Marine Spatial Planning of the Western Indian Ocean Blue Economy

Ecosystem-based marine spatial planning as an effective tool for the implementation of the Western Indian Ocean Blue Economy by the Contracting Parties of the UNEP-Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean Region.

A project of the Nairobi Convention Secretariat in partnership with the Western Indian Ocean Marine Science Association and the CSIR

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1 Executive Summary

Given the coastal and environmental opportunities and challenge facing the Western Indian Ocean (WIO), it makes sense to better integrate existing legal and management tools, and look for creative and novel solutions to existing problems (UNEP-Nairobi Convention & WIOMSA 2015).

Economic activities that take place *in the ocean space*, receiving goods and services *from ocean activities* and ocean activity (*to the ocean*) has been recognised as a major contributor to national economies (Park et al. 2014). This contribution (formally recognised or not) forms part of the ocean economy of countries.

There is increasing emphasis on the sustainable use of ocean and coastal resources in what has become known as the "blue" or sustainable ocean economy (hereafter the Blue Economy). The Blue Economy is a recent and developing paradigm, and the transition from an ocean economy (as a purely economic construct) to a Blue Economy (sustainable ocean economy) will be a complex, long-term undertaking. Even so, the ocean will become an economic force this century (Economist Intelligence Unit 2015).

The Blue Economy is globally (UNEP et al. 2010; Hoegh-Guldberg & et al. 2015), continentally (UNECA 2016; ECORYS et al. 2012; Commission of the European Communities 2007; African Union 2012) and in the WIO (UNCTAD 2014; Mohanty et al. 2015; Kelleher 2015) promoted as the "right and responsible way" to secure and maintain benefit from coastal and ocean resources.

There is also a growing awareness of the Blue Economy within Contracting Parties to the Nairobi Convention. The Government of Seychelles has adopted the Blue Economy Concept¹, Mauritius is investing in the Ocean Economy² and the Republic of South Africa has developed Operation Phakisa³ to unlock the economic potential of the ocean in a sustainable manner.

Implementing the Blue Economy requires a "toolbox" with a number of existing, new and often better strategies (African Union 2012; Commission of the European Communities 2007; UNECA 2016). These include integrated maritime strategies and policies, integrated coastal management, marine protected areas etc. One of the highly-rated and promoted tools is known as ecosystem-based marine spatial planning (Douvere & Ehler 2006; Douvere 2008; Domínguez-Tejo et al. 2016).

It has been argued that the Blue Economy makes its strongest gains when leveraging existing institutional relationships to address strategic gaps that affect multiple sectors and players, and which catalyse visible benefits for them in the long term (UNEP 2015). Ecosystem-based management, marine spatial planning (MSP), integrated coastal management (ICM) and the

¹ http://www.natureseychelles.org/what-we-do/blue-economy

² http://www.oceaneconomy.mu/, supported by Maurice Ile Durable (http://mid.govmu.org/)

³ http://www.operationphakisa.gov.za/operations/oel/pages/default.aspx

establishment of marine protected areas (MPAs) are established elements in support of the Blue Economy.

"Marine spatial planning (MSP) is a public process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process" (Ehler & Douvere 2009). Ecosystem-based MSP is also characterised as "hard" sustainability - that natural capital cannot be substituted by man-made capital (Qiu & Jones 2013).

MSP does not replace, or in any way detract from existing management paradigms such as ICM (or integrated coastal zone management- ICZM) or the value and importance of MPAs but rather relies on integration with and iterative improvement in existing and established tools. The African Blue Economy builds on Integrated Coastal Zone Management (UNECA 2016). Ultimately, the policy process for the implementation of ICM and MSP is so closely related that the only reason not to integrate the associated management tools is not due to technical failure, but rather a lack of recognition of the value of scaled and seamless coastal and ocean management.

MSP is indicated not only for use within national boundaries, i.e. exclusive economic zones, but also for areas beyond national jurisdiction (Ardron et al. 2008).

A step-by-step approach to set up and apply MSP was published by the Intergovernmental Oceanographic Commission (IOC; Ehler & Douvere 2009). The IOC guide provides a comprehensive overview of MSP.

There is a growing number of global examples of MSP implementation (Smith 2015; Domínguez-Tejo et al. 2016; Collie et al. 2013; Dalton et al. 2010), and at least two countries in the WIO have formally embarked on policy processes that will result in the development of MSPs. In 2000, Australia was the only country with a government-approved MSP. In 2015, there were reportedly 13 countries with approved plans, in addition the trajectory of progress indicates that by 2020 at least 44, and by 2025 at least 59 countries will have approved plans (Ehler 2015 – presentation to the European Commission MSP Conference series No. 5).

Given the overwhelming importance of securing national growth and development, it is virtually assured that Contracting Parties of the Nairobi Convention have already started a discussion/policy process on the Ocean/Blue Economy. This is supported by key regional policies (African Union 2012; UNECA 2016).

One of the most successful tools for the implementation of the Blue Economy is the development of marine spatial planning as a national policy mechanism.

The future use of MSP is promoted for national marine and maritime spatial planning, as well as for managing areas beyond national jurisdiction.

The Contracting Parties to the Nairobi Convention are making progress on COP decision CP8/10 and CP8/13 and a number of states are in the conceptual stages of the policy cycles

and it is proposed that directed support by the Secretariat would enhance and accelerate the process. It seem reasonable that a regional expression of "principles" regarding the policy process would improve the overall development cycle and may improve the consistency of policies and thereby reducing future transboundary alignment or actions relating to the use of ocean space. The assessment of progress towards policy implementation offers an indicator of the state of ocean governance and should be included in future State of the Coast reports. The development of regional capacity relating to the development of these policies is a priority that has also been supported by the various regional for a. Furthermore, the development of a regional approach and principles for the development of ocean management policies, the Blue Economy and MSP appears to be indicated.

KEY RECOMMENDATIONS:

- 1. Support an increasing role for the Contracting Parties to the Nairobi Convention in defining a Blue Economy for the Western Indian Ocean;
- 2. Agree that the Contracting Parties to the Nairobi Convention are champions for establishment of MSP as a tool for the implementation of the Blue Economy;
- 3. Through the Contracting Parties to the Nairobi Convention seek to embed ecosystem-based MSP within the larger context of national legislation and policies;
- 4. Recognise the role of MSP alongside, and in concert with that of ICM;
- 5. Support and ratify the Integrated Coastal Zone Management (ICZM) Protocol for the Nairobi Convention; and,
- 6. Improve regional and national integration of climate change adaptation, ICM and MSP.

2 Introduction

The Western Indian Ocean (WIO) has characteristically high species and ecosystems biodiversity, which places it as one of the most rich and interesting ocean regions of the world. The countries of the region also have, in general, relatively low per capita income, and as such a large fraction of the population is dependent on coastal and marine resources and ecosystem services.

The coastal and marine ecosystem of the WIO offers opportunity for the sustainable use of natural resources. Equally so, the unsustainable use of resources threatens

The global coastal and ocean environmental context is provided firstly by the First World Ocean Assessment (Group of Experts of the Regular Process 2016), and secondly the Regional State of Report (UNEP-Nairobi Coast Convention & WIOMSA 2015). reader is referred to these volumes in order to understand the global importance of the ocean and coastal environment, as well as the regional value and significance of ecosystem services to human well-being.

livelihoods, human well-being, biodiversity the goods and services provided by the ecosystems of the WIO (UNEP-Nairobi Convention & WIOMSA 2015). These threats are linked to similar global trends that requires globally integrated solutions. Effective, integrated management of human activities within marine ecosystems is imperative for equitable and sustainable development and resource use.

3 Purpose

This report was compiled to demonstrate how ecosystem-based marine spatial planning (MSP) is an effective tool for the implementation of the WIO Blue Economy (Kelleher 2015) by the Contracting Parties of the UNEP-Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean Region (hereafter Nairobi Convention). The report sets out to achieve the following:

- 1. Substantiate the ascendance of the "blue" or "ocean" economy as a dominant global and national discourse to the Contracting Parties of the Nairobi Convention;
- 2. Elaborate on the strong relationship between the Blue Economy and MSP, as well as propose its place amongst other policy tools such as coastal planning and integrated coastal management (ICM);
- 3. Present regional progress and three national case studies on the implementation and use of MSP in the WIO and beyond;
- 4. Make recommendations on the regional, national and sub-national scaling of MSP, and the seamless integration with other regional management and planning process and policy drivers; and,
- 5. Make recommendations for the development of a project for the incremental implementation of projects and initiatives to coordinate MSP and build capacity.

There is a need for improved regional cooperation to establish a consistent and appropriate definition of MSP that will best serve the needs of the countries within the WIO. This is aligned with two decisions of the 8th Meeting of the Contracting Parties to the Nairobi Convention that was held in Seychelles during June 2015:

- i. Decision CP8/10: Blue and Ocean Economy (4) "To urge Contracting Parties to cooperate in improving the governance of areas beyond national jurisdiction, building on existing regional institutions including the Nairobi Convention and developing area based management tools such as marine spatial planning to promote the blue economy pathways in the Western Indian Ocean Region."
- ii. Decision CP8/13: Enhancing Cooperation, Collaboration and Support with Partners (3) "To invite all Contracting Parties and request the Secretariat to collaborate with the Secretariat of the Convention on Biological Diversity, Western Indian Ocean Marine Science Association and other partners on capacity building, implementation and sharing of experiences on integrated marine spatial planning in support of blue economy."

MSP is proposed as a marine-domain policy process for regional, national and sub-national use. As such, it should not be isolated from existing efforts in ICM, ecosystem-based management (EBM), ecosystem approach to fisheries (EAF) and many other policy drivers. It is proposed that MSP supports the sustainable use of coastal and marine resources and the protection of biodiversity. The Nairobi Convention Secretariat (NCS) has previously recognised (Celliers 2016) that MSP in the WIO has potential as:

- i. An important and area-based management tool for use in the WIO;
- ii. A multi-scale (transboundary, regional, national and sub-national) marine-domain policy approach for seamless integration with existing efforts in ICM, EBM, EAF and other policy instruments;
- iii. A policy mechanism that supports the sustainable use of coastal and marine resources and the protection of biodiversity;
- iv. Showing great promise if built on a foundation of reliable information, coupled with appropriate (multi-scaled) governance and institutions. MSP is useful in mitigating multi-sectoral stakeholder conflict, at multiple levels of coastal and ocean governance;
- v. Associated with planning and implementation of the growth and development of the Ocean or Blue Economy, and as a mechanism to manage the multiple demands on the coastal and marine environment.

