for the protection of marine life. Such plans may also facilitate the establishment, extension or improvement of systems of transport whether by land, water or air; allocate sites for use in relation to transport, and the reservation of land for that purpose; as well as provide for the establishment, extension or improvement of telegraphic, telephonic, wireless or radar communication, the allocating of sites for their use, and the reservation of land for that purpose.⁶³ For the purposes of the development plan, this means that the Planning Authority has the power to demarcate areas not only on land but also areas of land covered with water and the sea-bed for the purposes listed above.

⁵⁸ TCPA 1972 section 3(1)

⁵⁹ TCPA section 4

⁶⁰ TCPA section 2

⁶¹ TCPA section 7(2)

⁶² TCPA section 4

⁶³ TCPA Schedule 2

The National Land Use Plan or Plan d'Aménagement du Territoire 1993 is the main tool used up till now to guide land use decision making by the Planning Authority. However, it covers only the three main islands of Mahé, Praslin and La Digue and is outdated.

The TCPA is currently in the process of being revised and will be replaced by the Physical Planning Bill (currently in draft form). The Bill makes provisions for the development of Land Use Plans (LUPs) (formally local development plans under the TCPA) as a tool to guide local land use and development. LUPs are being developed for all the 25 districts in the country and these will be consolidated into the National Land Use Plan.⁶⁴ The existing provisions of the TCPA allowing for the demarcation of marine areas must be provided for in either in the Planning Bill or any other legislation that will be enacted as the legal basis for the MSP. Permission from the Planning Authority is required for any development.⁶⁵ As land includes the land covered by water and the sea-bed, any development within these areas, will be addressed by the TCPA and the Planning Authority.

Other pieces of legislation also regulate development at sea. The *Fisheries Act 2014* regulates aquaculture projects⁶⁶. The Seychelles Fisheries Authority, may, approve such projects in consultation with the Ministry responsible for environment. The Environment Protection (IA) Regulations 1996 also consider certain development at sea.

Land Reclamation Act 1961

Reclamation has been undertaken off the coasts of Mahe, Praslin and La Digue. The areas so reclaimed need to be demarcated on the Marine Spatial Plan. The *Land Reclamation Act 1961* regulates the reclamation of land in Seychelles. The Act provides for any owner of land bordering on the foreshore to seek authorisation to fill in the whole or any portion of the foreshore. Foreshore is defined as "the area between high and low water marks".⁶⁷ Once granted authority to reclaim, any land so reclaimed shall become the property of that person.⁶⁸ The same provisions apply to the Republic in cases where the foreshore borders on State Land or on land, which is deemed to form part of the public domain. In both cases the reclaimed land shall become the property of the Republic as part of the private domain.⁶⁹

It is important to note that upon publication of the authorisation to reclaim, all public and private rights of navigation or fishing, all public and private rights of access, user, possession or occupation, and all other public or private rights (if any) in, upon or over the foreshore or seabed occupied by the reclamation shall be extinguished and cease to exist.⁷⁰ This is important to consider within the context of the MSP, in particular for future reclamation within areas demarcated for other uses/thematic areas. The EP (EIA) Regulations 1996 (detailed below) consider reclamation as an activity requiring Environmental Authorisation.

⁶⁴ Rock. F (2013) "LUP Guidelines for Seychelles"

⁶⁵ TCPA section 7

⁶⁶ Fisheries Act 2014 section 3

⁶⁷ Interpretations and General Provisions Act 1976 section 22(1)

⁶⁸ Land Reclamation Act 1962 section 2

⁶⁹ Land Reclamation Act section 5

⁷⁰ Land Reclamation Act section 7

A reclamation policy is referred to in certain documents but the author of this report has been unable to locate such a document.

Environment Protection Act 1994 and Environment Protection (Impact Assessment) Regulations 1996

Part IV of the *Environment Protection Act 1994 (EPA)* and the *Environment Protection (Impact Assessment) Regulations 1996* provide for Environment Impact Assessments (EIA). The Act requires that an EIA study be carried out and that an environmental authorisation is obtained if any person commences, proceeds with, carries out, executes or conducts or causes to commence, proceed with, carry out execute or conduct any prescribed project or activity in a protected or ecologically sensitive area⁷¹. The criteria, which establishes the necessity for an EIA is found in the 1996 Regulations which list categories of projects or activities requiring environmental authorisation (Prescribed Projects and Activities)⁷² and protected or ecologically sensitive areas where development requires an environmental authorisation.⁷³

Prescribed projects and activities of relevance to the MSP are fish and associated farming products, energy production and distribution, water (desalination plant); sewerage and waste water (sewerage networks and outfall); hotels, restaurants and tourism activities; fishing vessels and fleet construction; transport, harbour and marine (harbour construction and development; harbor dredging operations; sea defenses and sea walls); and land reclamation. Protected areas of relevance to the MSP are national parks, special nature and wildlife reserves and other protected areas; and historical sites and areas surrounding national monuments.

Ecologically sensitive areas of relevance to the MSP are natural habitats for rare, protected or endemic species of flora and fauna; Marshes and wetland habitats; Coastal strip; Beaches and intertidal zones; Seabed; and Small and outlying islands. The details of these areas are found in Annexe 3.

Removal of Sand and Gravel Act 1982

The *Removal of Sand and Gravel Act 1982* provides for an abstraction license for the removal of sand and gravel from any place, including the public domain. It also applies to the digging or stacking of sand or gravel for the purpose of removal.⁷⁴Both sand and gravel include mud under the Act.⁷⁵

NATIONAL POLICY

Seychelles Sustainable Development Strategy 2012-2020

The SSDS addresses the thematic area of Land Use, Coastal Zones and Urbanisation.⁷⁶ The focus of this thematic sector is to address the key challenges in managing urban sprawl and

⁷¹ Environment Protection Act 1994 section 15

⁷² Schedule 1 SI 39 of 1996 last amended by SI 63 of 2013

⁷³ Schedule 2 SI 39 of 1996 last amended by SI 63 of 2013

⁷⁴ Removal of Sand and Gravel Act 1982 section 3

⁷⁵ Removal of Sand and Gravel Act section 2

⁷⁶ SSDS Volume 2 Chapter 3 pages 25-33

the impacts it has on the coastal zone. By adopting a sustainable development approach, it is the objective of Government to address these challenges from a holistic and integrated perspective. This thematic area has the following goals and strategic objectives (Table 5).

Table 5. Goals and strategic objectives for land use and coastal zone management (Source:SSDS 2012-2020).

Goal 1: Long-term national development and land use management strategy for sustainable land management with **Strategic Objective**: Establish a comprehensive approach to sustainable land management with stakeholder involvement. There is a need for long-term perspective in land use development in Seychelles in view of its critical importance in supporting human development and also ensuring protection of the natural environment. Linked to this is the management of other resources associated with land use management.

Goal 2: An effective and integrated national coastal zone management framework, with **Strategic Objective:** Develop and implement an integrated approach to the management of the coastal zone areas. Too often development takes place in isolation, giving rise to all sorts of conflicts and when this occur lot of efforts and resources are used in resolving those conflicts rather than moving forward with development. Therefore it is vital to look at the coastal zone in a more integrated context.

Seychelles Strategic Land Use and Development Plan 2015 – Summary (Draft)

The draft Plan introduces a Spatial Strategy, which for the purposes of the MSP, seeks to support the growth of the Blue Economy through the opportunities provided by the maritime and coastal assets in a sustainable manner. This includes fisheries; aquaculture and mariculture; and marine tourism. Key proposals include the expansion of the Fishing Port at Ile du Port and supporting aquaculture at Ile de Romainville and the outer islands. The Plan also addresses issues of climate change and resilience. MLUH is also developing a development plan for Victoria. It must be ensured that the Land Use Plans, the Victoria Development Plan and Seychelles Strategic Land Use and Development Plan 2015 are all aligned to be able to be integrated within the MSP.

Chapter V. Non-renewable Resources

With regards to Non-renewable Resources (Chapter V), the United Nations Convention on the Law of the Sea provides the framework for exploitation of natural resources within Seychelles EEZ. There are no policy documents to guide development for non-renewable resources though legislation does exist - *Petroleum Mining Act 1976* and the *Environment Protection (Impact Assessment) Regulations 1996*. The President has portfolio responsibility over hydrocarbon matters, whilst PetroSeychelles is the implementing authority for the petroleum sector.

GOVERNANCE

The President of the Republic has portfolio responsibility over matters relating to nonrenewable resources in the country. PetroSeychelles, the national oil company, seeks to implement the petroleum policy and to strengthen Government capabilities in dealing with the exploration of, or other activities related to enhancing the value of the petroleum resources in Seychelles.

INTERNATIONAL COMMITMENTS

United Nations Convention on the Law of the Sea 1982

The Convention gives States the sovereign to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment.⁷⁷ At the national level this duty is reinforced by the *Constitution of Republic of Seychelles, 1993*⁷⁸ which puts a duty on the State to ensure that its citizens are guaranteed the right to a safe environment⁷⁹. This duty is further guaranteed under the *Environment Protection Act, 1994,* which in its Preamble provides for the protection, preservation and improvement of the environment and for the control of hazards to human beings, other living creatures, plants and property. Annex III to the Convention provides for the basic conditions on prospecting, exploration and exploration. It must be noted that the Annexes form an integral part of this Convention; therefore Seychelles is bound to implement these requirements when it became party to UNCLOS in 1994.

NATIONAL LEGISLATION

Petroleum Mining Act 1976

According to this Act, the ownership of all petroleum resources⁸⁰ existing in its natural condition in strata, in or under any land in Seychelles is vested in the Republic, which has the exclusive right of searching, and boring for, and getting such petroleum.⁸¹ In the Act, land is defined as "the surface area of the islands of Seychelles, and includes land covered by water and the seabed and subsoil beneath the territorial waters and the continental shelf"⁸²

Exploration, prospecting or mining for any petroleum on, in or under any land in Seychelles or to do any act preparatory to such exploring, prospecting or mining requires either an exploration licence or a petroleum agreement⁸³.

An exploration licence may be granted in respect of any area of land in Seychelles to which an application relates. This exploration licence may be granted to different persons in respect of the same area of land in Seychelles. More than one such licence may be granted to the same person in respect of different areas. Exploration licences so granted shall not be transferable. The licence is valid for 2 years and may be extended.⁸⁴ An exploration licence confers on the licensee, his servants or agents, the right to enter and remain upon the land to search, prospect and explore for petroleum in or under such land; to bring onto such land and to use any machinery, equipment, vehicles or materials reasonably required for

⁷⁷ UNCLOS Article 193

⁷⁸ Constitution of the Republic of Seychelles 1993

⁷⁹ ibid., Article 38

⁸⁰ defined as "any naturally occurring hydrocarbons whether in gaseous, liquid or solid state, any naturally occurring mixture thereof, or any naturally occurring mixture of one or more hydrocarbons whether in gaseous, liquid or solid state and one or more of the following, that is to say, water and other fluids" under Section 2 of the Petroleum Mining Act 1976

⁸¹ Petroleum Mining Act section 3

⁸² ibid., section 2

⁸³ defined as "any agreement made by the Government with any person under this Act for exploring, prospecting or mining for petroleum in or under any land in Seychelles" under s 2 of the Petroleum Mining Act

⁸⁴ Petroleum Mining Act sections 6 and 7

searching, prospecting and exploring for petroleum; and to construct, erect and lay out such buildings, installation and structures, and to carry out such works, on or under such land as may reasonably be required for the purpose of searching, prospecting and exploring for petroleum.⁸⁵ An exploration licence granted in respect of any area of land in Seychelles in relation to which a petroleum agreement is in force becomes void.⁸⁶ Further details on petroleum agreements are given below.

A petroleum agreement differs from an exploration license in that it grants exclusive rights for exploring, prospecting and mining for petroleum in or under any area of land in Seychelles specified in the agreement. The area or areas of land in Seychelles specified in such an agreement shall not in the aggregate exceed 10,000 square kilometres. Two or more petroleum agreements may be granted to the same person in respect of different areas of land in Seychelles, and it shall be lawful for the Government to enter into a single petroleum agreement with any person where the total area of land in Seychelles exceeds 10,000 square kilometres.⁸⁷ A petroleum agreement confers on the party or parties to the agreement and their servants or agents, the right to enter and remain upon the land to search and prospect for and win petroleum in or under such land and to carry out any operations directly or indirectly necessary or incidental; to dispose of any such petroleum; to bring onto such land and to use any machinery, equipment, vehicles or materials reasonably required for searching, prospecting and exploring for such petroleum; and to construct, erect and lay out such buildings, installations and structures, and to carry out such works, on or under such land as may reasonably be required for the purpose of searching for, winning, storing or disposing of such petroleum.⁸⁸

The Act further makes provisions⁸⁹ for the Minister to make Regulations for a model exploration licence and a model petroleum agreement. These are further detailed in the *Petroleum Mining Regulations 1976*. (First Schedule: model petroleum agreement for exploring or mining of petroleum in offshore land⁹⁰; Second Schedule: model exploration licence for exploring of petroleum in offshore land.) A revised Model Petroleum Agreement 2013 is available on the PetroSeychelles website.⁹¹

The Act also makes provisions for Regulations to be made for the protection of the environment and the taking of measures to avoid pollution. The current Model Petroleum Agreement (2013) further require developers to comply "with the relevant provisions of environmental laws and regulations in force from time to time in the Seychelles, including with respect to requirements for the conduct of Environmental Impact Assessment Studies". However, no such Regulations have been made under the Act and no specific environmental

⁸⁵ Petroleum Mining Act section 13(1)

⁸⁶ Petroleum Mining Act section 8

⁸⁷ Petroleum Mining Act section 9

⁸⁸ Petroleum Mining Act section 13(2)

⁸⁹ Petroleum Mining Act section 16

⁹⁰ defined as "land in Seychelles covered by the sea but does not include the foreshore"; "foreshore means land which is alternately covered and uncovered by the sea at the highest and lowest tides" under section 2 of the Petroleum Mining Regulations 1976

⁹¹ http://www.petroseychelles.com/index.php/legal-issues/model-petroleum-agreement

legislation that has been enacted with respect to offshore exploration. Though the EIA Regulations list mining as a prescribed activity requiring an EIA study, offshore drilling is not included on that list. The Model Agreement puts the onus on the developer to "employ techniques, practices and methods of operation and take other steps as are necessary and adequate in accordance with Best International Petroleum Industry Practice". At the international level, the Joint Nature Conservation Committee has adopted Guidelines for Minimising Risk of injury and Disturbance to Marine Mammals during Seismic Surveys. At the national level the Marine Conservation Society of Seychelles has prepared modified guidelines for seismic exploration based on the Joint Nature Conservation Committee Guidelines and forwarded these to the MEECC for consideration. However, to date no national guidelines have been developed.

The *Petroleum Mining Regulations* provide for a reference map showing land in Seychelles divided into numbered areas, each of which shall be known as a "block".⁹²

Minerals Act 1962

The *Minerals Act* was enacted in 1962 and has not been updated since then. It governs and defines minerals and their extraction within the Seychelles. The entire property in and control of all minerals⁹³ in, under or upon any land in Seychelles⁹⁴ or in all rivers or streams throughout Seychelles is vested in the Republic, which has the exclusive right of prospecting and mining⁹⁵ for such minerals.⁹⁶ However, the definition of minerals does not include coral, sand or sediments.⁹⁷ Prospecting⁹⁸ under a prospecting right, an exclusive prospecting licence or a special exclusive prospecting licence granted under the Act shall be lawful as well as mining under a mining right, a mining lease or a special mining lease granted under

⁹⁴ means including "land covered with water, the seabed and subsoil beneath the territorial waters and the continental shelf" under section 2 of the Minerals Act

⁹² Petroleum Mining Regulations Regulation 2

⁹³ means and includes the following: (a) metalliferous minerals, including antimony, arsenic, bismuth, copper, cobalt, chromium, cadmium, iron, lead, manganese, mercury, molybdenum, nickel, tin, tungsten, uranium, zinc, and all others of a similar nature to any of them, and all ores containing them and combinations of any of them with each other or with any other substance, excepting only those that occur in the form of precious minerals; (b) carbonaceous minerals, including graphite, coal in all its varieties, and all substances of a similar nature to any of them; (c) earthy minerals, including asbestos, barytes, bauxite, china clay, fuller's earth, gypsum, marble, mica, nitrates, phosphates, pipe-clay, potash, salt, slate, soda, talc, and all other substances of a similar nature to any of them; (d) precious minerals meaning and including (i) precious stones, namely, amber, amethyst, beryl, cat's eye, chrysolite, diamond, emerald, garnet, opal, ruby, sapphire, turquoise, and all other substances of a similar nature to any of them; and (ii) precious metals namely, gold, silver, platinum, iridium, osmium, palladium, ruthenium, rhodium, or ores containing any of these metals, provided that argentiferous led ores containing not more than four ounces of silver per ton shall be excluded from the scope of this definition; and (e) radio-active minerals, namely minerals, raw and treated (including residues and tailings) which contain by weight at least 0.05 per cent of the element uranium, or of the element thorium, or any combination thereof under section 2 of the Minerals Act 1962;

 ⁹⁵ means "any operation for winning or obtaining minerals" under section 2 of the Minerals Act
 ⁹⁶ Minerals Act section 3

 ⁹⁷ UNEP-GEF WIOLaB Addressing Land Based Activities in the Western Indian Ocean (Carolus, I.)
 (2006) "Report on the Legal, Regulatory And Institutional Frameworks In the Seychelles"
 ⁹⁸ means "to search for minerals, and include such working as is reasonably necessary to enable the prospector to test the mineral bearing qualities of the land"

the Act.⁹⁹ Mining requires an environmental impact assessment under the EIA Regulations 1996.

NATIONAL POLICY

Seychelles Sustainable Development Strategy 2012-2020

Goal 3 of the Fisheries and Marine Resources thematic area¹⁰⁰ focuses on promoting safe mineral exploration in Seychelles and has identified four strategic objectives as detailed below, all of which are relevant considerations for Seychelles MSP and are detailed in Table 6 below.

Table 6. Goal and strategic objectives mineral exploitation (source: SSDS 2012-2020).

Goal 3: Promote safe mineral exploitation in Seychelles waters.

