



The Need and Importance of Angolan Maritime Spatial Planning: Security and the Blue Economy

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The United Nations Convention on the Law of the Sea represented a milestone in the development of maritime regulation, in addition to establishing a clear legal regime in coastal countries to be complied with, both at sea and in its overlying airspace, on the sea floor and subsoil. This work aims to articulate the models of development and implementation of the Maritime Space (MSP) in the countries influenced by the Benguela Current (BCC), thus contributing to the implementation of the MSP process in Angola, based on the case study -Palmeirinhas-Mouth of the Tapado River. In order to fulfill the objectives of this study, it was decided to carry out research of a demonstrative nature, with a qualitative aspect that focused on exploratory analysis, including the interaction of variables to understand the nature and characteristics of the phenomena, using a set of tasks for data collection in the pilot area under study. As a result, the alignment in the identification and analysis of policies, strategies for the sea and blue growth in the countries of the Benguela Current namely South Africa, Namibia and Angola and also in the identification of the institutional and legal framework for MSP. Countries see MSP as an opportunity to improve the national and regional quality of ocean governance by promoting cooperation between sectors, stakeholders and government authorities. In this context, maritime spatial planning emerges as an essential tool to manage development and use in order to achieve the desired results. In this way, it will be possible to attenuate the maritime space in the most sustainable and integrated way. The BCC countries, and the BCLME as a whole, are among the first African countries and among the first developing countries and LMEs worldwide to introduce OEM.

1. Introduction

After the Second World War, there was a general mobilization of States towards the ocean to ensure access to marine natural resources. Consequently, many States have opted to conclude treaties and agreements for the delimitation of maritime boundaries or for the resolution of conflicts (Casimiro, 2015). The need to explore the ocean floor and discover new ways to take advantage of marine resources has driven the advancement of scientific research and existing technologies, providing an increasingly comprehensive view of the applications of living and non-living coastal and marine resources, increasing the interest of states in the ocean as a vector of strategic development (Casimiro, 2015). The intense and growing demand for maritime space for different purposes, such as fishing, tourism, renewable energies, maritime transport, aquaculture, among many others, together with the need for nature conservation and protection of biodiversity and underwater cultural heritage, and the multiple pressures exerted on resources, require an integrated approach to the management of our oceans (Santos et al., 2019). The 1982 United Nations Convention on the Law of the Sea (UNCLOS) is one of the most comprehensive attempts to create a regime for the governance and establishment of nations' rights with respect to the oceans (Menezes, 2015). The main objective of UNCLOS was to establish a

legal order for the seas and oceans, in order to facilitate international communications and the peaceful use of the seas and oceans. This convention resulted in several innovations in the governance of the marine environment, such as the delimitation and definition of marine zones, the concept of exclusive economic zone (EEZ) as well as sovereignty up to 12 nautical miles, the formal recognition of the world heritage of the sea and the establishment of the International Seabed Authority, among others. The entry into force of UNCLOS in 1994 revived expectations of economic success from the exploitation of ocean resources (Menezes, 2015).

The United Nations Convention on the Law of the Sea (UNCLOS) is an international treaty that was adopted and signed in 1982. It replaced the four Geneva Conventions of April 1958, which concerned respectively the territorial sea and the contiguous zone, the continental shelf, the high seas, fisheries and the conservation of living resources on the high seas. This Convention has created three new institutions on the international scene: the International Tribunal for the Law of the Sea; the International Seabed Authority and the Commission on the Limits of the Continental Shelf. It represented a milestone in the development of maritime regulation, in addition to establishing a clear legal regime in coastal countries to be complied with, both at sea and

in its overlying airspace, on the sea floor and subsoil, it also represents another step in the evolution of the Law of the Sea which, in its trajectory, oscillated between the doctrines that defended the sea as property, and among those who defended total freedom (Santos et al., 2019). The Convention is the result of the 3rd United Nations Conference on the Law of the Sea (1973-1982), which came to an end with the signing in 1982 of the treaty in Montego Bay (Jamaica) by 117 States. It entered into force on 16 November 1994. The Blue Economy is a sustainable maritime economy, which emerges from the balance between economic activity and the long-term capacity of ocean ecosystems to support the economic exploitation of the oceans while remaining resilient and healthy (Ginga, 2008). According to the United Nations Economic Commission for Africa (UNECA) and the African Union Commission, the blue economy encompasses all activities that develop from or derive from marine and aquatic ecosystems, including oceans, coasts, seas, rivers, lakes and groundwater, and associated resources, including security and defense, ports, transport and logistics, offshore energy and natural resources, fishing and aquaculture, tourism and leisure, science and technology, among other functions that present themselves as an added value for humanity (Ginga, 2008). In 2016, the United Nations Economic Commission for Africa produced the Africa Blue Economy Policy Manual (Guerreiro, 2022). Also in 2016, the African Union (AU) approved an instrument as a key to maritime policy, which is the Lomé Charter for the Development of Maritime Security in Africa, considering them to be indispensable for the success of the Maritime Economy (Blue/Ocean Economy) (Guerreiro, 2022). Finally, the Sustainable Blue Economy Conference that took place in Nairobi, Kenya in 2018 under the motto "Developing a Sustainable Blue Economy; a growing push for Blue growth", paved the way for the approval of Africa's Blue Economy Strategy (Guerreiro, 2022).