This report argues for the inclusion of MPS as a policy mechanism for use by Contracting Parties to the Nairobi Convention. With the purpose of the report in mind, the rest of the report will in detail address the issues mentioned above by first addressing the importance of ocean governance by leaders of African countries. This is in alignment with the African Integrated Maritime Strategy 2050 (AIMS 2050) and Agenda 2063. The following section delves into the changing perspective

of the existing ocean economy. Here the Blue Economy is explained in more detail and its important is put into perspective relative to that of the ocean economy. Furthermore the different sectors that make up this blue/ocean economy are classified to give an indication of its broadness, potential and monetary worth in different countries in the world.

4 Ocean Governance

In March 2015 (Cairo), African Ministers represented on the African Ministerial Conference on the Environment (AMCEN, established in 1985) agreed on the Cairo Declaration. This declaration reiterated their support for the regional seas programmes in Africa as platforms for the implementation of the AIMS 2050 and Agenda 2063. Both these instruments also supported the concept of ecosystem-based management approaches for marine resources in the exclusive economic zones and adjacent waters. The Cairo Declaration also urged member states to develop a governance strategy, in accordance with the United Nations Convention on the Law of the Sea and regional seas conventions, on oceans and seas in Africa for the effective management of the region's shared maritime resources and call for a regional conference to address the matter by 2016.

As a result, in October 2015, AMCEN decided to develop an ocean governance strategy in Africa (United Nations Environmental Programme 2015). This strategy is proposed to be based on, and in line with the ocean objectives of the AIMS 2050 (African Union 2012) and Agenda 2063: Africa We Want (African Union n.d.). The objective of developing an Africa ocean governance strategy is to define and propose institutional structure, functions of regional mechanisms and institutions, and decision-making processes. It will also aim at outlining objectives and processes of regional integrated and inter-sectoral ocean policies for the implementation of AIMS 2050 and associated national policy development.

The Cairo Declaration also urged member States to integrate the green economy into development planning, and to use green economy to mobilise additional resources, create jobs, and promote entrepreneurship and skills development. It was proposed that the ocean governance strategy be developed by the African Union (AU) member states, through the regional seas programmes in Africa, in cooperation with regional fisheries bodies, regional and sub-regional economic communities and other regional and national bodies. Regional seas programmes in Africa (e.g., Nairobi and Abidjan Conventions) are the regional platforms on EBM for marine resources in Exclusive Economic Zones (EEZ) and adjacent waters.

Prior to the AMCEN Declaration, the Abidjan Convention Conference of the Parties (COP) in March 2014 made a decision on ocean governance (CP11/4) to "pursue its efforts to provide guidance for alignment of existing relevant mechanisms; and to develop in partnership with regional and international partners, including the AU and the International Ocean Institute, a comprehensive ocean governance capacity-building programme;"

Equally so, in June 2015, the Contracting Parties to the Nairobi Convention made a decision (CP8/5) that requested the Secretariat to collaborate with the Barcelona, Abidjan and Jeddah Conventions, support by the United Nations Environment Programme, to contribute to the development of an African strategy on ocean governance in the context of the African Integrated Maritime Strategy 2050 and Agenda 2063.

The regional development of ocean governance policies provides the context for the growth of the Ocean or Blue Economy.

5 A New Perspective on an Existing Economy

The ocean and the coasts are drivers of the economy. Because of their outward-looking geography, ports and coastal communities have traditionally been centres for new ideas and innovation.

...in the 21st century, many ocean countries have reassessed the value of their oceans and coasts and have actively established strategies to develop and protect them.

According to the "Blue Growth" initiative of the European Commission (2012), rapid technological progress in working offshore in ever-deeper waters, increasing awareness that land and freshwater resources are finite, and the need to reduce greenhouse gas emissions by favouring seaborne transport over land are some of the new factors driving an expansion of the ocean economy.

The interest in the ocean economy is also stimulated by concern for global crises of the 2008 economic downturn, and the increasing impact of climate change (Park et al. 2014). These factors, as well as the existing and known benefits of ocean resources is stimulating an opportunity for "blue growth", which is for the European Commission (2012), an initiative to harness the untapped potential of Europe's oceans, seas and coasts for jobs and growth. Thus, in the 21st century, many ocean countries have reassessed the value of their oceans and coasts and have actively established strategies to develop and protect them.

5.1 Definitions of the Blue Economy?

Various definitions and concepts have evolved to form the understanding of the Blue Economy. Some of these are:

- i. The terms "ocean" and "coastal" economy are not synonymous, and the ocean economy is considerably smaller than the coastal economy (Colgan 2003);
- ii. The ocean economy is defined as any economic activity that directly or indirectly uses the sea as an input sea-specific activity as well as any economic activity that produces an input or uses an output from a sea-specific activity in their production process (Vega et al. 2012). This definition is a function of both industry and geography(Colgan 2003);
- iii. The coastal economy is all economic activity that takes place within the coastal region. This is the sum of employment, wages, and output in the region. For example, agriculture in coastal areas is not part of the ocean economy but it is part of the coastal economy (Colgan 2003);
- iv. While most of the ocean economy is located in the coastal regions, some of the ocean economy is located in non-coastal regions (Colgan 2003);
- v. Some of the coastal economy is the ocean economy but the coastal economy incorporates a broader set of economic activities (Colgan 2003);
- vi. The UNEP et al. (2010) reports links key sectors of the marine and coastal environment to the worldwide transition to a low-carbon, resource-efficient Green Economy with the seas and oceans as a key part of urgently needed transformations;
- vii. The European Commission "Blue Growth" is defined as "smart, sustainable and inclusive economic and employment growth from the oceans, seas and coasts" (ECORYS et al. 2012). The sectors of the ocean economy include; coastal tourism, marine transport, offshore oil and gas, fisheries, aquaculture, yachting, passenger ferry services, amongst many others;
- viii. According to UNECA (2016) the African "Blue Economy" recognises that the productivity of healthy freshwater and ocean ecosystems as the basis for aquatic and maritime-based economies. This ensures benefit for islands and other coastal countries, including land-locked States. The Blue Economy framework is composed of an integrated, systemic, dynamic, inclusive, participatory, and ecosystem-based approach in which sectoral barriers are minimised at the activity and governance level. Concomitantly, environmental, social, and economic dimensions are intertwined and pursued for all activities; and,
- ix. Globally, Small Island Developing States (SIDS) are a distinct group of developing countries that face common social, economic and environmental challenges (UNCTAD 2014). These include small populations, high dependency on development assistance and international trade (especially commodities through preferential trade regimes), susceptibility to external shocks, high transportation costs and low connectivity, susceptibility to natural disasters and high vulnerability to the impacts of climate change. For SIDS, oceans and seas constitute a much larger geographic area than their inland territory, especially when the EEZ is taken into account.

Notwithstanding the above, the Economist Intelligence Unit (2015) definition is used for the purposes of this report.

A sustainable ocean (or "blue") economy emerges when economic activity is in balance with the long-term capacity of ocean ecosystems to support this activity and remain resilient and healthy.

This definition points to the difference between the "ocean economy" and the "blue or sustainable ocean economy" as being one where the environmental risks of, and ecological damage from, economic activity are mitigated, or significantly reduced.

5.2 Blue/Ocean Economy Sectors

Various policies and strategies, depending on context and geographic location, provide different expressions of the key sectors that make up the Blue/Ocean Economy (African Union 2012; UNCTAD 2014; UNECA 2016). The classification standard and scope of the ocean economy in **Error! Reference source not found.** was proposed by Park et al. (2014).

Table 5-1. A Classification System of the Ocean Economy (taken from Park et al. 2014).

Sectors	Definition	Categories
Fisheries	The economic activity related to the production, processing and distribution of seafood.	Categories 1) Fishing 2) Aquaculture 3) Seafood processing 4) Seafood distribution and wholesale
Marine mining	The economic activity related to the production, extraction and processing of non-living resources in the seabed or seawater. But it doesn't include offshore oil & gas.	 Marine aggregates (limestone, sand, gravel) Seabed resources Salt Seawater dissolved minerals extraction
Offshore oil & gas	The economic activity related to the exploration and production of offshore oil and gas, includes operating and maintaining equipment related to this activity. It doesn't include building offshore platforms, equipment, and OSVs	1) Oil and gas E&P 2) Offshore supply services
Shipping and Port	The economic activity related to the transportation of freight and passengers through the ocean and river, and related to operation and management of ports.	 Passenger transportation Freight transportation Shipping business services Port development Port O&M (storage, load and unload, trucking, etc.)
Marine leisure and tourism	The economic activity related to marine and coastal leisure and tourism, which includes eating & drinking places, hotels & lodging places, marinas, marine sporting goods retailers, zoos, aquariums, recreational vehicle parks & campgrounds.	1) Eating & drinking places 2) Hotels & lodging places 3) Marinas, marine sporting goods retailers, zoos, aquarium, recreational vehicle parks & campgrounds 4) Marine festival, etc.
Marine construction	The economic activity which includes construction in the ocean and related to the sea.	Marine construction (seabed cable, pipeline) Marine related to construction (ports, bridges, etc.)
Marine equipment manufacturing	The economic activity which includes manufacturing of marine equipment and materials, such as various machinery, valve, cable, sensor, ship materials and so on (no building, repair and/or conversion and supply services).	Machinery, valve, cable, sensor, ship components Research equipment Others
Shipbuilding and repair	The economic activity related to the building, repair and maintenance of ships, boats, offshore platforms, and OSVs.	Ship & boat building Ship & boat repair and maintenance Offshore platform & OSV building Offshore platform & OSV repair and maintenance
Marine business services	The economic activity related to services to support ocean industry like finance, consulting, technical services, and so on. 10.	 Finance & Insurance, marine consulting Rental Technical services Inspection Ocean engineering, S/W service