Ongoing surveys indicate the potential for hydrocarbons and other seabed minerals (including sand) within the EEZ of the Seychelles. Extraction of those resources can lead to significant environmental impacts, especially in remote and sensitive habitats. This goal aims to ensure that such activities have the minimum impact on the environment and also the maximum benefit to the local population.

Strategic Objectives (1) Develop and implement appropriate environment safeguard policies and actions to minimise the environmental impacts of seabed activities and also compensate in any event of accidents; (2) Develop habitat maps of the sea bottom, with particular attention to sea mounts and other important seabed ecosystems; (3) Develop sensitivity maps for all the islands of the Seychelles; and (4) Establish appropriate fund mechanisms for the management and protection of the marine environment from proceeds of mineral exploitation in Seychelles.

Petroleum Policy (under development)

A Petroleum policy is being developed. The main objectives of the petroleum policy (as detailed on the PetroSeychelles website) will be to:

- 1. Promote petroleum exploration in Seychelles EEZ by putting in place fiscal and regulatory incentives that will attract oil companies, expedite exploration and have an early commercial discovery. A discovery will provide the country with its indigenous energy source and as the population is small only a small quantity of the hydrocarbon produced will end up in domestic consumption. The international oil company will have the large balance for export
- 2. Ensure Energy security at a time when world prices are very volatile and demands from countries like India and China are continuously on the increase.
- 3. Attract Foreign Direct Investments and stimulate ancillary economic growth. The industry will need services from other sectors, which will create further inflows of Foreign Exchange.
- 4. Build capacity and facilitate technology transfer to enable the eventual establishment of a Directorate of Petroleum to supervise and co-ordinate

 ⁹⁹ Minerals Act sections 5 and 6
 ¹⁰⁰ SSDS Vol 2 Chapter 6 pages 76-82

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exploration, field development and production programmes and enhance the effective management of the resources.

- 5. Ensure the maximisation of the economic benefit at minimum risk to safety, the environment and to capital investment.
- 6. Systematically build up a comprehensive database on all aspects of petroleum activity in Seychelles. This will entail proper collection, sorting, processing, storage and dissemination of data.
- 7. Promoting interest in petroleum exploration among the international oil companies will be at the highest level of priority of the policy objectives.¹⁰¹

Chapter VI. Pollution

Pollution to the marine environment is dealt with extensively by the Nairobi Convention 1985 and its Protocols; the International Maritime Organisation conventions and the United Nations Convention on the Law of the Sea 1982. National legislation also gives effect to these obligations, in particular the *Environment Protection Act 1994*. The Waste Management Policy 2014-2018 also addresses the issue of pollution to the marine environment, though the document does not address pollution by liquid waste. The Ministry of Environment, Energy and Climate Change is the responsible authority implementing these obligations under the *Environment Protection Act 1994*, whilst the Seychelles Coastguards has jurisdiction over the National Oil Spill Contingency Plan under the *Merchant Shipping Act 1992*.

GOVERNANCE

The Department of Environment, within the Ministry of Environment, Energy and Climate Change, is responsible for pollution matters within the country and has the administrative authority over the *Environment Protection Act, 1994*. The Department of Environment has been designated as the Authority under the Act and has the following functions, which are relevant for pollution within the EEZ and for the MSP:

- To evolve standards for quality of the environment in its various aspects, i.e., air, water, soil as well as for emission or discharge of environmental pollutants from various sources, i.e. effluent, emission of air pollutants and pesticides residues;
- To commission research and studies on problems relating to environmental pollution;
- To examine manufacturing processes, materials and substances likely to cause environmental pollution;
- To identify areas in which any activity shall be carried out subject to certain safeguards;
- To evolve procedures and safeguards for the prevention of accidents which may cause environmental pollution, remedial measures for such accidents as well as coordinating actions required in a state of environmental emergency or any situation which may pose a serious threat to the environment, and;

¹⁰¹ <u>http://www.petroseychelles.com/index.php/about-us</u> Accessed 24 October 2015

• To collect and disseminate information in respect of matters relating to environmental protection.

The Department of Environment also approves Environmental Impact Assessments in consultation with relevant stakeholders.

The Seychelles Coastguards has jurisdiction with regards to the National Oil Spill Contingency Plan under the Merchant Shipping 1992 and works in a coordinated approach with relevant stakeholders, i.e. Department of Environment, the Seychelles Police, the Seychelles Ports Authority and the Seychelles Maritime Safety Administration.

INTERNATIONAL COMMITMENTS

The Nairobi Convention 1985

Details on the Convention are found in Chapter I of this report. The Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region 1985 was amended and adopted in April 2010. The Convention offers a regional legal framework and coordinates the efforts of the member states to plan and develop programmes that strengthen their capacity to protect, manage and develop their coastal and marine environment sustainably.¹⁰²

Of relevance to the MSP in relation to pollution are the two following Nairobi Convention Protocols: the Protocol Concerning Co-operation in Combating Marine Pollution in Cases of Emergency in the Eastern African Region (adopted: 1985; entered into force: 30 May 1996) and the Protocol for the Protection of the Marine and Coastal Environment of the Western Indian Ocean from Land-Based Sources and Activities (adopted 31 March, 2010). Seychelles is party to the Convention and both Protocols.

At the COP 8 meeting¹⁰³ held in June 2015 in the Seychelles, the Contracting Parties called for regional guidelines on environmental management for oil and gas development, and asked countries and partners that are involved in oil and gas development to conduct and implement a regionally coordinated strategic environmental assessment, of social and environmental sustainability of oil and gas in the Western Indian Ocean Region. This document will be important for the developing petroleum sector in the Seychelles.

International Maritime Organisation

Seychelles has been a member of the International Maritime Organisation (IMO) since 1978. The IMO is the largest and strongest international body that regulates shipping and transportation worldwide. Below is a list of relevant IMO Conventions Seychelles is a party to.

• The International Convention for the Prevention of Pollution from Ships 1973 and its Protocol 1978 (MARPOL 73/78) aim to minimise pollution of the seas, including dumping, oil and exhaust pollution. MARPOL includes regulations aimed at preventing and minimizing, both accidental and operational, pollution from ships,

¹⁰² <u>http://www.unep.org/NairobiConvention</u> Accessed August 2015

¹⁰³ <u>http://www.unep.org/NairobiConvention/Meetings/COP8/</u>Accessed August 2015

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which are found in its six technical Annexes: Annex I Regulations for the Prevention of Pollution by Oil; Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk; Annex III Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form; Annex IV Prevention of Pollution by Sewage from Ships; Annex V Prevention of Pollution by Garbage from Ships; and Annex VI Prevention of Air Pollution from Ships. It must be noted that Annexes 1 and II are compulsory for member states, whereas the remaining are voluntary.

- The International Convention on Oil Pollution Preparedness and Response 1990 establishes measures for dealing with marine oil pollution incidents nationally and in co-operation with other countries.
- The International Convention on Civil Liability for Oil Pollution Damage 1992, which
 provides for adequate compensation to be available to cover oil pollution damage
 resulting from maritime casualties involving oil-carrying ships. The Convention
 places the liability for such damage on the owner of the ship from which the
 polluting oil escaped or was discharged.
- The International Convention on the Establishment of an International Fund for Compensation for Oil Pollution 1992.

The IMO Conventions have been given effect at the national level through legislation, details of which are given below in the legislation section.

United Nations Convention on the Law of the Sea 1982

Under the United Nations Convention on the Law of the Sea (UNCLOS) 1982, States have the general obligation to protect and preserve the marine environment. The Convention requests that Parties take necessary measures with respect to activities undertaken in the Area¹⁰⁴ to ensure the effective protection for the marine environment from harmful effects, which may arise from such activities. Such activities refer to all activities of exploration for, and exploitation of, the resources of the Area in question. Measures taken must be for the prevention, reduction and control of pollution and other hazards to the marine environment, including the coastline, and of interference with the ecological balance of the marine environment, particular attention being paid to the need for protection from harmful effects of such activities as drilling, dredging, excavation, disposal of waste, construction and operation or maintenance of installations, pipelines and other devices related to such activities; and the protection and conservation of the natural resources of the Area and the prevention of damage to the flora and fauna of the marine environment.¹⁰⁵

NATIONAL LEGISLATION

Environment Protection Act 1994

The Environment Protection Act (EPA) 1994 provides for the protection, preservation and improvement of the environment and for the control of hazards to human beings, other living creatures, plants and property and for the prevention, control and abatement of environmental pollution.¹⁰⁶ Environment is defined as "air, water and land and the

 $^{^{\}rm 104}$ defined as "... the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction" by Article 1 UNCLOS

¹⁰⁵ UNCLOS Article 145 and Part XII

¹⁰⁶ EPA Preamble and Part III

inter-relationship which exists among and between air, water and land, and human beings, other living creatures, plants, micro-organisms and property".¹⁰⁷

Under the Act no person is allowed to discharge or place in to the ground or dispose in the subsoil or dig into the ground any polluting or hazardous substance or waste¹⁰⁸ or throw, deposit or place any polluting, or hazardous substance or waste in any watercourse or in the territorial waters without an authorisation¹⁰⁹. Watercourse is defined as including "any river, stream, dam, reservoir, water catchment and wetlands".¹¹⁰

Section 6 of the Act gives the Authority the power to prescribed standards. Accordingly the *Environment Protection (Standard) Regulations 1995* have been enacted. The Regulations prescribe effluent quality standards and cover the discharge of effluents to a recipient system from any industry, operation or process. The effluent quality standard specifies maximum concentrations for a range of pollutants, including organic and heavy metal pollutants, which may be present in effluent discharges. Effluent is defined as "waste water or any other liquid with or without particles of matter in suspension therein of domestic, agricultural, trade or industrial origin, treated or untreated, and discharged directly or indirectly into the environment".¹¹¹ The 1995 Regulations has important implications for control of pollution from effluent within the coastal waters. This includes discharge of effluent from desalination plants and sewerage for the whole of the territorial waters of the Seychelles, including outer islands.

Under the *Environment Protection (Impact Assessment) Regulations 1996,* an EIA study is required for certain prescribed projects or activities in relation to pollution¹¹². Those of relevance to the MSP include sewerage and waste water (sewerage networks and outfall).

The EPA provides for the declaration of one or more coastal zones as protected. No person is allowed to release or cause to be released into the Coastal Zone polluting or hazardous substances by dumping or through the atmosphere.¹¹³ To date no coastal zones have been declared under these provisions. However, the provisions making it an offence to pollute any watercourse or in the territorial waters¹¹⁴ and the 1995 Regulations serve to protect coastal zones from pollution.

Petroleum Mining (Pollution and Control) Act 1976

The Act provides for liability for pollution from petroleum, which takes place during mining operations where such pollution results in any damage to land in Seychelles by contamination. However, it would seem that the Act is not yet in force.

- ¹⁰⁹ EPA section 7(5)
- $^{\rm 110}$ EPA section 2

¹⁰⁷ EPA section 2

¹⁰⁸ EPA section 7(4)(a)

¹¹¹ ibid.,

¹¹² EPA section 15

¹¹³ EPA section 11(4)

¹¹⁴ EPA section 7(5)

Merchant Shipping Act 1992 – Merchant Shipping (Oil Pollution Preparedness and Response) Regulations 2001

The Act provides for the President to declare that any Convention relating to shipping shall have effect in Seychelles, subject to any conditions, limitations, reservations or amendments.¹¹⁵ For these purposes, 'Convention' includes any Convention, Treaty or Agreement relating to shipping and relating to the prevention, reduction or control of pollution of the sea or other waters by matter from ships.¹¹⁶

The Act provides for the Minister to make Regulations for the protection of marine environment.¹¹⁷ The Merchant Shipping (Oil Pollution Preparedness and Response) Regulations, enacted in 2001, seek to give effect to the International Convention on Oil Pollution Preparedness and Response 1990.

The Seychelles Coastguards, designated as the Competent Authority under the Regulations¹¹⁸, has the duty to prepare and revise, a national contingency plan for the preparedness and response to an oil pollution incident in accordance with the guidelines provided by the International Maritime Organisation.¹¹⁹ Accordingly, the National Oil Spill Contingency Plan has been prepared.

National Oil Spill Contingency Plan

The objective of the NOSCP is to provide for the coordination and direction of an effective response to oil spills for identifying response resources; making thorough notifications; effecting recovery and shoreline clean-up; protecting sensitive environments; protecting, rescuing, rehabilitating wildlife and fisheries; and initiating assessment of damages to natural resources. The geographical scope of the application of the NOSCP is the Seychelles EEZ. The plan must be revised periodically. ¹²⁰

The National Oil Spill Contingency Plan (NOSCP) designates the Seychelles Coast Guards as the competent national authority for oil spill emergencies and response operations. In the event of an oil spill in Seychelles waters the lead agency for response is the Seychelles Coast Guards. Marine Oil spill risks identified under the NOSCP include spills from incoming and outgoing tankers; and spills from passing tankers. The latter is considered as posing a considerable risk of spills, especially in the Mozambique Channel and South of Coetivy Island. In case of spill within the 30Nm radius around Aldabra, Southern equatorial currents would carry the oil towards the atoll. The southern equatorial current is most predominant during the Southern Hemisphere winter season (SE Monsoon).¹²¹

The NOSCP provided a list of locations and facilities that have been identified to be at risk following as spill. These are desalination plants; power generation plants; marine national

¹¹⁵ with the exception of the Collisions Convention, the Load Line Convention and the Safety Convention which have the force of law in Seychelles – Merchant Shipping Act 1992 section 85

¹¹⁶ Merchant Shipping Act section 240

¹¹⁷ Merchant Shipping Act section 245

¹¹⁸ Merchant Shipping (Oil Pollution Preparedness and Response) Regulations 2001 Regulation 9 ¹¹⁹ ibid., Regulation 11

¹²⁰ National Oil Spill Contingency Plan chapter 1

¹²¹ NOSCP chapter 2

parks; hotels and other tourist amenities; marinas; wetlands; airports; beaches; ports; fisheries and aquaculture; coral reefs; and factories.¹²²

The NOSCP outlines the different protection and cleanup techniques available and when these would be appropriate to use. These are found in Annexe 6 to this report. Of relevance to MPAs, one of the techniques used is **exclusion booming** where a boom is deployed across or around a sensitive area to "exclude" a pollutant from contaminating the area; thereby deflecting or containing the pollutant is either deflected or contained by the exclusion boom.¹²³

The NOSCP outlines the different shoreline and close-shoreline habitats of the Seychelles EEZ. Each habitat is defined according to its specific characteristics, the predicted oil behaviour within each habitat; and finally the required response considerations for each of the habitats.¹²⁴ The habitats are classified as follows: exposed rocky shores; sheltered rocky shores; sand beaches; mixed sand and gravel beaches; gravel beaches; exposed, solid man-made structures; sheltered, solid man-made structures; kelp; riprap; coral reefs; mangroves; sea grass; soft bottom; and mixed and hard bottom habitats. Additionally, an updated atlas of environmentally sensitive coastal areas is annexed to the NOSCP (Appendix J), which contain detailed information relating to environmental and social economic issues. This is particular importance for the MSP as it outlines how the Plan relates to the protection of MPAs. It must be ensured that sensitive areas under the NOSCP area aligned with those under the marine protected areas legislation ad policy as well as the MSP.

Maritime Zones Act 1999 - Maritime Zones (Marine Pollution) Regulations 1981

The Act seeks to provide for the determination of the Maritime Zones of Seychelles in accordance with the UNCLOS 1982. The *1981 Regulations*, enacted the previous Act, still remain in force and provide for the protection and the preservation of the marine environment and the prevention and control of marine pollution. As required under UNCLOS, which requires Parties to adopt national legislation preventing pollution to the marine environment from land based sources, seabed activities and vessels,¹²⁵ the Regulations prohibit the discharge of any oil or oily mixture into the territorial waters of the Seychelles from any vessel, from any place on land and from any apparatus used for transferring oil from or to a vessel.

NATIONAL POLICY

Waste Management Policy 2014-2018

The vision of the Policy is to sustainably manage solid waste, which results in an improved quality of life for the population, protection of the environment and increased economic activity. The goal of the Policy is "to protect public health and the environment through the sustainable management of solid waste". Several Policy Objectives have been developed to achieve this goal, and target fourteen areas for actions drawing on four specific objectives

¹²² NOSCP chapter 2

¹²³ ibid., chapter 7

¹²⁴ ibid., chap 7 pages 32-47

¹²⁵ Part XII UNCLOS Part XII

which are: (1) To manage waste sustainably with a greater emphasis on source reduction, recycling and recovery; (2) To manage waste in a cost-effective manner where generators of waste pay the full cost for managing their waste; (3) To increase the institutional and human capacity for management of solid waste; and (4) To establish a comprehensive structure for the safe management of hazardous waste.

It must be noted that the policy does not cover liquid wastes in particular industrial effluents and sewage, which fall under the responsibility of the Public Utilities Corporation. It is also recommended that the policy be updated every two years to take into account emerging issues as well as the Solid Waste Master Plan, which is currently being updated.

Seychelles Sustainable Development Strategy 2012-2020

Chapter 7 of the SSDS focuses on the Water, Sanitation and Waste Management thematic area.¹²⁶ Goal 2 relates to integrated management of wastewater whilst Goal 3 relates to solid waste. Both goals have strategic objectives that have some relevance for the Seychelles MSP, in particular all those that reduce pollution inputs into the marine environment.

Table 7. Goals and strategic objectives waste management (source: SSDS 2012-2020).

Goal 2: Integrated management of wastewater for the protection of human health and the environment. Strategic Objectives: (1) Minimise pollution caused by waste water; (2) Develop and implement appropriate sewerage treatment plants for Praslin and La Digue.

Goal 3: Solid waste is managed in an integrated and environmentally safe manner is aimed at ensuring that the management of solid waste in Seychelles is continually strengthened in an integrated manner through the right policy, infrastructure, and capacity (financing and human resources) to implement advanced, solid waste management programmes that will respond to the needs of the country for the forthcoming 10 years. Strategic Objectives are as follows: (1) To enhance the legal framework for the management of solid waste; (2) To develop and enhance infrastructures for managing solid waste; (3) To achieve source segregation of solid waste and promote recycling; (4) To ensure safe management of hazardous waste; and (5) To strengthen Institutional capacity for the management of solid waste.