		6) Labour supply services 7) Others
Marine R&D	he economic activity which is related to research and	1) Research and development
and education	development, education, and training	2) Education and training
Marine	The Economic activity related to defence, coast guard,	1) Defence, coast guard, security
administration	security, navigation and safety, coastal & marine	2) Navigation and safety
	environmental protection by government and public or	3) Coastal & marine environmental protection
	private organization.	4) Organization (government, public organization,
		NGO)
Others	The economic activity which is not classified elsewhere.	1) Ocean energy (tidal, wave, OTEC, offshore
	It also includes economic activity related to development	wind) industry
	of the ocean resources, which are ocean renewable energy,	2) Marine bio industry
	marine living resources, seawater and spatial, but just	3) Seawater desalination
	enter into the early commercial stage.	4) Marine CCS
		5) Others which are not classified elsewhere

5.3 What is the Blue/Ocean Economy worth?

The current value of our global ocean, whilst enormous, the ecological and economic productivity of the ocean we know today is only a fraction of what it could be (UNEP et al. 2010). Oceans contribute to our environmental, financial and societal

well-being to an extent that is difficult to summarise and

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value (Group of Experts of the Regular Process 2016). Since the

Globally, the total sales of marine industries was estimated to be approximately US\$4 trillion in 2007.

earlier recognition of the contribution of the ocean sector to the gross national product (Nathan Associates 1974; Pontecorvo et al. 1980), the concept of the ocean economy has developed in its definition, scope and importance.

- According to the Marine Nation 2025 policy of **Australia**, the ocean contributed approximately \$44 billion per annum to the 2013 economy which was projected to increase to A\$100 billion by 2025 (OPSAG 2013);
- In 2010 major ocean industries in **China** were estimated to have contributed US\$239 billion to the national economy and employed over 9 million individuals (Zhao et al. 2014);
- In 2007 the **Irish** marine sector contributed €1.44 billion in Gross Value Added to the wider Irish economy and employed over 17,000 individuals in full time equivalents (Morrissey et al. 2011);
- The total size of the 2007 **United State of America** ocean economy was 2.68 million employees working in over 140,000 establishments and earning nearly US\$94 billion in wages. These industries contributed over US\$238 billion to the U.S. GDP. It comprised 1.7% of U.S. GDP.
- The 2012 estimate of the maritime economic activity in **Europe** was a total of €485 billion employing 5.4 million people. Economic activities linked to the Blue Economy are not

- only found in coastal or sea areas but also include maritime activities located in landlocked States (ECORYS et al. 2012). This is approximately 4% of 2010 EU GDP (Surís-Regueiro et al. 2013).
- **Globally**, the total sales of marine industries was estimated to be approximately US\$4 trillion in 2007, providing a 3-4% value-added equivalent to global GDP (House of Commons South East Regional Committee 2009).

Considering the estimated value that the ocean economy contributes to global and national accounts, the current dominant discourse on the growth and development of the ocean economy is understandable. Economic measures are important to predict the impacts of climate change on the oceans, as are economic measures of the resilience of different areas of the ocean and coastal economies. Knowledge of both the ocean, coastal and national economies can help governments address the future impacts and demands posed by nature and human populations on our coasts and oceans (Kildow & McIlgorm 2010).

The blue economy is a recent and developing paradigm and the transition from an ocean economy to a blue economy will be a complex, long-term undertaking. Even so, the ocean will become an economic force this century (Economist Intelligence Unit 2015).

5.4 Tools/mechanism for implementing the Blue/Ocean Economy

It has been argued that the Blue Economy makes its strongest gains when leveraging existing institutional relationships to address strategic gaps that affect multiple sectors and players, and which catalyse visible benefits for them in the long term (UNEP 2015). Ecosystem-based

management, marine spatial planning, integrated coastal management and the establishment of marine protected areas are established elements in support of the Blue Economy.

UNECA (2016) identifies a number of tools and opportunities for the implementation of the Blue

See Kelleher (2015) for an introduction to the concept of the Blue Economy, its origins and foundation, and the role of the Nairobi Convention.

Economy. These include; area-based management (ABM) and land and marine spatial planning; blue carbon; eco-labelling; fair trade; green fees; ecotourism; and green ports. Some other tools identified were; common fisheries policies (transboundary; Fritz & Hanus (2015); common and consistent definition of economic sectors (Surís-Regueiro et al. 2013); global reporting and assessment of the state of the marine environment (see UNEP-Nairobi Convention & WIOMSA 2015; Department of Environmental Affairs 2012).

One of the most direct and powerful mechanisms for the implementation of the Blue Economy is the development of integrated maritime policies or strategies. These are comprehensive and coherent strategy to develop, coordinate and harmonize policies and strategies to exploit the maritime economy. These strategies consist of implementable components and activities that will result in actions towards achieving the goals set out by the Blue Economy policies.

For example, the European Union integrated governance framework for maritime affairs requires horizontal planning tools that cut across sea-related sectoral policies and support joined up policy making (Commission of the European Communities 2007). The Integrated Maritime Policy recognises that all matters relating to Europe's oceans and seas are interlinked, and that sea-related policies must develop in a joined-up way if we are to reap the desired results. An integrated governance framework such as the EU IMP planning tools that cut across sea-related sectoral policies and support united policy making. Three of these tools are of major importance:

- Maritime surveillance which is critical for the safe and secure use of marine space;
- Maritime spatial planning which is a key planning tool for sustainable decision-making; and a
- Comprehensive and accessible source of data and information.

5.5 Recognition of the Blue/Ocean Economy in Africa

A number of key information resources was used to compile the information in this report (Table 5-2).

Table 5-2. Key information resources and supporting policies on the Blue Economy.

Scale	Institution	Policy	Reference
Global	United Nations Environmental Programme (UNEP) & others	Green Economy in a Blue World; Blue Economy: Sharing Success Stories to Inspire Change	(UNEP et al. 2010; UNEP 2015)
	World Wildlife Fund (WWF)	Principles for a sustainable Blue Economy; Reviving the Ocean Economy: the case for action - 2015	(World Wildlife Fund 2015; Hoegh-Guldberg & et al. 2015)
Continental	African Union (AU)	Agenda 2063: The Vision For 2063	(African Union n.d.)
	AMCEN AU	Concept Note for Development of an Ocean Governance Strategy for Africa	(United Nations Environmental Programme 2015)
	United Nations Economic Commission for Africa (UNECA)	Africa's Blue Economy: A policy handbook	(UNECA 2016)
	AU	2050 Africa's Integrated Maritime Strategy (2050 AIM Strategy)	(African Union 2012)
Regional	United Nations Conference on Trade and Development (UNCTAD)	The Oceans Economy: Opportunities and Challenges for Small Island Developing States	(UNCTAD 2014)
	Western Indian Ocean Science Association (WIOMSA)	Building the Blue Economy in the WIO Region	(Kelleher 2015)

The Africa's Union's (AU) Agenda 2063⁴, which is a global strategy to optimise the use of Africa's resources for the benefit of all Africans, states that "blue/ocean economy shall be major contributors to continental transformation and accelerated economic growth". In March 2015 the Sub-regional Office for East Africa of the Economic Commission for Africa held its 19th session of the Intergovernmental Committee of Experts on the theme "Harnessing the Blue Economy for the development of Eastern Africa." The meeting urged States in Africa, where applicable, to mainstream the Blue Economy into their national and regional development plans (UNECA 2016).

According to UNECA (2016), the **Blue Economy in Africa**, covering both aquatic and marine spaces, encompasses a range of sectors including fisheries, aquaculture, tourism, transport, shipbuilding, energy, bioprospecting and underwater mining activities. This sentiment is mirrored by the **African Integrated Maritime Strategy** (AIMS) which reiterates the urgency to develop a sustainable "blue economy" initiative. The 2050 AIMS points out that the blue economy strategy for the continent would be a marine version of the green economy, one that improves African citizens well-being while significantly reducing marine environmental risks as well as ecological and biodiversity deficiencies. The overarching vision of the 2050 AIM Strategy is to foster increased wealth creation from Africa's oceans and seas by developing a sustainable thriving blue economy in a secure and environmentally sustainable manner. The 2050 provides a framework of 14 strategic actions that include: the establishment of a Combined Exclusive Maritime Zone of Africa; the creation of Regional Maritime Operational Centres; the development of an Integrated Marine Tourism and Leisure Strategy for Africa; and the development of a Maritime Governance approach.

The **Indian Ocean Rim Association** (IORA; <u>www.iora.net</u>) states that "Blue Economy" is the integration of Ocean Economy development with the principles of social inclusion, environmental sustainability and innovative, dynamic business models⁵. According to this definition, it is founded upon a systems approach, wherein renewable and organic inputs feed into sustainably designed systems to fuel "blue growth". This concept of "blue growth" addresses the problems of resource scarcity and waste disposal, while delivering sustainable development that enhances human welfare in a holistic manner.

The United Nations Economic Commission for Africa (UNECA)⁶ and the Southern African Development Commission⁷ all are recognising the role of the oceans in driving economic development of the WIO states. Given the vast endowment of oceanic resources, the littoral states representing the IORA countries consider the importance of harnessing blue economy for economic and social development in the region (Mohanty et al. 2015).

⁴ http://agenda2063.au.int/

⁵ http://www.iora.net/blue-economy/blue-economy.aspx

⁶ http://www.uneca.org/stories/discussing-blue-economy-why-it-important-eastern-africa

⁷ SADC TODAY Vol. 16 No 2 February 2014

6 Marine Spatial Planning

6.1 What is MSP?

Marine Spatial Planning (MSP) is an emerging public policy process for the allocation of marine space over time that aims to achieve ecological, economic and social objectives that are defined by a political process (see Caldow et al. 2015; Foley et al. 2010; Ehler & Douvere 2009). MSP is

"Marine spatial planning (MSP) is a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process" (Ehler & Douvere 2009).

showing great promise if built on a foundation of reliable and objective information, coupled with appropriately (multi-) scaled governance and institutions. The involvement of stakeholders forms a core component of the conceptual design of MSP. At face value MSP appears to be for the marine domain what integrated coastal management (ICM) promises for the coastal domain. Both processes use a similar policy development cycle incorporating adaptive management.

There are however substantial differences in the genealogy of the two companion processes (see Claydon 2006; Jay 2010).

Marine spatial planning (MSP) first started in the early 1980s as a conservation tool for marine sustainability with one of the earliest examples being the Great Barrier Reef marine protected area (Douvere & Ehler 2006; Kidd & Shaw 2014; Zervaki 2015). In more recent times it has been identified with the need to manage the resource use and space of marine systems due to the increase in human pressure and degradation of marine ecosystems (Zervaki 2015). MSP is not a single tool, but a framework to assist in improving decision-making in the marine environment (Secretariat of the Convention on Biological Diversity & Scientific and Technical Advisory Panel-GEF 2012).

The literature broadly defines ecosystem and ocean economy-based MSP (Tarvainen et al. 2015; Frazão Santos et al. 2014). There is no single definition of MSP globally but it can be defined as an area-based, integrated, adaptive, forward-planning and participatory framework (or tool) that analyses human uses and activities of specific marine areas in order to allow consistent decision-making to achieve social, ecological and economic objectives (Blau & Green 2015; Kidd & Shaw 2014; Zervaki 2015; Gee 2007; Agardy et al. 2012). The fabric that makes up MSP is based in social, institutional, legal and political threads and can therefore be a very complicated process in order to achieve a successful agreed upon plan. In addition, MSP takes into account spatial and temporal conditions which require this tool to be relatively flexible in its application (Jentoft & Knol 2014).

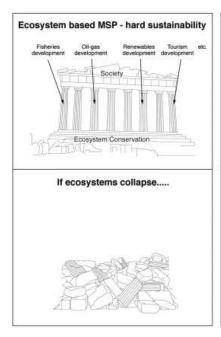
A number of authors (Frazão Santos et al. 2014; Qiu & Jones 2013) distinguish two types of approaches for developing MSP as (Figure 6-1. Different views on sustainability in MSP. The two figures on the left describe ecosystem-based MSP, and the anticipated consequences of ecosystem collapse, based on 'hard sustainability'. This view sees ecosystem conservation as the foundation

for MSP, and that irreversible collapses in marine ecosystems would eventually lead to collapses in the economic sectors that depend on such marine ecosystems. The two figures on the right describe integrated-use MSP, based on 'soft sustainability', in which economic growth is seen as the foundation of MSP, and the collapse of the 'environmental pillar' does not necessarily lead to the collapse of related socio-economic structures (taken from Qiu & Jones 2013). Figure 6-1 Figure 6-1. Different views on sustainability in MSP. The two figures on the left describe ecosystem-based MSP, and the anticipated consequences of ecosystem collapse, based on 'hard sustainability'. This view sees ecosystem conservation as the foundation for MSP, and that irreversible collapses in marine ecosystems would eventually lead to collapses in the economic sectors that depend on such marine ecosystems. The two figures on the right describe integrated-use MSP, based on 'soft sustainability', in which economic growth is seen as the foundation of MSP, and the collapse of the 'environmental pillar' does not necessarily lead to the collapse of related socio-economic structures (taken from Qiu & Jones 2013).):

- Hard (strong) sustainability of ecosystem-based MSP; and
- Soft (weak) sustainability of integrated-use MSP.

"Soft" sustainability describes a view that depletions in natural capital (crashes of natural stocks, decline in biodiversity etc.) can be compensated through economic growth, improvements in technology etc. This implies the primacy of the economic pillar of sustainability for the wellbeing of society. Contrary to this view is the position that natural capital cannot be substituted by manmade capital. Increasing man-made capital should therefore not be based on consuming natural capital and should not undermine the natural system and the processes that sustain human existence. This is referred to as "hard" sustainability. The environmental pillar is thereby considered as the foundation for the well-being of society (Qiu & Jones 2013).

"Although ecosystem-based MSP (hard sustainability) is more "precautionary", by putting the emphasis in achieving/maintaining ecosystems good environmental status, there is no assurance that it will be more effective than integrated-use MSP (soft sustainability) in delivering sustainable ocean management. Ultimately, it will all depend on how marine planning and management processes are conducted, and how marine ecosystem thresholds are accounted and assessed within such processes." (Frazão Santos et al. 2014).



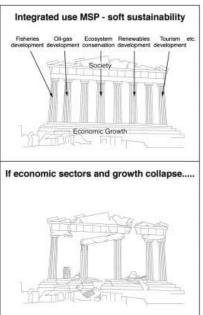


Figure 6-1. Different views on sustainability in MSP. The two figures on the left describe ecosystem-based MSP, and the anticipated consequences of ecosystem collapse, based on 'hard sustainability'. This view sees ecosystem conservation as the foundation for MSP, and that irreversible collapses in marine ecosystems would eventually lead to collapses in the economic sectors that depend on such marine ecosystems. The two figures on the right describe integrated-use MSP, based on 'soft sustainability', in which economic growth is seen as the foundation of MSP, and the collapse of the 'environmental pillar' does not necessarily lead to the collapse of related socio-economic structures (taken from Qiu & Jones 2013).

6.2 What are the benefits of MSP?

The benefits and uses of MSP is greatly highlighted in literature showing its ability to improve management of the marine ecosystem, aid in the reduction of ecosystem loss, aid in conflict reduction and is the practical approach to long-term ecosystem based management (Portman 2011; Kidd & Shaw 2014). However, although MSP is meant to be a participatory process, it tends to be championed by environmental government departments and therefore is biased towards natural science perspectives.

The public participation process can often be weak due to the lack of human habitation and private property ownership in the sea (like seen on land) (Kidd & Shaw 2014). This sense of being removed from the actual ocean makes it difficult for people to feel a sense of belonging or to fully understand the implications to their lives of decisions made about the marine system (Douvere 2008; Gee 2007). MSPs currently seem to focus on the management of the marine ecosystem and needs to put more focus into land-sea planning. The impact of land-based sources needs to be considered in order to have a holistic approach to the planning process.

As positive as the intentions of its principles are the process for MSP needs to be realistic in its planning without trying to do too much. If not planned properly and buy in from all stakeholders

is not achieved this can result in being a very expensive process that will ultimately fail (Agardy et al. 2012).

Some of the specific benefits of using MSP are summarised below (Ehler & Douvere 2009):

i. Ecological/ Environmental Benefits

- a. Identification of biological and ecological important areas
- b. Biodiversity objectives incorporated into planned decision-making
- c. Identification and reduction of conflicts between human use and nature
- d. Allocation of space for biodiversity and nature conservation
- e. Establish context for planning a network of marine protected areas
- f. Identification and reduction of the cumulative effects of human activities on marine ecosystems

ii. Economic Benefits

- a. Greater certainty of access to desirable areas for new private sector investments, frequently amortized over 20-30 years
- b. Identification of compatible uses within the same area of development
- c. Reduction of conflicts between incompatible uses
- d. Improved capacity to plan for new and changing human activities, including emerging technologies and their associated effects
- e. Better safety during operation of human activities
- f. Promotion of the efficient use of resources and space
- g. Streamlining and transparency in permit and licensing procedures

iii. Social Benefits

- a. Improved opportunities for community and citizen participation
- b. Identification of impacts of decisions on the allocation of ocean space (e.g., closure areas for certain uses, protected areas) for communities and economies onshore (e.g., employment, distribution of income)"
- c. Identification and improved protection of cultural heritage
- d. Identification and preservation of social and spiritual values related to ocean use (e.g., the ocean as an open space)

6.3 MSP and the Blue Economy

There is overwhelming support, guidance and directive for the use of MSP as a tool to assist the implementation of the Blue Economy, either embedded in maritime strategies (e.g., European Union, African Union), or independent thereof (e.g., South Africa).

According to the Blue Economy definition for Africa (UNECA 2016) MSP is essential for implementing the Blue Economy. MSP is described as an integrative, adaptive, and participatory process that brings together multiple users of the ocean at various levels — including energy,

industry, fisheries, oil and gas, government, conservation, and recreation — to make informed and coordinated decisions about how to use marine resources sustainably. It aims to achieve ecological, economic, and social objectives that usually have been specified through a political process.

According to the Blue Economy definition for Africa (UNECA 2016) MSP is essential for implementing the Blue Economy.

The 2050 AIMS (African Union 2012), a mechanism for

the implementation of the Blue Economy in Africa, establishes a framework for strategic actions including maritime governance and the future role of MSP. The 2050 AIMS confirms the importance of MSP as a tool for the implementation of the Blue Economy. By establishing and planning the maritime space for the economic activities, sectors and resources, MSP provides a policy process for the African Union, the Regional Economic Commissions and Member States to better determine how maritime zones can be sustainably used and protected. The 2050 AIM Strategy proposes MSP as a mechanism to balance competing sector-based interests. This needs to be one in order that a) marine space and resources are used efficiently and sustainably, b) decisions can be taken based on sound data and in-depth knowledge of the sea and inland water ways, and c) investors have greater legal certainty. Thus encouraging Africa's blue economic development.

Equally so, an ocean space approach or MSP can be particularly useful for Small Island Development States (SIDS) in sectors that are dependent on the sustainable management and use of common resources, and where there are multiple national/regional competent authorities (UNCTAD 2014). This report found that the MSP approach could be an important geographical and economic way to develop cooperation frameworks and partnership agreements. The UNCTAD (2014) report found that the MSP approach could be particularly useful in cases where:

- The sector's development depends on the management and use of common resources;
- There are multiple national/regional competent authorities with low levels of coordination; and,
- Joint investment and infrastructure is needed.