Chapter VII. Biodiversity Protection

The Convention on Biological Diversity is the main international commitment that Seychelles has vis a vis Protected Areas. Seychelles committed to 30% marine protection in Rio+20 (2009). These obligations are furthered in the newly developed Protected Areas Policy 2013, which legislation will give effect to in 2015, as well as the National Biodiversity Strategy and Action Plan 2015- 2020.

A comprehensive Legal, Policy and Institutional Review was undertaken by the UNDP-GEF project 'Strengthening Seychelles' Protected Area System through NGO Management Modalities' project 2010-2015. This review will not be duplicated here but it is important to review it and other policies and action plans to address marine biodiversity issues in

¹²⁶ SSDS Vol 2 Chapter 7 pages 100-121

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Seychelles. The review is available at <u>http://www.seychellesmarinespatialplanning.com/wp-content/uploads/2014/06/PA-Policy_OCT_2013.pdf</u> and shall be referred to as the Protected Areas (PA) Legal, Policy and Institutional Review for the purposes of the MSP Legislative and Policy Review. The PA review addresses Seychelles' international commitments as well as the national legal, policy and institutional framework vis a vis protected areas.¹²⁷ It must be noted that reference shall be made to the 2013 PA Legal Policy and Institutional Review throughout this part for further reference and details. Deficiencies in the policy, legal and institutional framework have been identified in the 2013 review.¹²⁸

GOVERNANCE

The following organisations are involved in the management of marine protected areas: Department of Environment within MEECC, Seychelles National Parks Authority, Seychelles Fisheries Authority, Seychelles Islands Foundation and several Non Governmental Organisations, including Nature Seychelles and Island Conservation Society. The 2010 PA Legal, Policy and Institutional Review provides details on the institutional structure and roles and responsibilities of each of these organisations¹²⁹

INTERNATIONAL COMMITMENTS

Convention on Biological Diversity 1992

Seychelles ratified the Convention on Biological Diversity (CBD) in 1993. The three objectives of this Convention are the conservation of biological diversity¹³⁰, the sustainable use¹³¹ of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources¹³².¹³³

All Parties to the Convention are required to "develop national strategies, plans or programs for the conservation and sustainable use of biological diversity¹³⁴. Accordingly, the National Biodiversity Strategy and Action Plan (NBSAP) was developed (the first in 1997 and the revised version in 2015). The new NBSAP is detailed below.

¹²⁷ Nevill. J (2010) "Strengthening Seychelles' Protected Area System through NGO Management Modalities – A Policy, Legal and Institutional Review" available at

http://www.seychellesmarinespatialplanning.com/wp-content/uploads/2014/06/PA-Policy_OCT_2013.pdf

¹²⁸ ibid., page 32

¹²⁹ ibid., pages 26-31

¹³⁰ defined as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems" under Art 2 of the CBD ¹³¹ defined as " the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations " under Art 2 of the CBD

¹³² defined as "genetic material of actual or potential value" under Art 2 of CBD; "Genetic material" is further defined as "any material of plant, animal, microbial or other origin containing functional units of heredity"

¹³³ CBD Article 1

¹³⁴ CBD Article 6

The Convention states that Contracting Parties shall implement the CBD with respect to the marine environment consistently with the rights and obligations of States under UNCLOS.¹³⁵

The revised and updated Strategic Plan for Biodiversity 2011-2020¹³⁶, which includes the Aichi Biodiversity Targets, provides an overarching framework on biodiversity. This includes biodiversity-related conventions, the United Nations system and all other partners engaged in biodiversity management and policy development.¹³⁷

The CBD is the most important international legal instrument addressing protected areas. The term "protected area" is defined in as "a geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives"¹³⁸. Parties are encouraged to: Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity; Develop, where necessary, guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity; Regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use; Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas; and Cooperate in providing financial and other support for in-situ conservation, particularly to developing countries.¹³⁹

The CBD Programme of Work on Protected Areas

In February 2004, the CBD Parties adopted the Programme of Work on Protected Areas (PoWPA). The PoWPA enshrines development of participatory, ecologically representative and effectively managed national and regional systems of protected areas, where necessary stretching across national boundaries. From designation to management, the PoWPA can be considered as a defining framework or "blueprint" for protected areas for the coming decades, acting as a framework for cooperation between Governments, donors, NGOs and local communities.¹⁴⁰

Protected areas are also addressed in the following Programmes of Work of the CBD. The relevant ones for the purposes of the MSP are detailed below:

• The **Programme of Work on Marine and Coastal Biodiversity**¹⁴¹ sees marine and coastal protected areas are an essential tool for the conservation and sustainable use of marine and coastal biodiversity. It promotes the idea that the establishment of a national framework of marine and coastal protected areas should include a range of levels of protection, encompassing both areas that allow sustainable uses and those that prohibit extractive uses (i.e., "no-take" areas)¹⁴². The Programme identifies key operational objectives and priority activities within its five key programme elements namely

¹³⁵ CBD Article 22

¹³⁶ CBD COP 10 Decision X/2

¹³⁷ https://www.cbd.int/sp/default.shtml Accessed August 2015

¹³⁸ CBD Article 2

¹⁴⁰ <u>https://www.cbd.int/protected/overview/</u> Accessed August 2015

¹⁴¹ as contained in the annex to Decision VII/5 (UNEP/CBD/COP/DEC/VII/5 13 April 2004)

¹⁴² CBD COP Decision VII/5

Integrated Marine and Coastal Management; Marine and Coastal Living Resources; Marine and Coastal Protected Areas; Mariculture; and Invasive Alien Species.¹⁴³

- The **Programme of Work on Traditional Knowledge**, which includes a component on protected areas relating to the management of protected areas by indigenous and local communities¹⁴⁴. Specific emphasis is put on the respect of their rights when establishing new protected areas¹⁴⁵
- The **Programme of Work on Tourism and Biodiversity**, which includes guidelines on how to incorporate sustainable use and equity strategies within and around protected areas¹⁴⁶
- The **Programme of Work on Island Biodiversity**, which aims to reduce significantly the rate of island biodiversity loss as a contribution to poverty alleviation and the sustainable development of islands, particularly SIDS. The programme of work sets out almost 50 island-specific priority actions arranged under 11 goals, and organised under seven focal areas with the first dedicated to "Protect the components of biodiversity"¹⁴⁷

Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity 2010

The Protocol, established under the CBD, provides a transparent legal framework for the effective implementation of one of the three objectives of the CBD as it aims at sharing the benefits arising from the utilisation of genetic resources in a fair and equitable way. Seychelles became a party to the Protocol in 2012. Consequently, draft legislation on access and benefit sharing is currently being developed.

Convention on Wetlands of International Importance especially as Waterfowl Habitat 1971 (Ramsar Convention)¹⁴⁸

The mission of the Convention mission is the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world. The Convention defines wetlands as areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.¹⁴⁹ This includes all lakes and rivers, underground aquifers, swamps and marshes, wet grasslands, peatlands, oases, estuaries, deltas and tidal flats, mangroves and other coastal areas, coral reefs, and all human-made sites such as fish ponds, rice paddies, reservoirs and salt pans.

Under the "three pillars" of the Convention, the Contracting Parties commit to work towards the wise use of all their wetlands; designate suitable wetlands for the list of Wetlands of International Importance (the "Ramsar List") and ensure their effective management¹⁵⁰; and

¹⁴³ <u>https://www.cbd.int/marine/resources.shtml</u> Accessed August 2015

¹⁴⁴ CBD COP Decision VI/10

¹⁴⁵ CBD COP Decision VII/16

¹⁴⁶ CBD COP Decision VII/14

¹⁴⁷ https://www.cbd.int/protected/pacbd/default.shtml Accessed August 2015

¹⁴⁸ <u>http://www.ramsar.org</u> Accessed August 2015

¹⁴⁹ Ramsar Convention 1971 Article 1

¹⁵⁰ Ramsar Article 2.1

cooperate internationally on transboundary wetlands, shared wetland systems and shared species.

The Ramsar Strategic Plan 2009-2015¹⁵¹ provides guidance on implementing the Convention. The Seychelles acceded to the Ramsar Convention in March 2005. Seychelles has three designated Ramsar sites, one of which is important for the purpose of the MSP: Port Launay, Albadra Atoll and Mare aux Cochons.

Convention on Migratory Species 1979¹⁵²

The Convention on Migratory Species (CMS), also known as the Bonn Convention, provides a global platform for the conservation and sustainable use of terrestrial, aquatic and avian migratory species and their habitats. CMS brings together the States through which migratory animals pass, referred to as the Range States, and lays the legal foundation for internationally coordinated conservation measures throughout a migratory range. Migratory species threatened with extinction are listed on Appendix I of the Convention. Migratory species that need or would significantly benefit from international co-operation are listed in Appendix II of the Convention. For this reason, the Convention encourages the Range States to conclude global or regional agreements. CMS acts as a framework Convention. The agreements may range from legally binding treaties (called Agreements) to less formal instruments, such as Memoranda of Understanding, and can be adapted to the requirements of particular regions. The development of models are tailored according to the conservation needs

Seychelles is a party to CMS since 2005. It is important to note that shark species now listed on the CMS appendices are significant in current Seychelles artisanal and export trade. Seychelles has signed two CMS instruments. These are the Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia (IOSEA Marine Turtle MoU), signed by Seychelles in 2003 and the Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their Range (Dugong MoU), signed by Seychelles in 2010. The Dugong MoU aims to promote internationally coordinated actions to ensure the long-term survival of dugongs and their sea grass habitats throughout their extensive range.¹⁵³

The IOSEA Marine Turtle MoU applies to the waters and coastal States of the Indian Ocean and South-East Asia and adjacent seas, covering 44 Range States. Through its Conservation and Management Plan, the IOSEA MoU puts in place a framework through which States of the Indian Ocean and South-East Asian region, as well as other concerned States, can work together to conserve and replenish depleted marine turtle populations for which they share responsibility.¹⁵⁴ The MoU covers six species of marine turtles. This includes the including the Green turtle (*Chelonia mydas*, Endangered A2bd) and the Hawksbill turtle (*Eretmochelys*)

¹⁵¹ <u>http://www.ramsar.org/sites/default/files/documents/pdf/strat-plan-2009-e-adj.pdf</u> as adopted by Resolution X.1 (2008) and adjusted for the 2013-2015 triennium by Resolution XI.3 (2012) Accessed August 2015

¹⁵² <u>http://www.cms.int</u> Accessed 30 October 2015

¹⁵³ <u>http://www.cms.int/en/legalinstrument/dugong</u> Accessed 30 October 2015

¹⁵⁴ http://www.cms.int/en/legalinstrument/iosea-marine-turtles Accessed 30 October 2015

imbricata, Critically Endangered A2bd) found in Seychelles waters (IUCN Red List Criteria shown in parentheses).

Seychelles is also considered a range state for the following species: birds of prey (raptors) and sharks. The Memorandum of Understanding (MOU) on the Conservation of Migratory Sharks is the first global instrument for the conservation of migratory species of sharks. Seychelles is also considered as range state for the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA). The agreement seeks to establish coordinated conservation and management of migratory waterbirds¹⁵⁵ throughout their entire migratory range.¹⁵⁶

Convention on International Trade in Endangered Species of Wild Fauna and Flora 1973

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival. Seychelles acceded to CITES in 1977.

Approximately 5,600 species of animals and 30,000 species of plants are protected by CITES against over-exploitation through international trade. They are listed in the three CITES Appendices. The species are grouped in the Appendices according to how threatened they are by international trade and are afforded different levels or types of protection from over-exploitation. Appendix I lists species that are the most endangered among CITES-listed animals and plants threatened with extinction. CITES prohibits international trade in specimens of these species except when the purpose of the import is not commercial, e.g. for scientific research. Appendix II lists species that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled. Appendix III is a list of species included at the request of a Party that already regulates trade in the species and that needs the cooperation of other countries to prevent unsustainable or illegal exploitation.¹⁵⁷

United Nations Convention on the Law of the Sea 1982

Part XII (Articles 192 – 237), entitled 'Protection and Preservation of the Marine Environment,' deals with marine conservation. Certain provisions require nations to protect and preserve the marine environment (Article 192), and to prevent pollution from any source (Article 196). While UNCLOS strengthens the ability of nations to establish MPAs, no specific reference is made to protected areas.¹⁵⁸

Other international obligations relevant to Protected Ares include the following:

• Agenda 21 1992, which is the Program of Action resulting from Rio Declaration and 1992 UN Conference on Environment and Development. Chapter 17 details requirements for protection of marine living resources and the marine environment, including the establishment of limitations on the use of marine ecosystems through

¹⁵⁶ <u>http://www.cms.int/en/legalinstrument/aewa</u> Accessed 30 October 2015

¹⁵⁵ 255 species of birds ecologically dependent on wetlands

¹⁵⁷ <u>https://cites.org/eng/app/index.php</u> Accessed 30 October 2015

¹⁵⁸ PA Policy page 39

the designation of protected areas and other means.¹⁵⁹

Barbados Declaration and Programme of Action 1994 for the Sustainable
 Development of Small Island Developing States were produced at the first Global
 Conference on the Sustainable Development of Small Island States in 1994. The
 Barbados Programme of Action (BPoA) contains 14 priority areas plus a number of
 actions and policies related to environment and development planning. Articles 21 25 highlight the actions required to ensure sustainable development of SIDS coastal
 and marine resources. In addition, Articles 41-45 highlight the special actions
 required at a national, regional and international level to protect and conserve
 biological diversity including marine biodiversity. The Mauritius Strategy for the
 Further Implementation of the Programme of Action for the Sustainable Development of
 Small Island Developing States 2005, developed under the auspices of UNESCO is the
 implementing strategy for the BPoA. Chapter IV on Coastal and Marine Resources
 encourages the strengthening of representative networks of marine protected
 areas.¹⁶⁰

International Whaling Commission

The Indian Ocean was been designated as a whale sanctuary by the International Whaling Commission (IWC) in 1979. As a result, commercial whaling is prohibited throughout the Indian Ocean extending North from 55 degrees South in addition to adjacent waters including the Red and Arabian Seas and the Gulf of Oman, which includes the whole of the Seychelles EEZ. The Seychelles introduced the Indian Ocean Sanctuary as an initiative. Seychelles is, however, no longer a member of the IWC.

FAO agreements address protected areas and species found within these areas. These agreements are the *IPOA-IUU; the IPOA-Sharks;*, the IPOA-Seabirds; as well as the *Guidelines to Reduce Sea Turtle Mortality in Fishing Operations*.¹⁶¹ All of those documents are elaborated upon in Chapter III of this review. Seychelles has developed an NPOA for the Conservation and Management of Sharks in 2007 and a NPOA on IUU.

NATIONAL LEGISLATION

The following pieces of legislation are of significant relevance to the MSP process. A summary of the protected areas detailed on this part as well as a review of each site is available in the PA Legal, Policy and Institutional Review.¹⁶²

Wild Animals and Birds Protection Act 1961

The following Nature Reserves, of relevance to the MSP, have been designated under the 1961 Act. These are Beacon or Ile Séche; Booby or Ile aux Fous; Boudeuse; Etoile; King Ross or Lamperiaire; Les Mamelles; North Cousin or Cousin; and Vache Marine.¹⁶³ The Act also affords protection to certain marine species i.e. whale sharks¹⁶⁴; green turtles (Chelonia

¹⁵⁹ ibid.,

¹⁶⁰ ibid.,

¹⁶¹ FAO 2009b

¹⁶² PA Legal, Policy and Institutional Review pages 20-24

¹⁶³ Wild Birds Protection (Nature Reserves) Regulations 1966

¹⁶⁴ Wild Animals (Whale Shark) Protection Regulations 2003

mydas), hawksbill turtle (Eretmochelys imbricata) and any other turtle found in the territorial waters of Seychelles¹⁶⁵.

National Parks and Nature Conservancy Act 1969

The Act establishes 4 categories of protected areas: Strict Nature Reserves, Special Reserves, National Parks, and Areas of Outstanding Beauty.

Fisheries Act 2014 – Fisheries Regulations 1987

Under the previous *Fisheries Act 1991*, provisions were made for the protection of marine mammals and made it an offence for any person to kill, chase or take any marine mammal, whether alive or dead, within the Seychelles waters.¹⁶⁶ However, on the repeal of this Act by the new *Fisheries Act 2014*, such protection has been removed. The new legislation provides for regulations to be made for the protection of marine mammals and turtles.¹⁶⁷ Whilst turtles are already protected by specific legislation under the Wild Animals Protection Act, no such legislation or any regulations exist for marine mammals.

Four Shell Reserves have been designated under the *Fisheries Regulations 1987*.¹⁶⁸ The location of these areas is found in Table 8 below.

Table 8. Shell reserves (source: Fisheries Regulations 1987).

On the East Cost of Mahe - North East Point and Anse Nord d'Est: the area lying within 400 metres seaward from the low-water mark between North East Point and the Western end of Carana Beach.

South East Island to Pointe au Sel: The areas lying within 400 metres seaward from the low-water mark between the northest corner of South East Island and Anse Faure and the area lying between the low-water mark and the edge of the reef between Anse Faure and Pointe au Sel.

On the North Coast of La Digue - La Passe by Pointe Cap Barbi to Cap Bayard River: the area lying within 400 metres from the low-water mark between the jetty at La Passe and the mouth of Cap Bayard River.

On the North Coast of Praslin - Pointe Zanguilles to Anse Boudin: the area lying within 400 metres seaward from the low-water mark between the lighthouse at Pointe Zanguilles and a point 270 metres beyond the mouth of Mon Desir River.

The *Fisheries Regulations 1987* make provision for protected areas where the use of any net, which is operated by being dragged across the seabed is prohibited under Regulation 15 (Table 9).

Table 9. Prohibited areas for use of nets (source: Fisheries Regulations 1987).

In the waters around Mahe: the whole of the reef situated on the east coast of Mahe from North East Point and where such reefs extend less than one thousand meters from the high water mark such portion of the sea as is within one thousand meters of the high water mark;

¹⁶⁵ Wild Animals (Turtles) Protection Regulations 1994

¹⁶⁶ Fisheries Act 1991 Section 24 (10)a

¹⁶⁷ Fisheries Act 2014 section 77(g)

¹⁶⁸ Fisheries Regulations 1987 Regulation 11(1)

In the waters around Praslin: the whole of the reefs situated on the south east coast of Praslin from an imaginary line drawn from "Roche Corbijeaux" to the nothernmost of North Cousin Island to Anse Marie Louise inclusive, and, where such reefs extend less than one thousand meters from the high water mark, such portion of the sea as is within one thousand metres from the high water mark;

In the waters around La Digue: the whole of the reef situated on the west coast of La Digue from the northern point of that island to its southermost point and, where such reefs extend less than one thousand metres from the high water mark such portion of the sea as is within one thousand metres of the high water mark.