In January 2016 the Sustainable Ocean Initiative (SOI) Regional Capacity Development Workshop for East Africa, organised by the Convention on Biological Diversity in Nosy Be, Madagascar, has highlighted the differences in understanding of the concept and practice of MSP between countries

and related initiatives in the region (Convention on Biological Diversity 2016). It has also acknowledged that there is a need for ongoing capacity development in order to establish MSP as a tool to achieve sustainable development of an Ocean Economy within the region. MSP was proposed as marine-domain policy process for regional, national and subnational use. As such, MSP application will strive for seamless integration with existing efforts in ICM, ecosystem-based management (EBM), ecosystem approach to fisheries (EAF) and many other policy instruments. MSP should be positioned as a part of a regional evolution towards sustainable use of coastal and marine resources and the protection of biodiversity.

Finally, Visbeck et al. (2014) proposed that in order to secure wealth (from a Blue Economy) there is a need for a special sustainable development goal for the ocean and coasts. This should result in the creation of a comprehensive underlying set of ocean sustainability targets and effective indicators developed within a global Future Ocean Spatial Planning process would help in assessing the current status of marine systems, diagnosing ongoing trends, and providing information for inclusive, forward-looking, and sustainable ocean governance.

6.4 ICM and MSP

UNECA (2016) proposes that the African Blue Economy, rather than negate or marginalise, builds on ICM. The reasoning is that ICM already focusses on ecosystems, and embeds the principles of the Green Economy in a Blue World report and sustainable development, taking into account the three pillars of environmental, economic, and social sustainability, as highlighted in the 2012 Rio+20 outcome document, The Future We Want, and the United Nations five-year Action Agenda 2012–2016.

Equally compelling for the integration of MSP with ICM is the progress made on the ICZM Protocol to the Amended Nairobi Convention is being developed pursuant to decision CP6/3.3 of the Sixth Conference of Parties of the Nairobi Convention (COP6) to strengthen the legal framework of the Nairobi Convention for a more effective management of marine and coastal ecosystems across sectors and national boundaries to achieve sustainable development. The purpose of the ICZM Protocol is to provide a framework for regional and national integrated coastal zone management for sustainable development within the geographical coverage of the WIO. Most signatories to the Nairobi Convention have already developed national frameworks for ICM.

Coastal planning within the policy framework of national ICM efforts, combined with MSP, will provide a seamless and integrated land-ocean boundary management system. The final agreement on an ICZM Protocol will also result in the seamless management of the coast and the ocean not only at national scales, but also for transboundary management of coastal and marine resources, and ecosystem services.

Ultimately, the policy process for the implementation of ICM and MSP is so closely related that the only reason not to integrate the associated management tools is not due to technical failure, but rather a lack of recognition of the value of scaled and seamless coastal and ocean management.

A UNEP/EC workshop on *Area-based Management and Regional Cooperation for the Implementation of Ocean-related Sustainable Development Goals* that was held in Brussels in 2017 concluded that there is a scope for further advancing Integrated Coastal Zone Management and Marine Spatial Planning across borders (UNEP & EC 2017). It went on to recommend the conceptualisation of a facility to share data and experience to inform practical application of area-based management tools such as ICM, MSP and MPAs. This should include strengthening of socio-economic analysis, models for socio-economic values and issues (complementing ecosystem models) as well as mapping and assessment of cumulative impacts of human activities.

6.5 Step-by-step MSP

A step-by-step approach to setting up and applying MSP was published by the Intergovernmental

Oceanographic Commission (IOC; Ehler & Douvere 2009). The IOC guide provides a comprehensive overview of MSP. It focuses on describing a logical sequence of steps that are all required to achieve desired goals and objectives for marine areas. The IOC guide provides a useful starting point to implement MSP in the Nairobi Convention states.

A step-by-step approach to setting up and applying MSP was published by the Intergovernmental Oceanographic Commission (IOC; Ehler & Douvere 2009).

Countries can, using the IOC guide as a basis, adapt and customise the approach.

The guide provides a comprehensive overview of MSP. It focuses on describing a logical sequence of steps that are all required to achieve desired goals and objectives for marine areas (Figure 6-2).

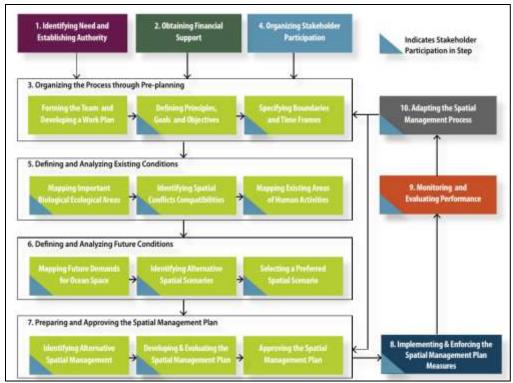


Figure 6-2. A Step-by-Step Approach to Marine Spatial Planning (taken from Ehler & Douvere 2009).

Some important things to remember when doing MSP:

- MSP is used to plan and manage human activities in marine areas, not marine ecosystems or components of ecosystems;
- MSP does not lead to a one-time plan. It is a continuing, iterative pro- cess that learns and adapts over time;
- These 10 steps are not simply a linear process that moves sequentially from step to step. Many feedback loops should be built into the process;
 - Analyses of existing and future conditions will change as new information is identified and incorporated in the planning process;
 - Stakeholder participation will change the planning process as it develops over time;
 and,
- Comprehensive MSP provides an integrated framework for management that provides a guide for, but does not replace, single-sector planning.

Refer to the UNESCO IOC Guide for comprehensive guidance on how to set up MSP.

7 Regional progress

Data and information on regional progress on the establishment of ocean polices for the Blue Economy and MSP, were collected for some countries in the WIO region. Methods included engaging in regional meetings and with experts and focal points. In addition, a national policy progress assessment framework was conducted for the countries. For a broad overview of the regional progress a rapid assessment was also used. Below is an explanation of these data collection methods.

7.1 Data Collection

Information on the state of policy development for ocean management, the Blue Economy and MSP was collected using two methods. Data and information was gathered at regional fora dealing with issues relevant to ocean policies, and also directly through engagement with experts and Focal Points of the Nairobi Convention.

7.1.1 Regional meetings

The first was through deliberations and engagements with experts and Nairobi Convention Focal Points at three regional fora that was convened to address topics relating the ocean policies, the Blue Economy and MSP. These fora were:

- I. The Convention for Biological Diversity Executive Secretary convened the Sustainable Ocean Initiative (SOI) Regional Capacity Development Workshop for East Africa, in Nosy Be, Madagascar, from 18 to 22 January 2016 (Convention on Biological Diversity 2016). This was done in collaboration with the Nairobi Convention Secretariat and the Western Indian Ocean Marine Science Association (WIOMSA) as well as various other relevant UN/international and regional organizations and initiatives. The workshop was hosted by the Government of Madagascar and financially supported by the Government of Japan, through the Japan Biodiversity Fund, and the Government of France, through the French Marine Protected Areas Agency (Agence des aires marines protégées). The workshop was attended by experts from Comoros, France, Kenya, Madagascar, Mozambique, Seychelles, Somalia, Agence Française des Aires Marines Protégées, BirdLife South Africa, Blue Solutions, Conservation International, Coastal Oceans Research and Development in the Indian Ocean (CORDIO), Indian Ocean Commission, International Ocean Institute-South Africa, International Union for Conservation of Nature (IUCN), Nairobi Convention Secretariat, Universidad Simon Bolivar, Universidade de Lisboa, University of Dar es Salaam, Western Indian Ocean Marine Science Association (WIOMSA), WWF-Madagascar Programme Office and the Wildlife Conservation Society.
- II. The second was a meeting of the Focal Points for the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean Region that was convened in Ebène, Mauritius from 23-25 March, 2016 (http://web.unep.org/nairobiconvention/). In Decision CP8/3, Contracting Parties requested the Secretariat to review the current status of the draft protocol on Integrated Coastal Zone Management in collaboration with Contracting Parties and other partners,

and facilitate discussions to explore other possible options for the effective management of marine and coastal environment, and report back on the options at or before the next Conference of Parties. Legal and technical experts from the Western Indian Ocean region; Comoros, France, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, United Republic of Tanzania, and the Republic of South Africa have been sponsored by the Nairobi Convention and the Indian Ocean Commission (IOC) to participate in the second negotiations meeting.

III. The Secretariat for the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean region in collaboration with UNEP-World Conservation Monitoring Centre (UNEP-WCMC), Institute for Advanced Sustainability Studies (IASS), Institute of Sustainable Development and International Relations (IDDRI), German Corporation for International Cooperation (GIZ) and the Western Indian Ocean Marine Science Association (WIOMSA) organised two meetings relevant to the topic of this report (http://web.unep.org/nairobiconvention/). These were a) The Partnership on Science to Policy Forum on 11-12 October, 2016; b) Area Based Planning tools and Exploring regional cooperation in the WIO to implement the U.N Oceans 2030 Agenda meeting on 13-14 October, 2016 in Mahe, Seychelles.

7.1.2. Direct engagement with experts and focal points

The experts and Focal Points that were contacted to provide input are shown in Table 7-1.

Table 7-1. Experts and Nairobi Convention Focal Points that were contacted to provide input as to the progress on policies relating to ocean management, the Blue Economy and Marine Spatial Planning.

Country	Contact	Institution
Mozambique	Prof. Salomao Bandeira,	Universidade Eduardo Mondlane
	Mr Xavier Chavana	Ministry of Economy and Finances
	Mr Marcos Sapateiro	Ministry of Economy and Finances
	Dr Atanasio Brito	Ministry of the Sea, Inland Waters and Fisheries
	Mr Celso Lopes	Ministry of the Sea, Inland Waters and Fisheries
	Dr. Paula Santana Afonso	Ministry of the Sea, Inland Waters and Fisheries
	Jorge Mafuca	Ministry of the Sea, Inland Waters and Fisheries
Tanzania	Dr Aboud Jumbe	Ministry of Environment
	Emelds Teikwa	Ministry of Environment
Reunion	Dr Erwann Lagabrielle	University of Reunion
Kenya	Stephen Katua	National Environmental Management Authority
	James Kamula	National Environmental Management Authority
Mauritius	Dr Rezah Badal	Office of the Prime Minister
Seychelles	Dominique Benzaken	Ministry of Finance, Trade and the Blue Economy
	Kelly Hoareau	University of Seychelles
Madagascar	Erwann Lagabrielle	University of Reunion
Comoros		
South Africa	Dr Louis Celliers	CSIR
Somalia	Dr Abdulkadir Sidi Sheikh	Office of the Prime Minister

7.2 National Policy Progress Assessment Framework

In addition to the regional meetings, the Nairobi Convention Focal Points were also requested to respond to a questionnaire that was designed to capture the specific policy progress relating to ocean management, the Blue Economy and MSP. The questionnaire design was based on the policy cycle for the Blue Economy (UNECA, 2016) and MSP (Ehler and Douvere, 2009). These are shown in Figure 7-1 and the questionnaire is provided in Appendix I.

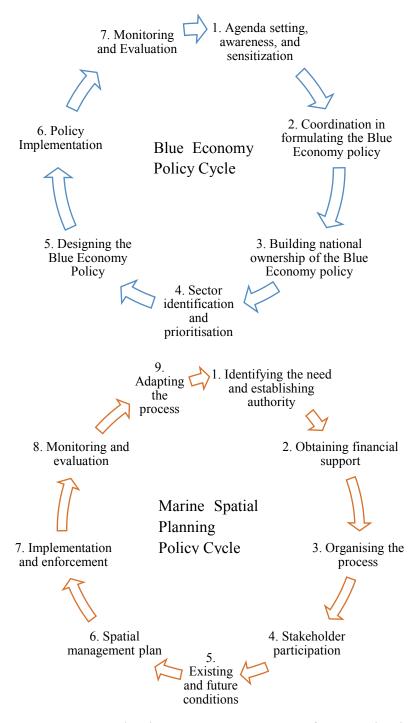


Figure 7-1. National policy progress assessment framework relating to implementation of the A) Blue Economy (adapted from UNECA, 2016) and B) Marine Spatial Planning (adapted from Ehler and Douvere, 2009). See also Appendix I of this report.

A limited number of returns were received (n=2; Mauritius and Seychelles) and the use of the framework was put on hold.

7.3 Rapid Assessment of Policy Progress

National development of ocean policies, Blue Economy and MSP processes in the region is just commencing, with the exception of a few states. A rapid assessment method was used to present the state of ocean policy development, the Blue Economy and MSP in the WIO region. National progress on three topics: 1) Ocean and coastal policy (in support of the BE); 2) Blue Economy policy; and 3) Marine Spatial Planning policy/implementation was scored using a 5-scale scoring system (Table 7-2). Scoring was based on the limited number of returns from the national policy progress assessment framework outlined in Section 2.2 above, face-to-face engagements with experts and Nairobi Convention Focal Points at the meetings described above, as well as by email correspondence.

Table 7-2. Scoring system to provide a broad overview of the regional progress on the national ocean policy development, the Blue Economy and MSP in the WIO region.

Score	Description
1	Policy cycle not started or conceptual only with no process in place or efforts to establish public and stakeholder awareness. Components of the policy process may be underway or complete.
2	Policy cycle has been initiated and the process is in the early stages of completion. There has been efforts to communicate the policy objectives to stakeholders and the public.
3	Policy cycle is advancing with clear direction and objectives. This includes status quo assessments, programme preparation and action plans.
4	Policy cycle is nearing completion with some objectives achieved. Monitoring and evaluation of the process may have been started.
5	Technical and political process has been completed and policy process has been evaluated. The next policy cycle is ready to be started.

7.4 Progress: MSP, ocean governance and the Blue Economy

The assessment of progress of policies relating to ocean management, the Blue Economy and Marine Spatial Planning indicate that the region is in the initial stages of development of these tools (Table 7-3). Small Island Development State of the WIO appears to have made more progress on all the policies assessed.

Table 7-3. Progress on the development of policies relating to ocean management, the Blue Economy and Marine Spatial Planning in mainland nations of the Western Indian Ocean.

0	1	ω		limited to fisheries issues.	Fisheries Development and Management Act 2016; National	
0	1	ω		limited to fisheries issues.	Fisheries Development and Management Act 2016: National	
				Fisheries and Blue Economy practically	in support of ocean governance, e.g.,	
			MSP	delegated the responsibility of developing	of offshore natural resources. Many	
			Environment Clearinghouse Mechanism fundamental aspect of	Department of Fisheries and Blue Economy. In practice there is no ministry that has been	2008, ICZM Policy and draft Ocean Policy for management and exploitation	
			Proposed Kenya Coastal and Marine	Institutional recognition through State	National Oceans and Fisheries Policy	Kenya
0	0	0	Unknown, probably limited.	Unknown, probably limited.	Unknown, probably limited.	Somalia
Marine Spatial Planning	Blue Economy	Ocean Policy	Marine Spatial Planning Policy and Institutions	Blue/Ocean Economy Policy and Institutions	Ocean and Coastal Policy Framework	Country

Sout	
South Africa	Country
ICM Act 2008 adopted, National Environmental Management of the Ocean in draft format (White Paper). Overall framework provided by National Environmental Management Act, Marine Living Resources Act and others.	Ocean and Coastal Policy Framework
Ocean economy planning is being fast-tracked through Operation Phakisa. Complex and extensive planning process with overall support and facilitation by Department of Environmental Affairs. Oversight by Department of Planning, Monitoring and Evaluation. Priority sectors planned in detail (3-feet Plans). Implementation underway.	Blue/Ocean Economy Policy and Institutions
Marine Spatial Planning Bill has been published for comment and currently being amended. Draft Marine Spatial Planning Framework 2016 published for comments. Extensive national biodiversity conservation planning process as part of the National Biodiversity Assessment.	Marine Spatial Planning Policy and Institutions
2	Ocean Policy
ω	Blue Economy
2	Marine Spatial Planning

Table 7-4. Progress on the development of policies relating to ocean management, the Blue Economy and Marine Spatial Planning in island nations of the Western Indian Ocean.

Mauritius	Seychelles	Comoros	Country
A collection of policies closely linked to Ocean Economy initiative. A nonstatutory Integrated Coastal Zone Strategy has been drawn up and an Action Plan is being implemented. A State of the Coast (State of Environment) was published. ICM implementation is supported by a Division of the Ministry of Environment and Sustainable Development	A collection of policies closely linked to Ocean Economy initiative	A National Plan for Integrated Coastal Management was finalised in 2010 under the EU-funded ReCoMap project.	Ocean and Coastal Policy Framework
Ocean Economy Road Map; Aquaculture Master Plan 2007; Government Programme 2015-2020, Vision 2030 and Budget Speech 32016-2017 (para 117); etc. The Blue Economy overseen by the National Ocean Council.	Seychelles Blue Economy Strategic Roadmap and Implementation. Also supported by the National Development Strategy, and the Seychelles Sustainable Development Strategy (SSDS), 2012–2020. Development is facilitated by Ministry of Finance, Trade and the Blue Economy.	Unknown, probably limited	Blue/Ocean Economy Policy and Institutions
The World Bank hosted a workshop at the Mauritius Oceanography Institute on the potential for MSP in Mauritius in relation to Ocean Economy and Climate Change. Mauritian Government project initiated: Developing an Enhanced Ocean Observatory in support of Ocean Exploration and Development by the Department of Continental Shelf, Maritime Zones Administration & Exploration. MSP supported by Department for Continental Shelf and Maritime Zones Administration and Exploration in the Prime Minister's Office.	The Seychelles MSP Initiative is a government- led process aimed at supporting the sustainable and long-term use and health of marine resources throughout the Seychelles EEZ. Overall goal of MSP supported by the Seychelles Constitution (Article 38) and the SSDS 2012–2020. Seychelles National Climate Change Strategy (2009); Fisheries Act (1998; and Bill 2012) and Regulations; and the Seychelles' Protected Areas Policy.	Unknown, probably limited	Marine Spatial Planning Policy and Institutions
ы	-	0	Ocean Policy
2	2	0	Blue Economy
1	2		Marine Spatial Planning

7	
Madagascar	Reunion
	Ocean policy is provided by Integrated Maritime Policy for the European Union (COM (2007) 575); Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe (2002/413/EC); Marine Strategy Framework Directive (2008/56/EC). Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning
Based on CBD meeting in Nosy Be, January 2016 conceptual at best. State Secretary in charge of the Sea advising the Minister of Fisheries and Fishery Resources	MSP and Blue Economy are seen as a framework/driving concepts for existing policy instruments. Other Blue Economy policy drivers include the Blue Growth strategy (COM(2012) 494); Innovation in the Blue Economy: realising the potential of our seas and oceans for jobs and growth (COM(2014) 254)
D meeting in Nosy Be, sonceptual at best. Minister and Fishery Resources + Environment, Ecology and ister at the Presidency of and Petroleum sts the "Centre de fusion maritime (CFIM)." al Planning task force is set tate Secretary in charge of 3 the Minister of Fisheries ources.	The policy landscape for MSP in Europe is emerging. The concept of MSP is relatively new and important policy drivers are the Marine Strategy Framework Directive (MSFD, Directive 2008/56/EC) and Integrated Maritime Policy (IMP, COM(2007) 575). In addition, a diverse range of other policies considered to be drivers of MSP (see Qiu & Jones 2013). Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning.
0	
0	2
0	2

The scoring of progress represented as national progress towards implementation demonstrates the limited progress in the region. The SIDS are leading the development of the coastal and ocean policies.