Foreign vessels are prohibited from fishing within nine zones within the EEZ – Industrial Fishing Exclusion Areas as detailed in Chapter III on Fisheries section Fisheries Act (Map Annexe 5).

Protected Areas Act 1967

Protected areas may be declared if it is found to be necessary or expedient in the public interest that special precautions should be taken to prevent the entry of unauthorised persons to such areas, place or premises.¹⁶⁹ Areas designated of relevance to the MSP process are: Mahe Quay; Port Launay/Baie Ternay; and African Banks and surrounding areas; Ile Cocos, Ile La Fouche and Ilot Platte and surrounding areas.¹⁷⁰

Environment Protection Act 1994 - Environment Protection (Impact Assessment) Regulations 1996

The following areas designated under the 1996 Regulations are of relevance to the MSP. Protected areas: national parks, special nature and wildlife reserves and other protected areas; and historical sites and areas surrounding national monuments. Ecologically sensitive areas: natural habitats for rare, protected or endemic species of flora and fauna; Marshes and wetland habitats; Coastal strip; Beaches and intertidal zones; Seabed; and Small and outlying islands. The details of these areas are found in Annexe 3.

NATIONAL POLICY

Seychelles' Protected Areas Policy 2013

The Vision of the Policy is "to have a Protected Areas System on land and in the sea that protects and conserves high quality, comprehensive and ecologically representative examples of the Seychelles' natural diversity and cultural heritage and that provides ample opportunities for the fair and equitable sharing of the benefits arising from the sustainable use of these resources".

The principal goal of the policy is "to achieve an effective and multi-use protected area system that is representative, comprehensive and balanced, to maintain the highest quality examples of ecosystems within the country by engaging all stakeholders" and further detailed in specific objectives summarised below in Table 10.

¹⁶⁹ Protected Areas Act section 3

¹⁷⁰ The coordinates of these areas may be found in the Act at <u>http://www.seylii.org/sc/legislation/consolidated-act/185</u>

Table 10. Specific objectives (source: Protected Areas Policy 2013)

- Create conditions to effectively conserve 50% of national terrestrial areas and effectively conserve and manage 20% of marine area within the EEZ;
- Establish and implement effective mechanisms for private sector, NGOs and community involvement and engagement in the planning and management of protected areas;
- Explore, develop and implement sustainable financing mechanisms to ensure the long term availability of adequate resources for PA management;
- Develop and implement effective capacity development programme to strengthen the management of PAs;
- Effectively conserve and protect the composition, function and evolutionary potential of biodiversity within and outside of the Protected Area Network;
- Provide for the restoration of degraded habitats and ecosystems of historical important biodiversity areas and put into place measures to prevent further degradation;
- Maintain and enhance terrestrial and marine ecosystems to guarantee long term ecosystem services;
- Develop and implement schemes for the sustainable use and sharing of the benefits arising from these activities within the PA network;
- Minimise and mitigate the impacts of climate change by maintaining the integrity and functions of ecosystems;
- Establish and implement educational and awareness programmes and enhance public support for ecosystem protection and sustainable use; and
- Develop and implement outreach programmes to change people's behaviour with respect to protection of the environment.

In order to achieve these objectives, 14 national commitments have been made. The first commitment listed in the policy is 'to create new PA categories in accordance to international norms'. This is in line with CBD and International Union for Conservation of Nature (IUCN) requirements, which Seychelles is party to. The Policy states that it seeks to simplify the multiple existing PA Categories into five new categories, which take into consideration both the local context whilst aligning with International (IUCN) criteria as well as the procedures to organise the PAs of Seychelles into a Protected Areas System Plan as required by the CBD. This includes implementing a system of spatial and temporal conservation-priority zoning for the coastal and marine areas. Further commitments include the development of a standardised PA management plan and the measurement of management effectiveness for existing and new protected areas, the adoption of an internationally recognized process for long-term monitoring of the Protected Areas system, capacity development with linkages to local and/or international academic and research institutions as well as seeking for and establishing sustainable financing mechanisms for the protected areas system. Stakeholder and public involvement in PA planning and management is encouraged. The Policy introduces and outlines the concepts of comanagement and proposes templates for co- management agreements for the PAs in Seychelles. The document proposes a new process for the nomination of new PAs as well as declassification and revocation of such areas in order to facilitate the re-formulation and extension on PAs. This scope of the policy document applies to all marine and terrestrial habitats and ecosystems of the Seychelles' territory and its EEZ. It is recommended that the Policy be updated every 10 years.

The 5 PA categories proposed in the Policy document are detailed below:

- Strict Nature Reserve (IUCN Ia) defined as "An area set aside for the strict protection of biodiversity and/or geological or landform features, where human visitation, use and impacts are strictly controlled and limited to ensure the protection of the area. All other interests and activities are subordinated to this end. Such reserve may serve for scientific research and long term monitoring".
- **Ecological Reserve** (IUCN IV) defined "An area set aside for the protection of particular species or habitats, normally subject to regular, active interventions to address the requirements of particular species or to maintain habitats".
- National Park (IUCN II) defined as "An area designated for the propagation, protection and preservation of wild life or the preservation of places or objects of aesthetic, geological, prehistoric, historical, archeological or other scientific interest for the benefit, advantage and enjoyment of the general public and includes in the case of a Marine National Park an area of shore, sea or sea bed together with coral reef and other marine features so set aside"
- **Protected landscape/seascape** (IUCN V) defined as "An area of land, with or without coast and sea as appropriate, where natural elements in isolation or through the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity".
- Sustainable Use Area (IUCN VI) defined as "An area that contains modified and/or unmodified natural systems, managed to ensure long term protection and maintenance of ecosystems and services, while providing at the same time a sustainable flow of natural products and services compatible with nature conservation".

Legislation is being developed, through the Nature Protection and Conservancy Bill to give effect to the Policy. One issue that needs to be highlighted is that the Protected Areas Policy and its enabling legislation will be under the administration authority of the MEECC. However, for effective implementation, relevant Authorities will need to be mandated for certain management functions, i.e. SNPA and SFA. With regards to the sustainable use category, SFA will also need to be mandated as an implementing agency for the category to be able to fulfill both its biodiversity and fisheries management functions as required. Legislation being drafted needs to make provisions to allow for this.

Seychelles Sustainable Development Strategy 2012-2020

It its thematic area on Biodiversity and Forestry¹⁷¹ the following Goals and Strategic Objectives, which are of relevance to the MSP process have been developed and are detailed below in Table 11.

Table 11. Goals and strategic objectives biodiversity (source: SSDS 2012-2020)

Goal 1: Conserve and manage terrestrial and aquatic biodiversity to ensure sustainable use and equitable benefits to the people with **Strategic Objectives: (1)** To develop strategies to conserve, restore and sustainably manage important biodiversity areas which are outside the protected area network; (2) To establish a network of protected areas that conserves a representative sample of biodiversity and maintains key ecological processes across the landscape and seascape; (3) To identify and strengthen the management, access and sustainable financing mechanism of new and

¹⁷¹ SSDS Volume 2 Chapter 4

existing protected areas; and (4) To improve collection and sharing of biodiversity data and related information.

Goal 2: Improve our understanding of biological diversity and ecosystem functioning in a changing environment with **Strategic Objectives:** (1) To strengthen research and improve our understanding of changes in biodiversity and its implications for ecosystem function (especially within the context of global change and ongoing restoration/mitigation processes); (2) To develop a framework for adaptive management based on our improved understanding of ecosystem change; and (3) To adopt and implement ecosystem-based approaches to halt biodiversity loss and limit or prevent ecosystem degradation.

Goal 1 aims to ensure that the management of biodiversity in Seychelles is undertaken in a manner that preserves ecological integrity and meets human needs. This includes the preservation of biodiversity for intrinsic and bequest values. It is also important that such benefits are shared in a fair and equitable manner. Goal 2 aims to ensure that the understanding of the flora, fauna and ecosystem function through research is understood and the loss of biodiversity and ecosystem functions within the context of global change is addressed. This will ultimately result in the development and implementation of adaptive management strategies to address the consequences of global change upon Seychelles' biodiversity.¹⁷²

Seychelles' National Biodiversity Strategy and Action Plan 2015-2020

The NBSAP addresses Seychelles' obligations under Article 6a of the CBD and replaces the NBSAP 1997. This document builds upon a review of its predecessor and preparatory documents addressing financing, capacity building and climate change related biodiversity issues. Of relevance to the MSP process, Seychelles' biodiversity with regards to Marine and Coastal Biodiversity is elaborated upon.¹⁷³ The document establishes climate change as a cross-cutting threat and complicating factor in assessing priority threats to terrestrial biodiversity and is also seen as a major threat to the conservation and sustainable use of marine biodiversity in particular the biodiverse habitat of coral reefs. Furthermore, the document sees overfishing as the primary threat in marine ecosystems. The combined effect of overfishing and raised sea temperatures is discussed with regards to the impact on reef systems.¹⁷⁴

The NBSAP further discusses the legal basis and classification of the Seychelles Protected Area Network as well as the issues it faces regarding its representative nature, the shortfall in Marine Protected Areas, "Paper Parks", effective management and the lack of sustainable financing mechanisms.¹⁷⁵

Chapter VIII. Renewable Energy

Renewable energy has been acknowledged both at the international level, by the International Renewable Energy Agency, and at the regional level by the Nairobi Convention

¹⁷² SSDS Volume 2 Chapter 4

¹⁷³ Seychelles National Biodiversity Strategy and Action Plan Chapter 2

¹⁷⁴ NBSAP Chapter 2.2

¹⁷⁵ NBSAP Chapters 2.5-2.7

as paving the way for the future, in particular for SIDS, energy wise. The *Energy Act* was enacted in 2012 and a new Energy policy is currently being developed. The Energy Commission has the mandate to implement the *Energy Act*.

GOVERNANCE

The Ministry of Environment, Energy and Climate Change gives policy directions with regards to energy affairs within the country. The Seychelles Energy Commission, established under the *Seychelles Energy Commission Act 2010*, has the following functions: to coordinate the development and implementation of a national energy policy and strategy; to formulate a national energy plan; to advise the Minister on all matters relating to energy, including renewable energy; to implement and enforce the energy supply laws, to review other laws relating to energy and to make recommendations for new legislation to the Minister; to promote energy efficiency and conservation of energy and the use of renewable energy; to promote research into, and the development and the use of, new techniques relating to extraction, production, transmission, distribution, supply and use of energy; to encourage and promote the development of the energy industry including the related capacity building; and to collect and maintain energy data, produce national energy statistics and fulfill any requirements for reporting of energy and emissions data. The Seychelles Energy Commission has administrative authority over the *Energy Act, 2012*.

INTERNATIONAL COMMITMENTS

The Nairobi Convention 1985

At the COP 8 meeting¹⁷⁶ held in June 2015 in the Seychelles, the Contracting Parties called for regional guidelines on environmental management for oil and gas development, and asked countries and partners that are involved in oil and gas development to conduct and implement a regionally coordinated strategic environmental assessment, of social and environmental sustainability of oil and gas in the Western Indian Ocean Region.

Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States 2005

The Strategy, adopted under the auspices of UNESCO, considers the development of integrated energy programmes including comprehensive assessments of energy resources, current and projected patterns of energy use, enhancing energy efficiency and promotes the development and use of renewable energy as well as advanced, clean energy technologies that are affordable and readily adaptable.

International Renewable Energy Agency 2009

The International Renewable Energy Agency (IRENA) is an intergovernmental organisation that supports countries in their transition to a sustainable energy future, and serves as the principal platform for international cooperation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy. IRENA promotes the widespread adoption and sustainable use of all forms of renewable energy, including bioenergy, geothermal, hydropower, ocean, solar and wind energy in the pursuit of

¹⁷⁶ <u>http://www.unep.org/NairobiConvention/Meetings/COP8/</u>Accessed August 2015

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sustainable development, energy access, energy security and low-carbon economic growth and prosperity.¹⁷⁷ Seychelles is a member of IRENA and ratified the IRENA Statute is 2011.

NATIONAL LEGISLATION

Energy Act 2012

The Act states that the use of renewable energy sources¹⁷⁸ shall be promoted in all sectors.¹⁷⁹ Renewable energy is defined as energy which is not depleted when used and includes energy obtained from energy sources such as biomass, hydro power, solar power, geothermal power, wind power, waves and tides.¹⁸⁰

NATIONAL POLICY

Proposal for Energy Policy of the Republic of Seychelles 2010 – 2030

The documents states that one of the 5 pillars of sustainable development on which the foundation for decreasing oil dependency will rest is the launch of programmes for increasing the contribution from renewable energy in the energy matrix in Seychelles. The necessary policy for further development of the energy sector should be comprehensive in order to sustain a constant movement towards increased energy efficiency and renewable energy and, at the same time, be flexible and adaptable to meet new challenges and opportunities as they arise.

The document further states that diversifying the energy base is one of the visions for development in the energy sector. The target envisaged for renewable energy is 5% in 2020 and 15% in 2030. This target is actually being readjusted in the revision of the Energy Policy currently being prepared. In the long term, energy supply will be 100% based on renewables.

The document states that the Seychelles has ample resources of energy from the wind, the sun and the ocean. Windpower and photovoltaics are well-established and proven technologies with low technology risk. Different kinds of ocean power technologies such as wave power and Ocean Thermal Energy Conversion (OTEC) are still in the research and demonstration stage. Analyses have indicated that all the mature technologies mentioned above are options to be considered. New and unproven technologies like OTEC or gasification of biomass should only be considered if special circumstances warrant it. This is important to note in the context of the MSP as future development.

Seychelles Sustainable Development Strategy 2012 2020

In its thematic area on Energy and Transport¹⁸¹, the SSDS has the following goal regarding renewable energy: **Goal 1 To Promote Sustainable Energy Demand and Supply**, with **Strategic Objectives** (1) To promote Energy Efficiency in all sectors of the economy; (2) To

¹⁷⁷ www.irena.org Accessed August 2015

¹⁷⁸ defined as "energy generated from natural non-depleting sources, including wind, solar, biomass, geothermal, hydro, ocean and tidal energy, landfill gas, biogas, biodegradable fraction of municipal and industrial waste and such other sources as prescribed" under the Energy Act 2012 section 2 ¹⁷⁹ Energy Act section 58

¹⁸⁰ Seychelles Energy Commission Act 2010 section 2

¹⁸¹ SSDS Volume 2 Chapter 11 pages 185-231

promote alternative and renewable energy at national level; (3) To prepare a long-term national energy plan; (4) To monitor the environmental impact of the energy sector and to undertake mitigation measures; and (5) To build capacity at all levels.

The *Energy Act 2012* must further be further developed regarding the provision of renewable energy sources in particular those of relevance to the MSP, i.e. energy provided by waves and tides. The Act must also be aligned with the Energy policy, which seek to further research the development of ocean power technologies such as wave power and OTEC.

Chapter IX. Shipping and Transportation

Shipping and marine transportation are regulated by the Harbour Act 1932 (last amended in 1991), the Merchant Shipping Act 1992, the Seychelles Ports Authority Act 2004 and the Maritime Zones Act 1999. These pieces of legislation give effect to the obligations that Seychelles has under the International Maritime Organisation Conventions. The Port of Victoria is aiming to expand and develop as detailed in the Seychelles Ports Development Master Plan 2014. The Seychelles Ports Authority is mandated under legislation to administer all matters relating to the port under the Merchant Shipping Act 1995, whilst the Seychelles Maritime Safety Administration is the regulatory government body ensuring safe marine transportation. The Harbour Act 1932 regulates shipping activities within Victoria Harbour and defines the legal boundary of Port Victoria; the boundary of the Fishing Port of Seychelles; and the International Zone, coordinates of all of which are important to include in the MSP. The Maritime Zones Act 1999 implements the United Nations Law of the Sea Convention 1982 at the national level and provides clear guidance, definitions and coordinates for the internal waters, the archipelagic water, the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf of the Seychelles. In this chapter the international commitments will be addressed within the discussions on legislation.

GOVERNANCE

The Seychelles Ports Authority (SPA) was created in 2004 by the *Seychelles Ports Authority Act 2004* and has the mandate to regulate, control and administer all matters relating to the safety and security of the port and its facilities; to promote the development of the infrastructure relating to the port; to maintain port installations and to promote the use, improvement and development of the port; to encourage the use of reliable and sufficient equipment in the provision of port services; to participate in matters pertaining to search and rescue; to collect all harbour dues, rental fees and other moneys payable to the Authority under this Act or any other law; to plan, execute, monitor and evaluate training programmes of employees designed to ensure conformity with the standards of the services provided by them; to act in collaboration with other public authorities and entities for the prevention of marine source pollution, protection of marine environment and to respond to marine environment incidents; to advise the government or any public authority on any matter relating to merchant shipping and the prevention and control of marine pollution; and to represent Seychelles on maritime matters at both the national and international level. The SPA has administrative authority of the *Merchant Shipping Act 1995*.

The Seychelles Maritime Safety Administration (SMSA) is the regulatory and supervisory authority within the Ministry of Home Affairs and Authority with regards to under safe marine transportation. SMSA also seeks to promote sustainable marine practices in order to ensure the preservation and protection of the Seychelles marine ecosystems.¹⁸² SMSA undertakes all duties relating to the Harbour Master under the *Merchant Shipping Act 2004* and the *Harbour Act 1932*.

NATIONAL LEGISLATION

Harbour Act 1932 & Harbour Regulations, 1933

The *Harbour Act* and Regulations date from 1932 and 1933 respectively. They seek to regulate shipping activities and to manage vessels in Victoria Harbour. The Act makes provisions for the Regulations to define the inner and outer harbour of Victoria and the Port Security Area as well as lawful wharves, landing places or mooring places.¹⁸³ Harbour is defined as "the harbour of Victoria and any bay, roadstead or place within three nautical miles from any coast".¹⁸⁴ Harbour of Victoria includes "the roadstead, the inner and outer harbour, the foreshore, piers and the sea walls or all chausse's, roads and causeways built or abutting on the foreshore".¹⁸⁵

For the purposes of port and harbour dues, the boundaries of Port Victoria were extended under the *Seychelles Port Authority (Extension of Port Victoria) (Declaration) Order 2012* and the *Harbour (Port and Harbour Dues) Regulations 2013*. The areas describe the legal boundaries of Port Victoria by the following coordinates in Table 12. Nautical miles is defined as "a linear distance of 6,080 feet"¹⁸⁶ and as the "international nautical mile of 1852 metres"¹⁸⁷.

Table 12. Boundaries for the Port of Victoria (source: Seychelles Port Authority (Extensionof Port Victoria) (Declaration) Order 2012 and the Harbour (Port and Harbour Dues)Regulations 2013)

PT1: from Mahe Island bearing 000° by 4.6 nautical miles, (Lat 04°53'S, Long 055° 31'E)

PT2: a straight line in a North Easterly direction to Fregate Island bearing 276° by 5.9 nautical miles Lat 04° 36'S, (Long 056 03'S)

PT3: a straight line in a North Westerly direction to Grande Soeur Island bearing 230^o by 7.7 nautical miles Lat 04^o 12'S, (Long 055^o 58'E)

PT4: a straight line in a Westerly direction to Aride Island bearing 094^o by 7.5 nautical miles, (Lat 04^o 12'S, Long 055^o 32'E)

¹⁸² <u>http://www.smsa.gov.sc/index.php?option=com_content&view=featured&Itemid=101</u> Accessed 29 October 2015

¹⁸³ Harbour Act 1932 section 4

¹⁸⁴ ibid., section 2

¹⁸⁵ ibid.,

¹⁸⁶ Harbour (Inner Harbour) (Control of Traffic) Regulations 1973 Regulation 2

¹⁸⁷ Maritime Zones Act 1999 section 2

PT5: a straight line in a North North Westerly direction to North Island bearing 115° by 7 nautical miles, (Lat 04° 20'S, Long 055° 08'E)

PT6: a straight line in a Southerly direction to Silhouette Island bearing 030^o by 10.8 nautical miles, (Lat 04^o 40'S, Long 055^o 08'E) to Mahe Island bearing 000^o by 4.6 nautical miles.

The *Harbour Act 1932* makes further provisions for the designation of any areas within or in the vicinity of the harbour of Victoria as the Fishing Port of Seychelles. The Fishing Port of Seychelles is under the administration of the Seychelles Fishing Authority.¹⁸⁸ The area comprising of land parcels V9, V6363, V6369 to V6374 and V6405 to V6407 constitute the Fishing Port of Seychelles. Parcel V9, V6363, V6369 to V6374 and V6405 to V6407 are delineated on plan No ML/ADN/91 filed in the office of the Director of Land and Surveys.¹⁸⁹

The *Harbour Fishing Port Regulations 1988* detail the administration of the Fishing Port and define the "International Zone" as the area made up of the following land parcels shall constitute the International Zone of the Fishing Port of Seychelles. Parcels V69 and V6362. Parcels V69 and V6362 are delineated on plan No ML/ADN/91 filed in the office of the Director of Land and Surveys.¹⁹⁰

Maritime Zones Act 1999

The Act seeks to provide for the determination of the Maritime Zones of Seychelles in accordance with the United Nations Law of the Sea Convention 1982, which Seychelles ratified in 1991. Under the Act, maritime zone is defined as being the internal waters, the archipelagic water, the territorial sea, the contiguous zone, the exclusive economic zone or the continental shelf.¹⁹¹ The internal waters of Seychelles comprise the areas of the sea that are on the landward side of the low water-line (or as may be prescribed by Order by the President). The limit of the territorial sea is twelve nautical miles (the line every point of which is at a distance of twelve nautical miles from the nearest point on the baselines).¹⁹² The contiguous zone of Seychelles is twenty four nautical miles beyond and adjacent to the territorial sea (comprising the areas of the sea that are beyond and adjacent to the territorial sea having, as their seaward limit, a line measured seaward from the baselines every point of which is twenty-four nautical miles distant from the nearest point on the baselines. The contiguous zone shall not extend into any part of the territorial sea of a foreign state, determined in accordance with UNCLOS.¹⁹³ The exclusive economic zone is 200 nautical miles (comprising the areas beyond and adjacent to the territorial sea, having, as their seaward limit, a line measured seaward every point of which is at a distance of 200 nautical miles from the nearest point on the baselines).¹⁹⁴ Under the *Maritime Zones* (Exclusive Economic Zone) Order 1978¹⁹⁵ the limit of the exclusive economic zone is

¹⁸⁸ Harbour Act section 9

¹⁸⁹ Fishing Port of Seychelles (Designation) Order 1988 section 2

¹⁹⁰ ibid., First Schedule

¹⁹¹ Maritime Zones Act section 32(2)

¹⁹² Maritime Zones Act section 4

¹⁹³ Maritime Zones Act section 8

¹⁹⁴ Maritime Zones Act section 9

 $^{^{\}rm 195}$ Statutory Instrument 125 of 1978, last amended by SI 6 of 1990

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delineated by the boundary of Area A as shown on Chart No. ML/ADN/52 filed in the office of the Director of Surveys and more fully described in Annexe 7.

Seychelles is an archipelagic state¹⁹⁶ and has defined¹⁹⁷ the baselines for the purpose of delimiting its maritime zones. This is detailed in the Maritime Zones (Baseline Order) 2008 which prescribe the archipelagic baselines in Schedule 1 and the normal baselines in Schedule 2 of the Order. The coordinates may be found in the Order available at http://www.seylii.org/sc/legislation/act/1999/2. The archipelagic waters of Seychelles comprise the areas of the sea on the landward side of any straight archipelagic baselines, up to the seaward limit of the internal waters.¹⁹⁸

The continental shelf of Seychelles comprises the seabed and subsoil of the submarine areas that extend beyond the limit of the territorial sea throughout the natural prolongation of the land territory of Seychelles to the outer edge of the continental margin; or to a distance of two hundred nautical miles from the baseline where the outer edge of the continental margin does not extend up to that distance. Wherever the continental margin extends beyond 200 nautical miles from the nearest point on the baselines, the outer limits of the continental shelf shall be established and delineated with due regard to the requirements and limitations of international law.

For the purposes of this section, the continental margin comprises the submerged prolongation of the landmass of Seychelles consisting of the seabed and subsoil of the continental shelf, the slope and the rise, but does not include the deep ocean floor with its oceanic ridges or the subsoil thereof.¹⁹⁹. The outer limits of the Exclusive Economic Zone and Continental Shelf of the Republic of Seychelles are defined in the *Maritime Zones (Exclusive Economic Zone and Continental Shelf) Orders 2002²⁰⁰ and 2008*²⁰¹. The coordinates may be found in the Order available at http://www.seylii.org/sc/legislation/act/1999/2

For the purposes of the MSP, the coordinates provided for by the *Maritime Zones Act* 1999, as provided for by UNCLOS, must be replicated accordingly.

Merchant Shipping Act 1992

The *Merchant Shipping Act 1991* gives effect to the following IMO Conventions, which Seychelles is a signatory to: the International Regulations for Preventing Collisions at Sea 1972; the International Convention on Load Lines 1966; the International Convention for the Safety of Life at Sea 1974; the International Convention on Standards of Training,

¹⁹⁶ defined as "a state constituted wholly by one or more Archipelagoes and may include other islands" under s2 of the Maritime Zones Act

¹⁹⁷ as provided for by S 2 of the Maritime Zones Act

¹⁹⁸ Maritime Zones Act section 6

¹⁹⁹ Maritime Zones Act section 11

 ²⁰⁰ This Order shall continue to have effect subject to the repeal of all references to points 2 to 17 in the Schedule by SI 89 of 2008. The coordinates may be found in the Order available at http://www.seylii.org/sc/legislation/act/1999/2
 ²⁰¹ ibid..

Certification and Watchkeeping for Seafarers 1978, as affected by any amendment made under Article XII of that Convention; and the International Convention on Tonnage Measurement of Ships 1969.

NATIONAL POLICY

Seychelles Ports Development Master Plan 2014

The new Master Plan aims to ensure the best functionality and operational efficiency of the domestic and international Ports. Development is being proposed for the following areas under the Plan, which will be relevant for the MSP as future development to consider: Mahe Quay (commercial port); Industrial Port; Inter Island Quay; Ile du Port (zone 14); Inter Island Industrial Cargo Terminal (zone 6); Baie St. Anne jetty; Eve Island; and La Passe Jetty (La Digue). Please refer to the Master Plan for details and maps on the proposed development.

Chapter X. Tourism and Recreation (including sports fishing)

Tourism and recreation, which includes marine charters and sports fishing, is dealt with in the last chapter of the report. Seychelles is a member of the United Nations World Tourism Organisation and has commitments with the Convention on Biological Diversity with regards to sustainable tourism development. In the same vein, the Seychelles Sustainable Tourism Label has been developed at the national level. The following pieces of legislation regulate tourism related activities such as sports fishing, boat charter, diving, yachting, paragliding, commercial ski boat, and hirer of water sports equipment: *Control of Hirecraft Act 1973*, *Licences Act 2010, Beach Control Act 1971* and the *Fisheries Act 2014*. These are supplemented by national tourism policies emanating out of the Tourism Master Plan 2012-2020, e.g. the Boat Charter Policy, 2008; the Recreational Diving Business Policy, 2015; and the Yachting Tourism Policy, 2008.

GOVERNANCE

The Department of Tourism within the Ministry of Tourism and Culture is responsible for providing policy guidance for the tourism sector in the Seychelles. The Ministry of Fisheries and Agriculture and SFA regulate issues dealing with competition sports fishing.

INTERNATIONAL CONVENTIONS

The World Tourism Organisation

The World Tourism Organisation (UNWTO) is the United Nations agency responsible for the promotion of responsible, sustainable and universally accessible tourism. As the leading international organisation in the field of tourism, UNWTO promotes tourism as a driver of economic growth, inclusive development and environmental sustainability and offers leadership and support to the sector in advancing knowledge and tourism policies worldwide.

UNWTO encourages the implementation of the Global Code of Ethics for Tourism, to maximize tourism's socio-economic contribution while minimising its possible negative impacts, and is committed to promoting tourism as an instrument in achieving the United

Nations Millennium Development Goals geared towards reducing poverty and fostering sustainable development.²⁰² Seychelles became a member of the UNWTO in 1991.

Convention on Biological Diversity 1992 - Guidelines on Biodiversity and Tourism Development

The scope of these international guidelines relates to sustainable tourism development activities in vulnerable terrestrial, marine and coastal ecosystems and habitats of major importance for biological diversity and protected areas. The present Guidelines are voluntary and will assist Parties to the Convention to apply the provisions of the Convention to the sustainable development and management of tourism policies, strategies, projects and activities in tourism and biodiversity. The Guidelines cover all forms and activities of tourism, which should be consistent with the principles of conservation and sustainable use of biological diversity. These include, but are not limited to, conventional mass tourism, ecotourism, nature- and culture-based tourism, heritage and traditional tourism, cruise tourism, leisure and sports tourism. Although the primary focus of the Guidelines is vulnerable ecosystems and habitats, they are also appropriate for tourism with impact on biodiversity in all geographical locations and tourist destinations. The guidelines can also play a crucial role in incorporating sustainable use and equity strategies within and around protected areas. Furthermore the Guidelines recognize the need for collaboration between originating and receiving countries and should be used to balance local interests and national, regional and international policies.²⁰³

NATIONAL LEGISLATION

The following marine tourism activities are regulated under legislation: sports fishing, boat charter, diving, yachting, paragliding, commercial ski boat, or hirer of water sports equipment. The relevant pieces of legislation are detailed below. The relevant provisions of the Licences Act 2010 and Regulations made thereunder are highlighted whilst discussing the other specific legislation.

Control of Hirecraft Act 1973

The Act provides for a licence to trade as a hirer of hirecraft²⁰⁴. The license may specify conditions including restricting the area of operation and shall be subject to the condition that the holder of the licence shall comply with the Control of Hirecraft Act²⁰⁵. "Hirecraft" is defined as "a boat let out for hire for fishing as a sport or for pleasure purposes only and includes the hiring of any craft or part thereof".²⁰⁶ The *Control of Hire Act* requires that a hire craft must at all times satisfy the requirements set out in the schedule.²⁰⁷ Part 1 of the Schedule relates to hire craft operating between 2 and 10 miles off-shore of an inhabited island; Part 2 relates to hire craft operating between 10 miles and 60 miles off-shore; and

²⁰² http://www2.unwto.org

²⁰³ <u>https://www.cbd.int/tourism/guidelines.shtml?page=a</u>

²⁰⁴ Reg 3(1) Licences Trade Regulations 2012

²⁰⁵ Reg 5 Licences Trade Regulations

²⁰⁶ Control of Hire Craft Act section 2

²⁰⁷ Control of Hirecraft Act section 5

Part 3 relates to hire craft operating more than 60 miles off-shore of an inhabited island. Hirecrafts are further regulated by the *Control of Hire Craft Regulations 1978*.²⁰⁸

Licences (Diving Business) Regulations 1991

The *Licences Act 2010* provides for the application of licences for dive centers and dive operators, which is further detailed in the *Licences (Trade) Regulations 1987*. The *Licences (Diving Businesses) Regulations 1991* requires a license in order to engage in a diving business such as a dive center, a dive operator or power-diving. The Regulations require that a holder of a diving business licence shall not engage any vessel in or for the purpose of the business unless it is licenced to operate as a hire craft under the *Licences Act*.

The following definitions are provided for by the Regulations²⁰⁹:

- "Diving business" means the business of a dive centre or a dive operator for the provision of facilities for recreational diving;
- "Dive centre" means a person or a body of persons engaged in the teaching of diving;
- "Dive operator" means a person or a body of persons engaged in conducting diving excursions;
- "Power diving" means a system of diving in which a person is connected to a floating unit that is towed along the surface supporting the air supply;
- "Recreational Diving" means diving excursions offered by any one of the diving businesses as a leisure activity and during which the dive does not go beyond the depth of forty metres.

The *Licenses (Trade) Regulations 2012* further requires a licence to trade as an operator of paragliding or commercial ski boat, or hirer of water sports equipment, (to which the *Beach Control Act 1971* applies).²¹⁰ A licence so granted shall be subject to the condition that the holder of the licence shall comply with the provisions of the *Beach Control Act 1971* and Regulations made under that Act.

Beach Control Act 1971; Beach Control Regulations 1978

The Act provides for the application of licences for commercial skiing and paragliding. The Regulations provide for the regulation of the use of pleasure boats, motor boats, water skiing and paragliding.

The Act provides for the following definitions:²¹¹

- "beach" means any part of the seashore;
- "inshore waters of the sea" means that portion of the sea, which lies within a distance seaward of one thousand yards from low-water mark at the lowest tides;

²⁰⁸ SI 63 of 1978 (what does SI mean?)

²⁰⁹ Reg 2 Licences (Diving Businesses) Regulations

²¹⁰ Reg 3(1)(f) Licenses (Trade) Regulations 1987

²¹¹ Beach Control Act section 2

• "seashore" means that part of the land, which is alternately covered and uncovered by the sea at the highest and lowest tides.

The 1978 Regulations provide for the following definitions:²¹²

- pleasure boat" includes a motor boat and any craft licensed under the *Control of Hire Craft Act* and any type of craft used for pleasure however propelled but does not include an inflatable boat which is not propelled by an internal combustion engine or a pleasure boat whilst engaged in the saving of life or proceeding to or coming from anywhere for the purpose of saving life;
- "water ski" includes an aquaplane or similar device and the verb to water ski and its participles shall be construed accordingly;
- "commercial ski boat" means any ski boat used for hire or reward;
- "paragliding" means a water sports activity whereby a person harnessed to a specially constructed parachute is made airborne by being pulled behind a motor boat on the end of a tow line.

The Act also provides for certain areas to be set aside for different categories of activities including bathing, water skiing, paragliding, fishing and other water sports including mooring and anchorage points for pleasure boats. The Act provides for specified areas to be demarcated in such manner as to conveniently draw thereto the attention of persons using the beach and the inshore waters of the sea. Where the whole of the water adjacent to a beach are so set aside for any category of user, this shall be either gazette or a notice posted to that effect in any conspicuous place upon the beach.²¹³ Areas that have been so demarcated are found in Table 14 below. These areas need to be included in the MSP. The Minister shall take into account the traditional interests of fishermen when considering what beach and inshore activities shall be permitted within the inshore waters of Seychelles and shall also have regard to the requirements of conservation, the preservation of the ecology and the tourist resources of the country.²¹⁴

Table 13. Beau Vallon swimming areas, anchorage and mooring of boats, and waterskiing(source: Beach Control Act 1971).

Beau Vallon swimming areas: zones A,B, and C

1. Swimming

Zone A is demarcated by an imaginary line commencing' at a green concrete marker set in position latitude 4 dg. 36' 24.71" S, longitude 55 dg. 25' 54.68" E, thence running on a true bearing of 30S dg. (T) for a distance of 120 metres to a moored green buoy, thence in a South Westerly direction parallel to the beachline along the high water mark for a distance of 330 metres to a red moored buoy thence on a bearing of 145 dg. (T) for a distance of 120 metres to a fitting of 120 metres to a red moored buoy thence and bearing of 145 dg. (T) for a distance of 120 metres to a red concrete marker set in position latitude 4 dg. 36' 34.07"S longitude 55 dg25'8.02"E.

Zone B is demarcated by an imaginary line commencing at a green concrete marker set in position latitude 4 dg. 36' 35.27"S longitude 55 dg. 25' 47.04" E, thence running on a true bearing of 325 dg. (T) for a distance of 120 metres to a moored green buoy, thence in a South Westerly direction parallel to the beachline along the high water mark for a distance of 180 metres to a red moored buoy thence on a bearing of 145 dg. (T) for a distance of 120 metres to a red concrete marker set in

²¹² Reg 2 Beach Control Regulations

²¹³ Reg 15 Beach Control Regulations

²¹⁴ Reg 16 Beach Control Regulations

position latitude 4 dg. 36' 39.26"S longitude 55 dg. 25'42.S9"E.