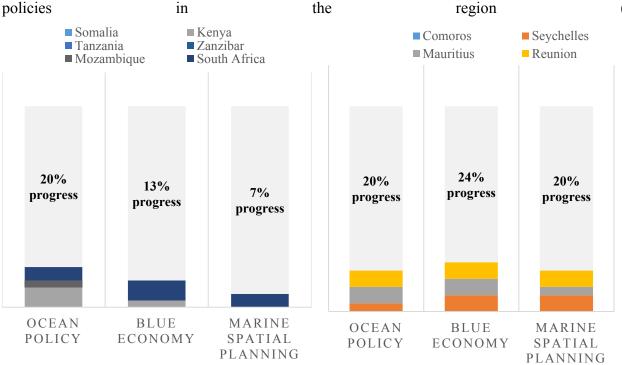


Figure 7-2). Overall progress in the region remains muted (Figure 7-3). Seychelles, Mauritius and South Africa are leading the development of these policies in the region.

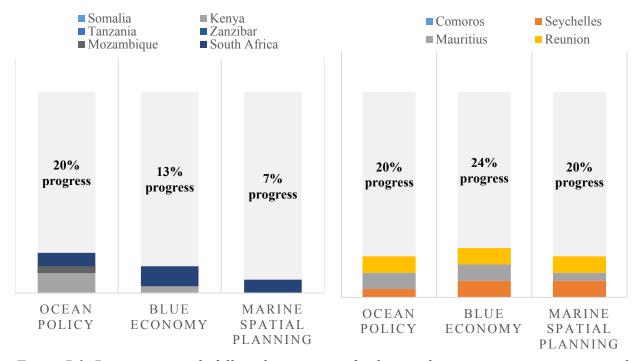


Figure 7-2. Progress towards full implementation of policies relating to ocean management, the Blue Economy and marine spatial planning in mainland states of the Western Indian Ocean.

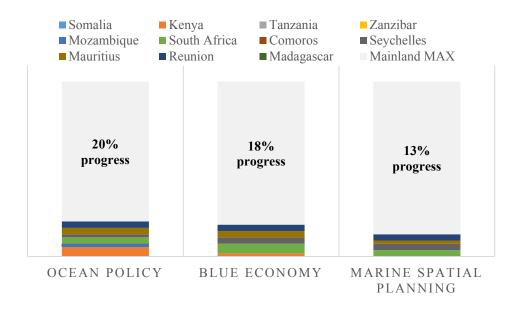


Figure 7-3. Progress towards full implementation of policies relating to ocean management, the Blue Economy and marine spatial planning in states of the Western Indian Ocean.

The development of ocean policies, the Blue Economy and MSP by nations of the WIO has commenced. Generally speaking, the progress on these policies reflect the early stages of development. Some nations have, however, been actively pursuing the development of these ocean-related policy mechanisms with Seychelles, Mauritius and South Africa being the most advanced. The section the follows looks at the three country specific case studies and their progress. The SIDS appears to be particularly interested in the development of the Blue Economy while the development of MSP policy instruments is most advanced in South Africa.

The interest and progress of the SIDS is in line with the shifting perception of the islands being "coastal states" to that of being "ocean states". Their large ocean areas, small land-masses, relative higher vulnerability and greater access to ocean resources appears to be a driver for ocean related policies.

The assessment of policy development in the WIO supports the following statements:

- The Contracting Parties to the Nairobi Convention are making progress on COP decision CP8/10 and CP8/13;
- The development of the three policy cycles by the three states most advanced indicate very different process, priorities and initial objectives;
- A number of states are in the conceptual stages of the policy cycles and it is proposed that directed support by the Secretariat would enhance and accelerate the process;
- It seem reasonable that a regional expression of "principles" regarding the policy process would improve the overall development cycle and may improve the consistency of policies and thereby reducing future transboundary alignment or actions relating to the use of ocean space;

- The progress already made offers a valuable source of "good practice" examples, as well as learning from activities that did not work as planned;
- The assessment of progress towards policy implementation offers an indicator of the state of ocean governance and should be included in future State of the Coast reports. A regionally negotiated assessment framework should become part of a reporting structure of Contracting Parties to the Nairobi Convention;
- The development of regional capacity relating to the development of these policies is a priority that has also been supported by the various regional fora; and,
- The development of a regional approach and principles for the development of ocean management policies, the Blue Economy and MSP appears to be indicated.

8 Implementing MSP in the WIO

Several countries in the WIO are pursuing Blue/Ocean Economy and MSP initiatives. The Government of Seychelles has adopted the Blue Economy Concept⁸, Mauritius is investing in the Ocean Economy⁹ and the Republic of South Africa has developed Operation Phakisa¹⁰ to "unlock"

the economic potential of the ocean in a sustainable manner". WIO states are developing ocean policies to support the blue growth strategies and further development of the Blue Economy holds promise for the Indian Ocean region.

Several countries in the WIO are pursuing Blue/Ocean Economy & MSP initiatives.

It has also become clear that there are many different activities and initiatives related to MSP at the global, regional, sub-regional and national levels. The development and implementation of MSP is at different stages within some WIO countries. See examples below.

The author of this report recognises that MSP, ocean governance and the Blue Economy are rapidly evolving policy processes and that some of the information presented may be outdated by the time that the report is published. All efforts are made to ensure that contents are verified by a reputable source of information at the time of publication.

8.1 Case Study 1: The Ocean Economy - Mauritius

The Ocean Economy approach adopted by Mauritius was establishment through a policy framework which was developed through broad-based consultations with all stakeholders, including civil society and the general public. The Government Programme 2015 reflects the vision to transform Mauritius into an "ocean state" by promoting the ocean economy as one of its main pillars of development. A Ministry of Ocean Economy, Marine Resources, Fisheries, Shipping and Outer Island dedicated to ocean related activities has been created.

The Ocean Economy project aims to:

- Providing an integrated approach to the development, management, regulation and promotion of ocean-related economic activities both in the Ocean, the seabed and the subsoil as well as onshore ocean-related services and industries
- Ensuring policy coordination among all Ministries and public sector agencies dealing with activities related to our Ocean space
- Increasing the share of ocean-related economic activities in our GDP
- Improving Ocean Governance and ensuring proper ocean and coastal management, conservation, healthy marine eco-system and safety for all ocean-related activities

http://www.natureseychelles.org/what-we-do/blue-economy

http://www.oceaneconomy.mu/, supported by Maurice Ile Durable (http://mid.govmu.org/)

http://www.operationphakisa.gov.za/operations/oel/pages/default.aspx

Mauritius launched its Oceans Economy Roadmap in 2013 (Republic of Mauritius 2013). The road map places emphasis on the need to make use of the untapped value locked up in the EEZ by ensuring sustainable and coordinated utilisation of living and non-living resources (UNCTAD 2014). The development opportunities and sectors include: fisheries; development of deep ocean water applications (DOWA); commercial marinas; bunkering; aquaculture.

According to the Ocean Economy Roadmap the protection maritime health and the preservation of biological diversity remains a core asset. The Roadmap recommends adopting measurable goals to better monitor the sustainable development of economic activities related to the oceans. This is aligned with the 2005 Mauritius Strategy for the further implementation of the Barbados Plan of Action and the Maurice Ile Durable Policy Strategy and Action Plan.

The implementation of the Maurice Ile Durable (MID) vision steers the sustainable growth of the Republic of Mauritius, and targets a better quality of life for all Mauritians. The MID concept revolves around making Mauritius a world model of sustainable development, particularly in the context of SIDS (Small Island Developing States). The MID Policy Statement on the Ocean Economy:

"To exploit the living and non-living resources of the ocean in a sustainable manner. Concurrently it is important to protect and restore the health, productivity and resilience of oceans and marine ecosystems, and maintain their biodiversity, enable their conservation and sustainable use for present and future generations." MID Policy, Strategy and Action Development, May 2013

Over and above the establishment of the Ocean Economy, the Government of Mauritius has initiated MSP for the implementation of the Project: Developing an Enhanced Ocean Observatory in support of Ocean Exploration and Development by the Department of Continental Shelf, Maritime Zones Administration & Exploration. The project aims at developing a database framework for the sustainable management of marine resources for Marine Spatial Planning in Mauritius. Part of the project includes the development of a data catalogue in order to compile information on existing marine spatial data covering the maritime area of Mauritius.

8.2 Case Study 2: Blue Economy and MSP: Seychelles

The Seychelles definition of the Blue Economy refers to the economic activities that directly or indirectly take place in marine and coastal areas, use outputs from the ocean, and put goods and services into ocean activities (UNEP 2015). It is recognised as a mechanism to realise sustainable economic development based around an ocean-based economy. The Blue Economy Department

within the Ministry of Finance, Trade, and the Blue Economy has oversight over the implementation/realisation of the Blue Economy in the Seychelles. The government of Seychelles has also recently developed a "Seychelles' Blue



Economy Roadmap: Defining a Pathway to Prosperity."

The Seychelles Marine Spatial Planning (SMSP) Initiative, initiated in 2014, is a process focused on planning for and management of the sustainable and long-term use and health of the Seychelles Exclusive Economic Zone (EEZ)(SMSP 2016). The overall goal of the SMSP (supported by the Seychelles Constitution and the Seychelles Sustainable Development Strategy 2012-2020) is:

"Develop and implement an integrated marine plan to optimise the sustainable use and effective management of the Seychelles marine environment while ensuring and improving the social, cultural and economic wellbeing of its people."

The final Seychelles' Marine Plan (2020) will be a multi-use plan will guide the strategies and decisions of the Seychelles Conservation & Climate Adaptation Trust (SeyCCAT) established as part of the Debt-for-Climate-Change-Adaptation swap. The planning scope of the Seychelles Marine Plan covers the entire 1,374,000 km² of the EEZ.

The SMSP has an extensive governance and process structure starting with a ministerial-level Executive Committee, a MSP Steering Committee dealing with administrative and process management, and science and technical issues. The MSP Steering Committee provides recommendations, advice and oversight to the MSP Initiative and reports to the Executive Management. Ecological and socio-economic input and advice on planning outputs and assist with developing planning products are provided by Technical Working Groups (Figure 8-1). Members of these groups include marine and terrestrial ecologists, economists, environmental non-governmental organisations, and private sector representatives for fishing, oil & gas, tourism, ports, renewable energy, and economic development.

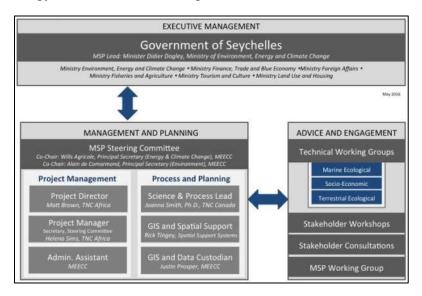


Figure 8-1. Governance framework of the Seychelles' Marine Spatial Planning Initiative (http://seymsp.com/; accessed 10 August 2016).

The SMSP Initiative methodology is underpinned by the principles and process adapted from the 2009 IOC-UNESCO Step-by-step marine planning guide (Ehler & Douvere 2009). The SMSP is a two-phase initiative launched in 2014 and set to conclude 2020 with a Cabinet adopted Final Marine Plan including 30 % of the EEZ under marine protection. Also included is an implementation plan, monitoring and review plan, priority strategies, integration with other projects, and budget (SMSP 2016).

8.3 Case Study 3: Ocean Economy and MSP: South Africa

The Operation Phakisa initiative was launched in June 2014 and aims to accelerate execution of the National Development Plan. Operation Phakisa is goal-specific and focused on the

achievement of national development goal targets within a specified time frame, with effective monitoring of implementation and delivery. The rationale for Operation Phakisa is predominantly economic. President



(van Wyk 2015). Specific outcomes includes inclusiveness, participation, job creation, value addition, and links to industrialization, particularly in the aquaculture sector (contained in detailed "3-feet" plans). The approach also facilitates cross-sectoral interactions and discussions by and among specialists and other public and private sector stakeholders. Each sector is assigned a lead agency.

The Oceans Lab initiative of Operation Phakisa specifically aims to establish a framework for the development and wealth creation from South Africa's Blue Economy (http://www.operationphakisa.gov.za). Interdepartmental cooperation is led by the Department of Planning, Monitoring and Evaluation while the Department of Environmental Affairs (DEA) takes the lead on overall facilitation of the Oceans Lab initiative.

The Ocean Economy programme under Operation Phakisa focuses on: i) Marine Transport and Manufacturing (Department of Transport); ii) Offshore Oil and Gas (Department of Mineral Resources); iii) Aquaculture (Department of Agriculture, Forestry and Fisheries - DAFF); iv) Marine Protection Services and Ocean Governance (DEA); v) Small Harbour Development (Department of Public Works); and vi) Coastal and Marine Tourism (Department of Tourism).

MSP for South Africa is being facilitated as an Operation Phakisa initiative forming part of the Marine Protection Services and Ocean Governance focus area. South Africa's shared vision for MSP is to achieve:

"A productive, healthy and safe ocean that is accessible, understood, equitably governed and sustainably developed and managed for the benefit of all."

Cabinet has designated the Department of Environmental Affairs (DEA) as the coordinating Department for MSP in South Africa. In this capacity, DEA will collaborate with all relevant national authorities that have a mandate relating to marine planning and management. A National (governmental) Working Group will develop and implement MSP. The National MSP Working Group consists of representatives from government departments including: DEA; DAFF; and the Departments of Energy; Defence; Mineral Resources; Tourism; and Transport.

It is intended that an Act of Parliament will provide a framework for marine spatial planning and the development of a marine spatial plan. It will also define institutional arrangements for the implementation of the marine spatial plan and governance of the use of the ocean by multiple sectors. The MSP Bill is currently being revised following public comment while the MSP Framework was published during 2016.

8.4 Summary

Table 9.8-1. A comparison of Blue/Ocean Economy and MSP initiatives in Seychelles and South Africa.

MSP MPA Effects	MSP Outputs and Timeline	odology Governance	MSP & Supporting Policies	MSP Framework	BE Governance I framework	(BE)	Blue or Ocean l	
The adopted Marine Plan aims to have 30 % of the EEZ under marine protection.	Phase 1 (2014-2016): coarse scale zoning design and draft management considerations to conclude with a Draft Marine Plan. Phase 2 (2016-2020): refinement, implementation plan, monitoring and review plan, and finalising budgets and costs to conclude with a Final Marine Plan.	Based on IOC-UNESCO Guide Executive Management, MSP Steering Committee; Technical Working Groups, and stakeholder consultation and workshops	Overall goal of MSP supported by the Seychelles Constitution (Article 38) and the SSDS 2012–2020. Seychelles National Climate Change Strategy (2009); Fisheries Act (1998; and Bill 2012) and Regulations; and the Seychelles' Protected Areas Policy.	The Seychelles MSP Initiative is a government- led process aimed at supporting the sustainable and long-term use and health of marine resources throughout the Seychelles EEZ.	Ministry of Finance, Trade and the Blue Economy	Seychelles Blue Economy Strategic Roadmap and Implementation. Also supported by the National Development Strategy, and the Seychelles Sustainable Development Strategy (SSDS), 2012–2020.	Blue Economy	Savohallas
Only 0.4% of South Africa's mainland marine territory is protected within Marine Protected Areas (MPAs) and most offshore habitat types are unprotected. The offshore expansion of South Africa's MPA network is a national priority. As part of the Office of the President's Operation Phakisa initiative, South Africa has committed to expanding its Marine Protected Areas (MPAs) to 5% the Economic Exclusion Zone (EEZ) by 2017.	According to the draft National Framework document the Marine Area plans will be developed sequentially.	South Africa's National Framework on Marine Spatial Planning A National (i.e. governmental) Working Group will develop MSP and implement the process. It is proposed that the National Working Group will report to a Directors-General Marine Spatial Planning Committee, and the Ocean Ministerial Management Committee and where appropriate Cabinet.	MSP supported by the Constitution and broadly by the National Development Plan. An Act of Parliament will provide a framework for marine spatial planning and the development of a marine spatial plan (currently a MSP Bill, 2016). Other relevant ocean-related sector legislation which includes but is not limited to the National Environmental Management Act (Act No. 107 of 1998); National Environmental Management: Protected Areas Act, 2 (2003); National Environmental Management: Biodiversity Act (2004); National Environmental Management: Integrated Coastal Management Act (2008); Marine Living Resources Act, (1998); Mineral and Petroleum Resources Development Act (2002); Maritime Traffic Act (1981); Marine Pollution (Intervention) Act (1987); Maritime Zones Act (1994).	DEA has been assigned as the lead agency for MSP implementation. MSP as a governing mechanism is being facilitated as part of Operation Phakisa.	The Department of Planning, Monitoring and Evaluation undertakes overall coordination of Operation Phakisa while the first phase of implementation of the Oceans Lab is being led by the Department of Environmental Affairs (DEA).	No specific ocean economy policies but a framework provided by the Operation Phakisa Oceans Lab (in support of the National Development Plan) and the resulting detailed "3-feet" plans. Previously the Department of Environmental Affairs were drafting an Ocean Policy (White Paper on the National Environmental Management of the Ocean 2014) but this has since been put on hold.	Ocean Economy	South Africa

9 Recommendations

This report recommends an increasing role for the Nairobi Convention in supporting a Blue Economy for the Western Indian Ocean (Kelleher 2015). This includes supporting efforts to establish good environmental governance, regional cooperation, connectivity, capacity building, shared knowledge and common cause in global fora, including emerging financing opportunities

for development of the Blue Economy. Supporting the Blue Economy agenda enlarges the domain of the Nairobi Convention beyond environmental conservation. The Nairobi Convention is a champion for establishment of MSP as a tool for the implementation of the Blue Economy by promoting its inclusion on the agendas of the Regional Economic Commissions.

MSP is not new to or outside the scope of existing coastal and marine management systems, policies and legal mechanisms.

MSP is proposed as one of the most important tools to implement the Blue Economy in the WIO. The acceptance and implementation of MSP by the Contracting Parties to the Nairobi Convention will create a relationship between regional economic goals and ambitions for improved environmental sustainability. The Nairobi Convention can be a powerful agent for the responsible development of the Blue Economy.

The potential and demonstrated value of MSP is well-established, as is its recognition of its

The recognition of the role of MSP alongside and in concert with that of ICM is important for the WIO region.

contribution to planning the sustainable use of the coastal and marine space. This includes the value of MSP as a mechanism to give effect to resource planning of the WIO Blue Economy. There is a timely opportunity for the Nairobi Convention Secretariat to develop a project/programme to provide guidance to member states

on the implementation of MSP. MSP is not new to or outside the scope of existing coastal and marine management systems, policies and legal mechanisms. MSP is recognised by a number of continental and regional "non-environmental" policies more aligned with the Blue Economy. This is an opportunity to embed ecosystem-based MSP within the larger context of national legislation and policies.

The recognition of the role of MSP alongside and in concert with that of ICM is important for the region. Especially within the context of the First Negotiated Draft of the Integrated Coastal Zone Management Protocol for the Nairobi Convention. It is also important to improve regional and national integration of climate change adaptation, ICM and MSP.

The Nairobi Convention National Focal Points are important agents for the monitoring of the implementation of the Blue Economy and MSP. They are requested to provide information in response to the tabling of this concept note.

Some general recommendations (Mccann et al. 2014) for the development of MSP in the region includes communicating the value of MSP, improve MSP practice through implementation and adaptive management, develop curricula to support the training of MSP practitioners, documenting and evaluate existing decision-making tools.

KEY RECOMMENDATIONS:

- 1. Support an increasing role for the Contracting Parties to the Nairobi Convention in supporting a Blue Economy for the Western Indian Ocean;
- 2. Agree that the Contracting Parties to the Nairobi Convention are champions for establishment of MSP as a tool for the implementation of the Blue Economy;
- 3. Through the Contracting Parties to the Nairobi Convention seek to embed ecosystem-based MSP within the larger context of national legislation and policies;
- 4. Recognise the role of MSP alongside, and in concert with that of ICM;
- 5. Support and ratify the Integrated Coastal Zone Management (ICZM) Protocol for the Nairobi Convention; and,
- 6. Improve regional and national integration of climate change adaptation, ICM and MSP.

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