Zone C is demarcated by an imaginary line commencing at a green concrete marker set in position latitude 4 dg. 36' 42.84"S longitude 55 dg. 25' 38.01" E, thence running on a true bearing of 305 dg. (T) for a distance of 120 metres to a moored green buoy, thence in South Westerly direction parallel to the beachline along the high water mark for a distance of 135 metres to a red moored buoy thence on a true bearing of 125 dg. (T) for a distance of 120 metres to a red concrete marker set in position latitude 4 dg. 36' 45.33"S longitude 55 dg. 25' 33.87"E.

2. Anchorage and Mooring of Pleasure Boats and Other Boats

Beau Vallon: Mooring Areas

Area 1 is demarcated by an imaginary line commencing at a Buoy No: 1at position latitude 4dg 36'OS" S longitude 5Sdg 25'7E, thence running West to a Buoy No: 2 at position latitude 4dg 36' S S longitude 55dg25'63E thence running North to a Buoy No: 3 at position 4dg 36'36.5S longitude 55dg 25.63E thence running East to Buoy No: 4 at position latitude 4dg 36'365S longitude 55dg 25'77E. Area 2 is demarcated by an imaginary line commencing at a Buoy No: 1at position latitude 4dg 36'75 S longitude 5Sdg 25' 47E, thence running West to a Buoy No: 2 at position latitude 4dg 36'75 S longitude 55dg 25'335E thence running North to a Buoy No: 3 at position 4dg 36'615S longitude 55dg 25.335E thence running East to Buoy No: 4 at position latitude 4dg 36' 61SS longitude 55dg 25'470E. Boats shall moor only on the mooring buoys situated on or within the perimeters of the abovementioned areas subject to such conditions as the Harbour Master may from time to time make. Hire-craft licensed to operate in Beau Vallon shall provide their own mooring buoys subject to the approval of the Harbour Master. Boats shall moor at their own risk, and the person in command of the boat shall at all times inspect the mooring buoy for functional integrity and to ensure that the buoy is holding the boat. Any boat found moored or anchored other than to a mooring buoy may be removed by direction of the Harbour Master and held until the expenses incurred in such removal are paid in full.

3. Waterskiing

Between the hours of darkness and twelve noon no person shall water-ski or use any pleasure boat for the purposes of water skiing in that part of the inshore water of the sea bounded on the north by North Point and on the west by the mouth of the Dan Iles No. I or Moustache River."

Fisheries Act 2014

The new Act provides for sports fishing as well as for competition sports fishing. These are defined²¹⁵ as follows:

- "competition sport fishing" means any fishing activity which is undertaken for sport among competitors who are observing a prescribed set of rules; involves the hiring, chartering or leasing of a vessel not exceeding 40 metres in length overall, and catch for charitable purposes authorised by the Authority and which does not result in the trading, offering for sale, or selling of fish.
- "sport fishing" means any fishing activity undertaken for sport or recreation which involves the hiring, chartering or leasing of a vessel and its' annexes not exceeding 40 metres in length overall but which does not result in the trading, offering for sale or selling of fish;
- "sport fishing permit" means the permission that a vessel shall obtain before it engages in any form of sport fishing.

²¹⁵ Fisheries Act, 2014 section 3

A permit from SFA is required for sport fishing permit or a commercial sports fishing. A sport fishing permit may authorise a vessel to be used in Seychelles waters²¹⁶ or, for such sport fishing activities as may be specified in the permit. Permits shall be granted only if SFA. One important conditions in granting the permit is that the vessel in respect of which the sport fishing permit is sought has no record of non compliance with international fisheries conservation and management measures; or the vessel in respect of which the sport fishing permit is not included in a list of vessels having engaged in, or supported, illegal, unreported or unregulated fishing established by a Regional Fisheries Management Organisation²¹⁷ or any other appropriate regional or international organisation.²¹⁸

NATIONAL POLICY

Seychelles Tourism Master Plan 2012-2020

This Master Plan serves as a guiding framework for a sustainable and responsible tourism in Seychelles. The document recognises the need to mainstream environment into tourism development. To this end a series of measures to support the promotion of Seychelles as an eco-tourism destination have been adopted, which includes the following: the launching of the **Seychelles Eco-Tourism Strategy** in 2003 as well as the adoption of the **UN Global Code of Ethics for Tourism**. Furthermore, the **Seychelles Sustainable Tourism Label** (SSTL), a certification programme aimed at mainstreaming sustainability practices in the hospitality industry and providing a set of standards to guide sustainability improvements in hotels was launched in 2011. The ultimate aim of the SSTL is to safeguard biodiversity and to culture of Seychelles. Seychelles is affiliated with **Fair Trade Tourism** based in South Africa, which will promote hotels that are SSTL certified.²¹⁹ Seychelles is seeking membership of the *Global Sustainable Tourism Council* in order to develop and promote the SSTL.²²⁰ The recommendations made in the document have been formulated in separate policy papers. The one relevant to the MSP process are discussed below.

Boat Charter Policy 2008

The Boat Charter Policy outlines the development and operation of boat charter services, specifically day charter service providers (including glass bottomed boats). The Policy paper notes that it does not apply to boats designated as necessary means of transport for hotels

²¹⁶ defined as "the exclusive economic zone, the territorial sea, archipelagic waters, internal waters and all other waters subject to the fisheries jurisdiction of Seychelles" under the Fisheries Act ²¹⁷ defined as "a subregional or agreement having the competence to establish conservation and management means for particular straddling fish stocks or highly migratory fish stocks as specified in the United Nations Fish Stocks Agreement 1995: under S 3 of the Fisheries Act, 2014 ²¹⁸ SS 18 & 19 Fisheries Act, 2014

²¹⁹ www.fairtourismsa.org.za

²²⁰ The GSTC establishes and manages global sustainable standards with the aim of increasing sustainable tourism knowledge and practices among public and private stakeholders. The GSTC is independent and neutral, serving the important role of managing its global baseline standards for sustainability in travel and tourism. Centre to its work is the Global Sustainable Tourism Council's Sustainability Criteria. There are two sets of GSTC Criteria: Destination Criteria (GSTC-D) and Hotel & Tour Operator Criteria (GSTC-H&TO). These are the guiding principles and minimum requirements that any tourism business or destination should aspire to reach in order to protect and sustain the world's natural and cultural resources, while ensuring tourism meets its potential as a tool for conservation and poverty alleviation.²²⁰

on other islands.²²¹ There is no limit on the size of the fleet in boat charter operation. However, approval will need to be sought from the Seychelles Investment Board for additional boats to the fleet.²²² A boat charter operator shall use the boats only for the purposes stated in its licence and according to the conditions therein. Licensable activities include game fishing, snorkeling and other maritime leisure activities but exclude ferry services. Motorised boats of at least 50ft feet or over may offer diving services as long as it is part of an overall charter package.²²³ Non-compliance with the licence and its conditions may result in fines or suspension/revocation of the licence in question²²⁴. All boat charter operators are required to meet the quality and standards set by the regulatory bodies, which include, but are not restricted to, the Seychelles Tourism Board, the Seychelles Licensing Authority, Department of Environment, Seychelles Maritime Safety Administration and the Seychelles Coast Guards.²²⁵ Implementation of schemes, legislation and managements concerns need to be addressed to effectively manage threats to the environment relating to anchoring and damage to the seabed, disposal of garbage, holding, treatment and disposal of sewage.²²⁶ Furthermore, it is the responsibility of boat charter businesses to sensitise their clients on the need to preserve the environment and respect the laws in place.²²⁷ Boat charter operators may only be based or located in areas designated by the authorities. Should an operator wish to have his base of operation on or near the beach, only areas designated as such at specific beaches will be allowed. These areas shall be specified jointly by the Seychelles Tourism Board, Seychelles Maritime Safety Administration, the Seychelles Licensing Authority, the Ministry of Environment and the Ministry of Land Use and Housing.²²⁸ Such areas will be important to note for the MSP.

Recreational Diving Businesses Policy 2015

This document provides guidelines and conditions for the diving industry. The diving business in Seychelles is regulated by the *Licences (Diving Business) Regulations 1991*. Below are the relevant provisions of the Policy pertinent to the MSP process.

- Policy 2: All diving businesses are required to meet the minimum standards of the regulatory bodies and sensitise their clients on the need to preserve the environment and respect the laws that are in place.
- Policy 3: All dive centers must be land-based. No dive centre licence should be issued to liveaboards.
- Policy 5: A dive centre is allowed up to a maximum of three dive boats under its dive centre licence by paying an additional fee on the dive centre's licence without having to pay a full separate hirecraft licence. These boats shall be licensed to be

²²¹ These are only allowed for hotels or restaurants located where there is no public road transport system and these boats should be used solely for the transport of persons and goods for the proper operation of the hotels and shall not be allowed to operate or be licensed for boat charter operation.
²²² Boat Charter Policy 2008, Policy 2

²²³ Boat Charter Policy, Policy 4

²²⁴ Boat Charter Policy, Policy 12

²²⁵ Boat Charter Policy, Policy 5

²²⁶ Boat Charter Policy, Policy 7

²²⁷ Boat Charter Policy, Policy 8

²²⁸ Boat Charter Policy, Policy 9

used for diving purposes only but can be used for different activities as part of the diving package.

- Policy 7: Any licensed dive centre may carry out excursions as a boat charter provided it is conducted together with a diving activity.
- Policy 12: All licensed diving businesses should have a risk management plan for Risk reduction and disaster preparedness and should also have appropriate insurance cover.

Yachting Tourism Policy 2008

The general policy is the Seychelles should develop its yachting tourism industry to a sustainable level in line with its tourism policy of being an exclusive eco friendly destination so that it generates wealth and contributes towards the national economy with the aim of doubling the Gross Development Product by 2017. Operators need a valid license to operate as required under the *Licences Act*. For continued offences the suspension or revocation of licence shall be applied.²²⁹ The Policy requires government to put in place an enabling environment to permit the yachting tourism industry to develop further and specifies the following areas requiring immediate action:

- Government shall encourage the development of marinas on Mahe, Praslin and other islands to accommodate the yacht charter companies with modern facilities to serve the yachting tourists.
- Appropriate areas shall be identified for the development of small service centres on Mahe and Praslin and on any other islands where such development is practical to provide services to the yachts.
- Yacht charter operators shall also be encouraged to participate in the development of the marinas.²³⁰

Once agreed upon, these areas are important to note for inclusion within the MSP.

A ceiling of 200 charter yachts has been set for the industry, though this may be revised as the number of yachts grows, particularly in considering the impact on the environment and on the perception of exclusivity. However, operators with a fleet of less than 3 boats shall not be counted as part of the ceiling of 200 charter yachts. Temporary licences and super yachts based in Seychelles shall also not be subjected to this limit.²³¹ The document states that Government shall encourage the development of the support services and infrastructure for maintenance and repair of yachts²³² as well as the development of related facilities in the outer islands with basic facilities at selected island(s) (ice, water and basic provisions which can be easily arranged without any major investment).²³³ Such areas will

²²⁹ Yachting Tourism Policy, Policy 20

²³⁰ Yachting Tourism Policy, Policy 1

²³¹ Yachting Tourism Policy, Policy 4

²³² Yachting Tourism Policy, Policy 14

²³³ Charters could originate from Mahe but could also be based in the Amirantes, Farquhar and Assumption; and the guests flown in and out from Mahe. A small marina facility could also be developed in the areas such as Poivre where yachts could be stationed during the season and where these basic facilities could be provided. Desroches already has some basic facilities and could well be developed into such a base for the Amirantes

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need to be included in the MSP. Operators of yacht charter businesses shall be limited to 30 yachts per operator. Notwithstanding the above, approvals for starting up or extending a fleet shall only be for 10 boats at a time. After the implementation of the approved 10 boats, any further extension will require a separate and new application and shall be subject to the maximum limit of 30 yachts.²³⁴ Companies wishing to start such operations, including existing operators with fewer than 30 yachts in their fleets and wishing to increase this shall follow to the "droit d'entrée" procedure.²³⁵ Applications shall be submitted to the Seychelles Investment Bureau and shall be considered on a first come first serve basis. A ceiling of 200 yachts in operation has been set for the country.²³⁶ The Policy encourages the diversification of yachting products in offer. Sailing yachts within the range of 38 – 47 feet make up the fleet presently in Seychelles. Motor yachts in the range of 50 feet and over including the super yachts should also be encouraged.²³⁷

The Policy obliges Government to ensure that yacht charter companies do not compete unfairly with other segments of the boating industry. To this end, yacht charter companies/ operators who offer day charters shall only rent the boat as one unit with a fixed rate on a per charter basis and shall not sell on a per person basis.²³⁸ Furthermore, licensed yacht charter operator is allowed to let the boat for hire for fishing as a sport or for pleasure and other maritime leisure activities including island hopping. It may also offer diving services if it is part of an overall yacht charter package.²³⁹

Government also has to ensure that no company has an unfair or undue influence on the market so as to control the industry. A person shall not be allowed to have shares or interests, directly or indirectly, in more than one yacht charter company. All operators are required to swear an affidavit to the Seychelles Licensing Authority declaring that they have no interest directly or indirectly in another yachting operation. In addition, the licensed yachting operators shall abide to the integration policy.²⁴⁰

The Policy states that whilst maintaining the need to preserve the exclusivity of the island resorts, appropriate access to the islands shall be retained.²⁴¹ Furthermore, tourism operators on beachfront properties are encouraged to welcome sailing visitors.²⁴²

Environmental actions need to be undertaken to minimise the impact of an increased level of yachting tourism activity. To this effect the installation of mooring buoys in designated and highly frequented areas shall be accelerated. The Policy also highlights the issue of the inexpensive on-board treatment of sewage from yachts, which should also be addressed. Government through the Department of Environment shall explore the possibilities and measures for the mitigation of environmental impacts of the yachting industry with the

²³⁴ Yachting Tourism Policy, Policy 8

²³⁵ Yachting Tourism Policy, Policy 9

²³⁶ Yachting Tourism - Droit D'entrée Procedures 2005

²³⁷ Yachting Tourism Policy, Policy 10

²³⁸ Yachting Tourism Policy, Policy 11

²³⁹ Yachting Tourism Policy, Policy 19

²⁴⁰ Yachting Tourism Policy, Policy 12

²⁴¹ Yachting Tourism Policy, Policy 17

²⁴² Yachting Tourism Policy, Policy 13

provision of related facilities and development of appropriate legislation.²⁴³ The document recommends a periodical review of this document to cater for changing circumstances. Other documents relevant for the tourism industry are detailed below:

The Seychelles Strategy 2017 recognises tourism as one of the main drivers of growth and contributor to the economic development in Seychelles and sets the targets for tourism development and expansion until 2017. The Seychelles Eco-Tourism Strategy provides a framework for developing Seychelles as eco-tourism destination, whilst also promoting cultural sustainability.

Seychelles Sustainable Development Strategy 2012 2020

The thematic area on Tourism and Aesthetics²⁴⁴ has the following goals and strategic objectives as detailed in Table 15 below.

Table 14. Goals and strategic objectives for tourism and aesthetics (source: SSDS 2012-2020).

Goal 1: Promote a sustainable tourism industry, which aims to establish the long-term sustainability of the industry by upholding the environmental, economic, social and cultural aspects of its tourism activities and development based on sustainable development. **Strategic Objectives**: (1) To significantly minimise the negative impacts of tourism development on the environment and society; (2) To implement sustainability standards by introducing a tourism sustainable scheme for the tourism industry; (3) To promote the sustainable management of existing local and natural resources within the tourism industry; (4) To diversify and expand the tourism experience in Seychelles; and (5) To integrate the principles of sustainable tourism in educational institutions/organisations.

Goal 2: Enhance the economic benefits of tourism for the local communities seeks to foster the involvement of local communities in the tourism sector, to develop tourism projects and activities that can provide economic, cultural, social and environmental benefits which meet the needs of the local people. **Strategic Objectives**: (1) To promote Seychellois involvement in tourism development; (2) To preserve and promote the cultural heritage and traditional; and (3) To promote corporate social responsibility within the tourism sector values of Seychelles.

²⁴³ Yachting Tourism Policy, Policy 16

²⁴⁴ SSDS Volume 2 Chapter 8 pages 123- 142

PART III. GAPS AND CHALLENGES

By examining the existing legislation and policies, it is noted that both exist to govern or manage most marine uses or themes that are included in the MSP Initiative. However, with respect to implementing the MSP marine plan and zoning design, the following gaps are noted and elaborated upon below. These gaps will highlight the challenges that the MSP initiative will face for implementing marine protection areas. Recommendations are made on how to address these gaps.

- Only policy directions are given with regards to climate change under the UNFCCC the obligations, no national legislation exist to give effect to these obligations. Once the Climate Change Strategy, developed under the auspices of the Nairobi Convention, is adopted, it must be ensured that it is integrated within the National Climate Change Strategy, especially with regards to marine related activities.
- 2. The legislative and policy framework for sustainable fisheries have been developed according the FAO agreements and UNCLOS, however, the NPOA to reduce the incidental catch of seabirds in longline fisheries and the NPOA to reduce sea turtle mortality in fishing operations must be developed to be fully in line with these obligations.
- 3. Seychelles *Fisheries Regulations 1987* need to be aligned to the obligations of FAO and UNCLOS agreements and the newly enacted *Fisheries Act 2014*. A new Fisheries Strategy needs to be developed to support the Fisheries Policy 2005.
- 4. For infrastructure development, it must be ensured that the current definition of land under the *TCPA 1972* is modified to include both land covered with sea water and the seabed. This definition needs to be carried to the *Physical Planning Bill* when it is enacted.
- 5. In order for there to be a legal basis for the Marine Spatial Plan, the existing provisions of the Town and Country Planning Act 1972, which allow for the demarcation of areas in development plans, must be provided for in either in the new Physical Planning Bill or any other legislation that will be enacted for the demarcation of marine areas throughout the EEZ.
- 6. A reclamation policy must be developed so that future reclamation sites may be demarcated in the marine plan.
- It must be ensured that the District Land Use Plans, The National Land Use Plan, the Victoria Development Plan and Seychelles Strategic Land Use and Development Plan 2015 are all aligned to enable their integration within the MSP.
- 8. The Petroleum Mining Act 1976, the Petroleum Mining (Pollution and Control) Act 1976 and the Minerals Act 1962 are severely outdated and need updates and/or revisions in light of current and future development in this sector as well as advances in technology to extract non-renewable resources (e.g., deep sea mining).
- 9. There is currently no clear written and approved policy to guide petroleum development in the country. It is important that such a policy be developed to ensure that all interests are adequately represented in the Marine Spatial Plan.
- Regional guidelines on environmental management for oil and gas development are absent but are being developed under the auspices of the Nairobi Convention. These guidelines will be important for the developing the petroleum sector in the Seychelles.

- 11. National guidelines must be developed in line with the Joint Nature Conservation Committee Guidelines for Minimising Risk of injury and Disturbance to Marine Mammals during Seismic Surveys.
- 12. With regards to marine pollution, it must be ensured that the Waste Management Policy addresses liquid waste, due to its implications for the marine environment.
- 13. The provisions of the EPA 1994 for the declaration of one or more coastal zones as protected must be utilised for the better protected on these areas from pollution. No such areas have been declared to date. These areas, once declared, will need to be demarcated in the MSP.
- 14. The Protected Areas Policy 2013 has been approved but there is no legislation to support it. The Nature Protection and Conservancy Bill is still in draft form and will need to be passed as soon as possible. In addition, other pieces of legislation of relevance to Protected Areas (detailed in Chapter VII) will need to be aligned to the legislation once enacted.
- 15. The *Energy Act 2012* must be revised in order to reflect the proposals in the Energy Policy, in particular in relation to ocean power technologies. This will harness legislative support for renewable energy.
- 16. Legislation (*Harbour Act 1932* and *Merchant Shipping Act 1995*) regarding shipping and transportation seek to implement Seychelles' international obligations under the IMO Conventions. However, the provisions of both Acts are repetitive, confusing and fragmented. The two pieces of legislation need to be harmonised for ease of reference.
- 17. Legally designated spatial areas for tourism and recreation are few in Seychelles. Beau Vallon is the only area to be demarcated under the *Beach Control Act 1971* for swimming, anchorage and mooring of boats, and waterskiing. Other tourism and recreation areas must be legislated if they want to be included as existing legal boundaries for those activities.

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ANNEXE 1. CONVENTIONS, AGREEMENTS²⁴⁵, LAWS, POLICIES, AND INSTITUTIONS

Theme or Use	International Conventions and Regional Agreements	Laws	Policies and/or Action Plans	Institutions
Climate change	 UNFCCC 1992(Ratification 1994) Kyoto Protocol 1997 (Ratification 2005) Nairobi Convention 1985 (Revised and adopted 2010) Protocol Concerning Co-operation in Combating Marine Pollution in Cases of Emergency in the Eastern African Region (Accession 1985) Protocol for the Protection of the Marine and Coastal Environment of the Western Indian Ocean from Land-Based Sources and Activities (Accession 2010) 		 Seychelles National Climate Change Strategy 2009 Seychelles Sustainable Development Strategy 2012-2020 	 MEECC National Climate Change Committee
Culture	 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage 1972 (Accession 1980) Mauritius Strategy for the Further Implementation of BPoA 2005 ICESCR 1966 (Accession 1992) 	 National Monuments Act 1980 Environment Protection (Impact Assessment) Regulations 1996 	 Cultural Policy of the Republic of Seychelles 2004 SSDS 2012-2020 	 Ministry of Tourism and Culture Seychelles Heritage Foundation

²⁴⁵ Prepared according to "INTERNATIONAL AND REGIONAL TREATIES TO WHICH SEYCHELLES IS PARTY (As of March 2013)" available at http://www.mfa.gov.sc/uploads/files/filepath_40.pdf Accessed 31 October 2015. The dates of signature, accession or ratification for these agreements are in parenthesis.

Theme or Use	International Conventions and Regional Agreements	Laws	Policies and/or Action Plans	Institutions
Fisheries & Maritime Security	 Kegional Agreements UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage 2003 UNCLOS 1982 (Ratification 1994) FAO Compliance Agreement 1993 (Ratification 1994) FAO Code of Conduct for Responsible Fisheries 1995 FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing 2009 IPOA-IUU 2001 Seychelles NPOA IUU IPOA – Sharks 1999 Seychelles NPOA 2007 IPOA–Seabirds 1998 Guidelines to Reduce Sea Turtle Mortality in Fishing Operations 2005 UN Fish Stocks Agreement 1995 (Ratification 2001) 	 Fisheries Act 2014 Fisheries (Shark Finning) Regulations 2006 Fisheries Regulations 1987 Licences (Fisheries) Regulations 1987 Maritime Zones Act 1999 Environment Protection Act 1994 National Parks and Nature Conservancy Act 1969 Penal Code 1955 Firearms and Ammunition Act 1973 	 Fisheries Policy 2005 SSDS 2012-2020 Seychelles Comprehensive Maritime Security Plan of Action Rolling Plan I 2010- 2040 	 Indian Ocean Tuna Commission International Commission for the Conservation of Atlantic Tunas Commission for the Conservation of Antarctic Marine Living Resources. South West Indian Ocean Fisheries Commission Southern Indian Ocean Fisheries Agreement Ministry of Foreign Affairs
Infrastructure	 ISO/PAS 28007:2012, Ships and marine technology – Guidelines for Private Maritime Security Companies providing privately contracted armed security personnel on board ships 	 Town and Country Planning Act 1972 	 Plan d'Aménagement du Territoire 1993 	 Ministry of Agriculture and Fisheries SFA Seychelles Coast Guards MLUH Town and Country
Development		 Reclamation Act 1972 	 SSDS 2012-2020 	 Town and Country Planning Authority

Theme or Use	International Conventions and Regional Agreements	Laws	Policies and/or Action Plans	Institutions
		 EP (IA) Regulations 1996 Removal of Sand and Gravel Act 1982 Fisheries Act 2014 	 Seychelles Strategic Land Use and Development Plan 2015 – Summary (Draft) Victoria Development Plan 	
Petroleum & Mining	UNCLOS 1982 Annexe III (Ratification 1994)	 Petroleum Mining Act 1976 EP (IA) Regulations 1996 Minerals Act 1962 	SSDS 2012-2020	PetroSeychelles
Pollution	 Nairobi Convention 1985 (Accession 2010) Protocol Concerning Co-operation in Combating Marine Pollution in Cases of Emergency in the Eastern African Region (Accession 1985) Protocol for the Protection of the Marine and Coastal Environment of the Western Indian Ocean from Land-Based Sources and Activities (Accession 2010) MARPOL 1973/1978 (Accession 1991) International Convention on Oil Pollution Preparedness and Response 1990 (Accession 1992) 1992 Protocol to amend International Convention on Civil Liability for Oil Pollution Damage 1962 (Accession 2000) 1992 Protocol to amend International Convention on the Establishment of an International Fund for Compensation for Oil Pollution 1971 (Accession 2000) UNCLOS 1992 Article 145 and Part XII 	 EPA 1994 EP (IA) Regulations 1996 Environment Protection (Standard) Regulations 1995 Petroleum Mining (Pollution and Control) Act 1976 Merchant Shipping Act 1992 Merchant Shipping (Oil Pollution Preparedness and Response) Regulations 2001 Maritime Zones Act 1999 Maritime Zones (Marine Pollution) Regulations 1981 	 National Oil Spill Contingency Plan Waste Management Policy 2014-2018 SSDS 2012-2020 	 MEECC Seychelles Coast Guards

Theme or Use	International Conventions and Regional Agreements	Laws	Policies and/or Action Plans	Institutions
Protected Areas	 (Ratification 1994) Convention on Biological Diversity 1992 (Ratification 1993) Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity 2010 (Signature 2012) Ramsar Convention 1971 (Accession 2005) Convention on Migratory Species 1979 (Accession 2005); IOSEA Marine Turtle MoU (signed 2003); Dugong MoU (signed 2010) CITES 1973 (Accession 1977) UNCLOS 1982 Part XII (Ratification 1991) Agenda 21 1992 Barbados Declaration and Programme of Action 1994 Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States 2005 Chapter IV on Coastal and Marine Resources 	 Wild Animals and Birds Protection Act 1961 NPNCA 1969 Fisheries Act 2014 Fisheries Regulations 1987 Protected Areas Act 1967 EPA 1994 EP (IA) Regulations 1996 	 Seychelles' Protected Areas Policy 2013 SSDS 2012-2020 Seychelles' National Biodiversity Strategy and Action Plan 2015-2020 	 MEECC Seychelles National Parks Authority Seychelles Fisheries Authority Seychelles Islands Foundation Nature Seychelles Island Conservation Society
Renewable Energy	 International Renewable Energy Agency 2009 (Ratification 2011) Nairobi Convention 1985 (Accession 2010) 	Energy Act 2012	 Energy Policy 2010-2030 (Proposal) SSDS 2012-2020 	 MEECC Seychelles Energy Commission

Theme or Use	International Conventions and Regional Agreements	Laws	Policies and/or Action Plans	Institutions
Theme or Use Shipping and Transportation	 Regional Agreements Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States 2005 UNCLOS 1992 (Ratification 1994) International Regulations for Preventing Collisions at Sea 1972 (Accession 1988) International Convention on Load Lines 1966 International Convention for the Safety of Life at Sea 1974 (Ratification 2001) International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) 1978 (as amended 1997) (Accession 1999) International Convention on Tonnage Measurement of Ships 1969 	 Harbour Act 1932 Harbour Regulations 1933 Merchant Shipping Act 1992 Seychelles Ports Authority Act 2004 Maritime Zones Act 1999 Seychelles Port Authority (Extension of Port Victoria) (Declaration) Order 2012 Harbour (Port and Harbour Dues) Regulations 2013 Harbour Fishing Port 	 Seychelles Ports Development Master Plan 2014 	 Seychelles Ports Authority Seychelles Maritime and Safety Administration
		 Regulations 1988 Maritime Zones (Exclusive Economic Zone) Order 1978 Maritime Zones (Exclusive Economic Zone and Continental 		

Theme or Use	International Conventions and Regional Agreements	Laws	Policies and/or Action Plans	Institutions
		Shelf) Orders 2002 and 2008		
Tourism and Recreation	 UNWTO (Member 1991) UN Global Code of Ethics for Tourism Fair Trade Tourism Africa Global Sustainable Tourim Council 	 Beach Control Act 1971 Beach Control Regulations 1978 Licences Act 2010 Licences Trade Regulations 1987 Licences (Diving Business) Regulations 1991 Control of Hirecraft Act 1973 Control of Hirecraft Regulations 1978 Fisheries Act 2014 	 Tourism Master Plan 2012- 2020 Seychelles Eco-Tourism Strategy 2003 Seychelles Sustainable Tourism Label 2011 Boat Charter Policy 2008 Recreational Diving Business Policy 2015 Yachting Tourism Policy 2008 	 Ministry of Tourism and Culture Seychelles Tourism Board

ANNEXE 2. TERMS OF REFERENCE FOR DOCUMENT

The Consultant will:

Identify and locate all relevant Seychelles and international policy, law, and regulation for the theme/uses that pertain to marine planning.

List of themes/uses for Review: Legal, Policy and International commitments

- Commercial Fisheries (incl. piracy and IUU)
- Tourism and Recreation (incl. sport fishing)
- Environment: Protected areas; pollution (incl. Blue Economy)
- Petroleum/Mining
- Port/Harbour/EEZ
- Development (infrastructure)
- Renewable energy
- Shipping and transportation (incl. International Maritime Organisation)
- Climate change
- Culture
- Military Protected areas
- Governing Authority

Briefly review the identified policies for the themes/uses listed above for their importance in developing and implementing a marine spatial plan in the Seychelles EEZ. Exclude those policies that are not relevant to the MSP Initiative. Prepare a summary of the relevant governance structures and governing authority(ies) for the marine waters of Seychelles including Territorial Sea and Exclusive Economic Zone. Include international conventions and agreements and dates signed and/or ratified. Include a list of the Seychelles Ministries or Agencies responsible for managing marine resources, negotiating international agreements that pertain to access or extraction of Seychelles' marine resources and managing economic activities in marine waters including fisheries, oil & gas, commercial tourism and marine charters, renewable energy, mining, shipping and transportation, ports, military, enforcement, and surveillance. Provide references to key documents and clearly differentiate between fact (from the published document) and opinion or interpretation (from the author).

Write a 2-page, stand-alone, Executive Summary to provide a high level overview of the policy environment as it pertains to marine spatial planning in Seychelles.

Create a Reference list for all relevant publications used in this report.

Create a folder and save a copy of the documents used to develop this report.

ANNEXE 3. PROTECTED AREAS ENVIRONMENT PROTECTION REGULATIONS

Prescribed projects and activities for Protected Areas Environment Protection (Impact Assessment) Regulations, 1996.

SCHEDULE 1 Reg 3(1).

CATEGORY OF PROJECT OR ACTIVITY REQUIRING ENVIRONMENTAL AUTHORISATION
1 Mining:
1-1 Quarries and deposit sites.
1-2 Rock crushing, splitting, blasting and excavating.
1-3 Commercial production of aggregates and other materials.
1-4 Earthworks.
2 Agricultural production:
2-1 Commercial rearing of livestock, including pigs, cattle and poultry.
2-2 Drainage or irrigation for commercial purposes.
3 Forestry:
3-1 Logging operations and vegetation clearing.
3-2Foresttracks or trails: construction or improvement.
3-3 Sawmills: construction.
4 Fish and associated products farming:
4-1 Fish farming works and extension, aquaculture.
4-2 Fish processing plants and equipment.
5 Chemical industries:
5-1 Manufacture, handling, storage and transportation of hazardous chemicals
or substances.
6 Industry:
6-1 Construction of industrial buildings.
6-2 Installation of industrial equipments.
6-3 Transportation equipment of industrial products: (classified dangerous as
per UNEP specifications)
7 Food and agricultural industries.
8 Energy production and distribution:
8-1 Power plant.
8-2 Electric line.
8-3 Gas storage.
8-4 Pipeline.
8-5 Bottling plant.
9 Water:
9-1 Dams and reservoirs.
9-2 Water treatment plant.
9-3 Public water supply network.
9-4 Desalinization plant.
10 Sewage and waste water:
10-1 Sewerage treatment plants.
10-2 Sewage networks and outfall.
11 Solid waste:
11-1 Dumping sites.
11-2 Treatment plant.
11-3 Collecting equipment.
12 Hotels, Restaurants, and Tourism:
12-1 New hotels or extension of existing hotels.
12-2 Facilities such as golf, swimming pools.
12-3 Restaurants.
13 Fishing vessels and fleet construction:
13-1 New industrial vessels.

- 14 Transport, Harbour and Marine:
- 14-1Harbourconstruction and development.
- 14-2 Construction of airfields aviation strips and landing grounds.
- 14-3 Harbour dredging operations.
- 14-4 Equipment purchase and installation.
- 14-5 Seadefenses and sea walls.
- 14-6 Dry docks.

15 Land reclamation.

16 Habitat:

- 16-1 Housing development and/or land subdivision that would give rise to the creation of a large housing estate.
- 16-2 Housing development and/or land subdivision that would result in increase pressure on existing infrastructure and or environment.

- 17 Road network: 17-1 New roads.
- 17-1 New Todus.
- 17-2 Extension out from existing bank.17-3 Surfacing of earth tracks or roads.
- 17-4 Water drainage networks.

SCHEDULE 2 Reg 3(2)

PROTECTED AND ECOLOGICALLY SENSITIVE AREAS

A) Protected areas

A.1. National parks, special nature or wildlife reserves and other protected areas:

(i) All areas designated under section 5 of the National Parks and Nature Conservancy Act (Cap 141)

- (ii) Shell reserves as designated under the Fisheries Act. (Cap 82 Sub. Leg. pg 16)
- (iii) Protected areas designated under the Protected Areas Act: African banks, Ile Coco, -Ile la Fouche, -Ilot Platte, -Bel Ombre. (Cap. 185 Sub. Leg. pgs 9, 10 and 11)

(iv) Sainte Anne Island land use plan conservation area. NRC 95/13.

- (v) Anse Lazio coastal belt (Landscape of outstanding beauty). CAB 95/54.
- A.2. Historical sites and areas surrounding the National Monuments
- A.3. Sites, buildings, monuments: (see A2 for conditions).
- A.4. Remarkable natural landscapes:

All areas listed below are sites of outstanding natural and physical beauty, either natural or developed. As designated on maps deposited with the Division of Environment and certified by the Director General of Environment.

MAHE:	
-Mont Sebert - Les Dents.	-Rock at Anse Louis, "teapot".
-Castle peak.	-Rocks at Le Rocher
-Glacis du Cap at Anse aux Pins.	-Danzille to Anse Major.
-Fairyland, Ile Souris et plages.	-Cascade de Grande Anse.
-Anse Parnel et Cap Lascars.	-Cascade de Bel Ombre.
-Rochers d'Anse Forbans.	-Rocks at Baie Lazare beach.
-Anse Capucins.	
-Anse Petite Boileau.	PRASLIN:
-Pointe Police.	-Anse Lazio and Baie Chevalier.
-Pointe du Réduit	-Anse Georgette.
-Pointe Maravi.	- Petite Anse Kerlan
-Glacis de Val Mer.	-Anse Matelot.
-Pointe Gouvernement.	-Ilot Chauve Souris.
-Pointe Petit Gouvernement.	-Ilot Saint Pierre.
-Pointe Petite Anse.	-Rocher du Comédien

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-Falaises des Remparts.	
-Pointe Barbarons.	LA DIGUE:
-Cascades de Souvenir, la Misére.	 Southern coast from pointe Source d'Argent to Grand Anse.
-Petite ile.	- Grande Anse and Petite Anse.
-Pointe Escalier.	 Western coastal strip from pointe Turcy to Anse Patate
-Cascade de Port Glaud.	- Pointe Cap Barbi.
-L'Ilot.	- La Passe rocks.
-Falaise de Danzille.	
-Pointe sud d'Anse Boileau.	
-La Réserve.	

A.5. Viewpoints

A.6. Inter-urban buffer zones

A.7. Water catchment areas:

Those areas located upstream of dams that are used for public water catchment and water storage,

and the following areas that are potential water catchment basins:

Rivière Mare aux Cochons. Above 50 meters altitude.

Rivière les Mamelles. Above 80 meters altitude.

Rivière Pasquière. Above 50 meters altitude.

La Digue: 150 meters radius around the wells at "le Plateau"

A.8. Industrial risk areas:

Areas in the vicinity of industrial equipments or activities, with a high risk potential in case of an accident or an hazard.

Mahé: -200 meters around Fuel and LPG storage at Newport Victoria.

-200 meters around Fuel storage at Mahé airport:

-50 meters each side of river Anse Etoile, downstream of La Gogue Dam:

-25 meters each side of river Rochon downstream to Rochon dam.

-Mahe Airport landing path:

1000 m. radius from the end of the airstrip in both directions, in a 10° Angle.

-200 metres around Anse Royale dumping site.

-200 meters around Petit Paris dumping site.

-200 meters around Pointe Larue quarry.

-200 meters around Providence quarry.

Praslin: -200 meters around Fuel storage at Baie Sainte Anne

-Airport landing path:

500 m. radius from the end of the airstrip in both directions, in a 10 ${\rm \hat{A}^{\circ}}$ Angle.

-200 m. Around La Jalousie dumping site.

-200 m. Around La Jalousie quarry.

-200 m. Around Anse Citron quarry.

La Digue: -200 m. Around L'Union dumping site.

A.9. Natural risk areas:

Areas with a risk potential, by natural hazards, especially landslides and fall of boulders, on granitic and red earth steepest slopes and surroundings, such as: "Trois Frères Estate",

"Pied du Morne" area, North east of "Copolia", "Le Rocher" and "Brillant" area, "Anse Talbot" and "Riviere Bayonne" area, Mont Buxton area. As designated on corresponding maps.

A.10. <u>Steep slopes</u>

A.11. Earth erosion areas

A.12. <u>High elevations</u>.

A.13. Skyline

(B) Ecologically sensitive areas:

B.1. Natural Habitats for rare, protected or endemic species of fauna and flora:

The areas categorised below are based on one or more of the following considerations:

- to protect the endemic species
- to protected species according to national or international (CITES) conventions, laws or regulations.

SEYCHELLES MARINE SPATIAL PLAN INITIATIVE

- to protect endangered species, which need special attention because of particular uses, which threaten their population.
- Extension as designated on maps deposited with the Division of Environment and certified by the Director General of Environment

MAHE:

- Montagne Glacis.
- Mont Josephine.
- Mt. Planeau -L'Abondance -Grand Bois -Varigault.
- Mont Sebert -Les Dents.
- Montagne Brulee -Castle Peak.
- Mont Parnel.
- Le Desert.
- Mont Signal.
- Montagne Corail -Mont Cauvin -Giraffe.
- Riviere Dauban, Bardeau.
- Copolia.
- Anse Capucin
- Anse Bazarca.
- Glacis between Anse Louis and Souvenir.
- Glacis at Barbarons
- Glacis Beoliere.
- L'Islette.
- Sainte Anne, Grande Anse.
- Souvenir.
- Roche Caiman, Bird Sanctuary.
 - Bel Ombre
 - Port Glaud
 - Endangered birds nesting areas.

PRASLIN:

- Nouvelle Decouverte.
- Consolation.
- Fond Ferdinand, Fond d'Albaretz.
- Cap Jean Marie.
- Rivière Pelissier.
- Mont Cabris.
- Pointe Badamier.
- Newcome.
- Savoie.
- Petite Cour glacis.
- Grande Anse, Fond de l'Anse.
- Baie Pasquière.
- Endangered birds nesting areas.

LA DIGUE

- Nid d'Aigle.
- Woodlands of le Plateau- nesting territories for La Veuve
- Belle Vue
- Endangered birds nesting areas.

B.2. Marshes and Wetlands habitats:

Areas where the water table enables specific vegetation to thrive, whether the area is permanently or temporarily flooded, or fresh or salt water, including all mangroves.

The relevant areas may show some of the following characteristics:

- contributes to decrease in water pollution before it outflows to the sea
- decreases excessive flooding of lands
- contains specific fauna habitats and contributes to nesting and breeding of this type of fauna.

B.3. Streams and Surroundings:

Areas as categorised in Schedule A of the State Land and River Reserves Act. (Cap 228)

B.4. Coastal Strip:

The area extending up to a distance of 100 meters towards landward side from the high water mark except in the following cases:

- Where a paved and regularly used vehicular road alongside the sea has been built nearer than 100 meters towards land. In this case, the road defines the boundary of the coastal strip.
- Where the area is already developed, including a 20 meter radius around the existing development.
- Where the area has been scheduled in an approved development plan for the proposed development.
- Where an integrated coastal zone management plan (ICZM) has defined the delineation of the coastal strip under section 11 of the Environmental Protection Act.
- On the eastern coast of Mahé from North east Point to Ile du Suète.

B.5. Beaches and intertidal zones:

All areas between the lowest low tide and the dune crest plus 20 meters on the landward side. If a dune crest does not exist, the landward boundary will be 30 meters from the high water mark.

B.6. Seabed:

All lands that are regularly flooded by the sea within the territorial waters fall in this category. For estuary and mangroves, the sea bed boundary is defined by a junction line across the outflow at the high water mark.

B.7. Small islands and outlying islands:

All Seychelles islands except the main islands of Mahe, Praslin, La Digue where the sensitive areas are defined based on specific considerations

ANNEXE 4. FI	SHERIES AC	2014
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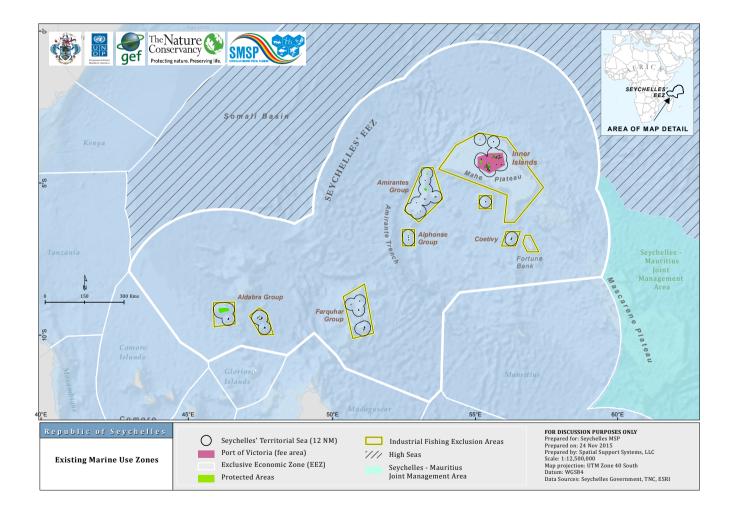
Parts	Sub-Parts	Provisions	Relevant definitions
Part II – Management of Fisheries	Sub-Part 1 - Management plans and management measures	 Plan for management of fishery Management measures Collection and analysis of statistics and information Record of fishing vessel to be kept by Authority 	
	Sub-Part 2 Special Arrangements	Power of Minister to enter into fisheries agreements; Agreement or authority for scientific-research on fisheries	
Part III - Licensing Requirements	Sub Part 1 Foreign Fishing vessel licence	Fishing by foreign fishing vessel prohibited without licence and international agreement	
	Sub-Part 2 Obligations relating to foreign fishing vessel	 Entry into and exit from Seychelles waters Entry into Port Victoria Stowage 	
	Sub-Part 3 Fishing vessel license and permit other than foreign fishing vessel license	 Fishing vessel licence or permit Refusal to grant licence Sport fishing vessel permit Competition sport fishing Regulations requiring licence or permit for other fishing activities or fishing related activities Recreational fishing Validity of licence or permit 	 "sport fishing" means any fishing activity undertaken for sport or recreation which involves the hiring, chartering or leasing of a vessel and its' annexes not exceeding 40 metres in length overall but which does not result in the trading, offering for sale or selling of fish; "Competition sport fishing" means any fishing undertaken for sport among

SEYCHELLES MARINE SPATIAL PLAN INITIATIVE

Parts	Sub-Parts	Provisions	Relevant definitions
		 Grant of new licence or permit upon termination Transfer of licence or permit 	 competitors who are observing a prescribed set of rules; involves the hiring, chartering or leasing of a vessel not exceeding 40 metres in length overall, and catch for charitable purposes authorised by the Authority; and does not result in the trading, offering for sale or selling of fish; "recreational fishing" means any fishing activity undertaken by a vessel not exceeding 10 metres for recreational purposes which does not involve any commercial activity and result in the trading, offering for sale or selling of fish;
	Sub-Part 4 - Authorisation to fish outside Seychelles waters	 Authorisation to fish outside Seychelles waters Validity of authorisation Renewal of authorization Transfer of authorisation 	
	Sub-Part 5 - Requirements and conditions relating to all fishing vessels and gears	Conditions relating to licence, permit or authorisation	
	Sub-Part 6 - Control of fishing activities	 Conditions to fish within the Exclusive Economic Zone Prohibition against use of poison etc., Prohibition against use of spear guns, chumming, catching or marine mammal Fish aggregating device 	•
	Sub-Part 7 Aquaculture	Aquaculture	"aquaculture" means the cultivation, propagation or farming at sea or on land of

Parts	Sub-Parts	Provisions	Relevant definitions
			fish from eggs, spawn, spat, fingerling or seed; and includes the rearing and ranching of fish taken locally or imported into Seychelles (s 3)
	Sub-Part 8 General provisions relating to this part		
Part IV - Appeals Board			
Part V - Enforcement Measures	Sub-Part 1 Powers of Authorised fishery officers in Seychelles waters and beyond, and on land Sub-Part 2 Procedure upon seizure and detention		
	Sub-Part 3 Other enforcement measures	 Implementation of international fishery conservation and management measures Establishment of observer programme Regional cooperation in surveillance and enforcement 	international fishery conservation and management measures means "a measure established by a Regional Fisheries Management Organisation or other international fisheries management organisation to which Seychelles is a party"; Regional Fisheries Management Organisation means "a subregional or agreement having the competence to establish conservation and management means for particular straddling fish stocks or highly migratory fish stocks as specified in the United Nations Fish Stocks Agreement 1995" (S 3)
PART VI - Offences			
Part VII -			
Miscellaneous			

ANNEXE 5. SEYCHELLES' MARINE ADMINISTRATIVE BOUNDARIES



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ANNEXE 6. NATIONAL OIL SPILL CONTINGENCY PLAN

7 PROTECTION AND CLEANUP TECHNIQUES

7.1 CLEANUP TERMINOLOGIES

The following terms refer to clean-up techniques, clean-up technologies and/or clean up equipment.

7.2 Biodegradation:

Process describing the natural, organic (molecular) breakdown of oil.

7.2.1 <u>Bioremediation:</u>

Process in which nutrients are added to spilled oil(s) to accelerate "biodegradation". Bioremediation can enhance the growth of naturally occurring biota found in the soil. Bioremediation can only be used on shorelines (not effective in marshes or on oils still in the water).

7.2.2 <u>Bio augmentation:</u>

The addition of natural microbes, which accelerates the breakdown of oil.

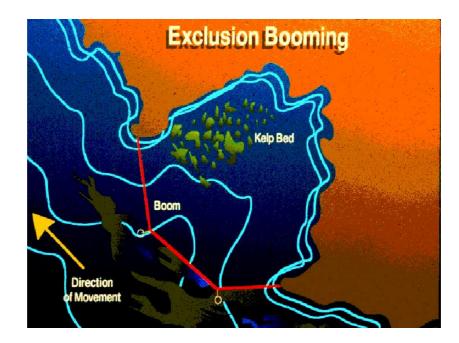
- 7.2.3 <u>Bio stimulation:</u> The addition of nitrogen and/or phosphorus enriched fertilizers to accelerate the breakdown of oil.
- 7.2.4 Booming:

Apart from sorbents, there are three basic containment techniques:

- Exclusion Booming
- Diversion Booming
- Containment Booming

Exclusion Booming:

A boom is deployed across or around a sensitive area to "exclude" a pollutant from contaminating the area. The pollutant is either deflected or contained by the exclusion boom. *Primarily used when currents are less than one knot, and the breaking waves are negligible.*



Exclusion Booming

Diversion Booming:

A boom is deployed at an angle to the approaching pollutant. The pollutant is either "diverted" away from sensitive area (Cascade-Diversion Booming, figure 1) or diverted to a central collection point (Diversion Booming, figure 2) to ease recovery. *Primarily used when currents are greater than one knot and the breaking waves are negligible.*

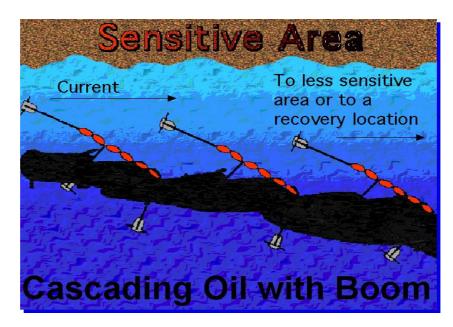


Fig 1 Cascade – Diversion Booming

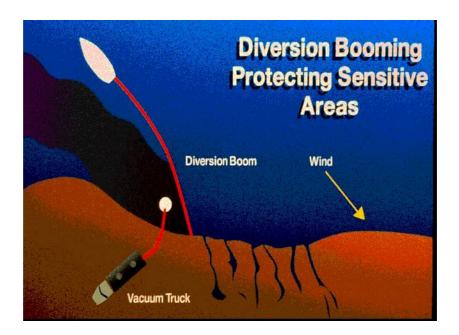


Fig 2 Simple Diversion Booming

Containment Booming:

A boom is deployed in a "U" shape in front of (or around) the pollutant. The boom ends are normally anchored by work vessels. The pollutant is contained within the "U" of the boom and prevented from spreading. It can be used on the open water, often in conjunction with skimming type vessels or devices, or to contain the pollutant around the source. It allows for containment and removal of the pollutant.

- 7.2.5 <u>Cutting Vegetation:</u> Removal of vegetation to protect birds and other wildlife.
- 7.2.6 Debris Removal:

Removal of contaminated debris and logs.

7.2.7 <u>Dispersant:</u>

Chemicals, which "disperse" (spreads & dilutes) oil both horizontally and vertically throughout the entire water column. Dispersants should only be used:

- Under direct supervision of trained specialist.
- With trained technicians skilled in using dispersants monitoring equipment; and
- Only in deep, tidal waters

Guidelines and Policies for the use and application of dispersants in Seychelles can be found in Appendix A.

7.2.8 In-Situ Burning:

Removal of oil (from the surface of the water or land) by means of ignition. In-Situ Burning should only be conducted:

- Under direct supervision of trained specialist;
- With trained technicians skilled in using In-Situ Burn monitoring equipment and;
- Away from populated areas.
- 7.2.9 Manual Removal:

Removing stranded surface oil with hand tools and manual labour.

7.2.10 Natural Recovery / Monitor and evaluate:

No attempt is made to remove stranded oil. This is generally done when it is determined that the available clean-up methods would be more harmful to the environment or safety of personnel than would be accomplished by the clean-up. However careful monitoring and evaluation of the impacted areas should be carried out.

7.2.11 Passive collection:

Sorbent material is placed along of the shoreline, allowing it to absorb oil as it is released by tidal or wave action. Oil removal is dependent on the capacity of the particular sorbent, the energy available for lifting oil off the shoreline, and the degree of weathering.

7.2.12 <u>Sediment Removal:</u>

Removal of oiled surface sediments.

7.2.13 Skimmers:

All skimmers work best in calm waters, with little or no wave action. There are several types including weir, oleophilic (belt, drum, rope, disc, and brush) sorbent surface, etc. Details on the functioning of the skimmers listed in the equipment list at Appendix B can be found at the Seychelles Coast Guard JRCC.

7.2.14 Sorbents:

Absorbent and absorbent material in the form of pads and, which are effective tools for oil from the surface of the water. Sorbent boom may also be used for placement along a

shoreline to protect sensitive areas or placed on the water to keep heavier, emulsified oils from spreading.

7.2.15 Trenching:

Removal of subsurface oil from beaches or permeable shorelines.

7.2.16 <u>Vacuum:</u>

Removal of pooled oil on land or from the water's surface at collection points or in sheltered areas via a vacuum truck.

- 7.2.17 <u>Water Flooding (Deluge):</u> Washing of surface oil and oil from crevices and rock interstices to water's edge for collection (and possible skimming).
- 7.2.18 Other methods:

Research and development is ongoing for new oil spill response methods. Various chemical and biological techniques are being tested for effectiveness and toxicity.

ANNEXE 7. SEYCHELLES' MARITIME ZONE COORDINATES

Limits of EEZ - Maritime Zones (EEZ) Order 1978

The boundary from point 1 through points 2, 3, 4, 5, 6, 7, 8, 9,10, 11, 12, to 13 is formed by the locus of a point 200 nautical miles from the nearest land mass of the Republic of Seychelles.

From point 13 through points 14, 15, 16, 17, to point 18, the boundary is the medium line equidistant between the Republic of Seychelles and the Territory of Mauritius.

The boundary then follows the locus of a point 200 nautical miles from the nearest landmass of the Republic of Seychelles to point 19.

From point 19 through points 20,21, 22,23, 24,25, 26,27, 28, to 29 the boundary is formed by the median line equidistant between the Republic of Seychelles and the Malagasy Republic, Isles Glorieuses (France), Mayotte Island, Iles Comores and Mafia Island (Tanzania).

The Geographical coordinates of the points referred to above are listed below:

Points	Latitude	Longitude	
	South of the	East of Greenwich	
	Equator		
1	07° 46′	43° 15′	
2	06° 04′	46° 41′	
3	06° 19′	47° 49′	
4	06° 30′	48° 40′	
5	05° 41′	49° 57′	
6	04° °32′	50° 04′	
7	01° 38′	52° 36′	
8	00° 29′	56° 03′	
9	02° 39′	58° 48′	
10	04° 01'	59° 15′	
11	05° 34′	59° 09′	
12	07° 10′	59° 30′	
13	08° 27′	59° 22′	
14	08° 33′	58° 23′	
15	08° 45′	56° 25′	
16	08° 56′	54° 30′	
17	09° 39′	53° 53′	
18	12° 17′	53° 49′	
19	12° 47′	53° 14′	
20	11° 31′	50° 29′	
21	11° 05′	50° 12′	
22	10° 17′	49° 26′	
23	11° 01′	48° 30′	
24	10° 47′	47° 33′	
25	10° 37′	46° 56′	
26	11° 12′	45° 47′	
27	10° 55′	45 °31′	
28	10° 27′	44° 51′	
29	08° 05′	43° 10′	