1.1. Use of Angolan Maritime Space

In recent years, there has been a greater environmental appreciation of the seas and oceans as a system, especially with regard to their importance in maintaining the environmental balance and habitability conditions of the planet, (Ginga, 2014). This movement led to the year 1998 being universally declared to be the "Year of the Oceans", during the Lisbon World Exhibition (Expo 98) on the theme "The oceans: a heritage for the future of humanity", in a context in which it was already considered that the world's waters were going through an environmental crisis. Currently, and deepening this first initiative, the United Nations has declared the decade 2021-2030 as the Decade of Ocean Science for Sustainability, in line with the Sustainable Development Goals of the 2030 Agenda.

The Angolan State shall, in accordance with the Law of the Sea, administer and exercise its authority in the maritime spaces under its sovereignty and jurisdiction in order to fulfill its responsibilities and safeguard its interests. The exercise of the State's authority at sea consists in developing, on a legal and political basis, the verification of compliance with the law at sea in the preservation and protection of the marine environment, the safety of human life at sea, maritime and navigation safety, the administration and management of natural resources, compliance with international agreements and the preservation of its interests, including state defense and security (Tchindele, 2019).

Angola is a coastal state with a vast coastline and large maritime space under its sovereignty or jurisdiction, rich in terms of natural resources such as oil and natural gas and abundance and diversity of fish, which leads it to rely on a legal regime of the Sea and International Conventions and which brings together the law of Maritime Spaces,

Law No. 14/10, of 14 July, Law No. 17/14, of 29 September (Law on the Baselines for the Delimitation and Demarcation of the Maritime Spaces of Angola), Resolution 18/90 of 6 October (United Nations Convention on the Law of the Sea), Resolution approving for accession the Agreement on the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, Resolution No. 13/10, of 2 June, (International Convention for the Safety of Life at Sea), Resolution No. 11/89 of 27 May, the 1972 International Convention on Maritime Search and Rescue, Resolution No. 34/01 of 23 November, Resolution No. 41/01 of 21 December (International Convention for the Prevention of Pollution from Ships), 1973, the 1972 International Convention on the Safety of Containers (CSC), Resolution No. 35/01, of November 30 (Tchindele, 2019).

1.2. Responsibility and Obligations of Licensing Authorities

Presidential Decree No. 117/20, of 22 April, approved a new Regulation on Environmental Impact Assessment and Environmental Licensing Procedure, abbreviated as the Environmental Licensing Regulation, which revoked Decrees No. 51/04, of 23 July, and No. 59/07, of 13 July; The Environmental Licensing Regulation (RLA) contains new rules related to the Environmental Impact Assessment (EIA), with the aim of regulating the environmental and administrative procedures related to the implementation of activities and projects, public and private, that, by virtue of their nature, location or size, are likely to cause significant environmental and social impact, and are therefore subject to authorization and subject to the fulfilment of the requirements laid down in that Regulation, (DR. 117/20). The RLA (DR. 117/20) defines, in particular, the procedures to be followed for the purposes of licensing the activity and the rights and obligations of the licensed entities, the different types of permits applicable and the models of environmental permits in the annexes to the Regulation. Among the other matters addressed by the RLA, the following stand out:

- Creation of an Integrated Environmental System, an online technological platform, which allows the submission of the application for environmental licensing and relevant documents;
- List of requirements for the issuance of environmental licenses and Declaration of Exemption from Environmental Licensing by local authorities;
- Obligation to carry out an environmental pre-assessment in the case of activities that may have an environmental impact, whether or not they are expressly provided for in the annexes to the regulation;
- Subsequent approval of Terms of Reference by the Environmental Authority for the performance of EIA;
- Issuance of an Environmental Compliance Statement, in order to enable the credit negotiation process with banks and other entities;
- Establishment of an Environmental Deactivation License;
- Definition of a 5-year validity period, renewable, for Environmental Operating Licenses;
- Subjection of the transfer of the installations subject to the Environmental License to prior notification of the entity responsible for the Environment Sector;
- Express rules on civil and criminal liability for violation of the provisions of the RLA;
- Establishment of fines for violation of RLA rules up to a maximum amount of AKz 500 million;
- Inclusion of a list of "life-threatening issues", areas in which no activity potentially causing significant negative impacts can be authorized.

Article 3 of the Decree-Law defines the "Competent Licensing Authority" as the entity responsible for environmental policy at the central and provincial levels.

1.3. Articulation of Land Regime/ Maritime Regime

Maritime planning and spatial planning instruments will be linked whenever they relate to policies that have as their object the biophysical area, consisting of all urban and rural soils, the subsoil, inland waters, the territorial sea, the continental shelf, as well as the exclusive economic zone as elements or natural resources contained within the national territorial borders with relevance to the implementation of the respective instruments. Although these instruments incorporate the concept of spatial planning, however, the approach to maritime planning is different from land-based planning, due to the diversity of maritime areas and human uses, the exclusion of individual property rights in the oceanic space, and the differences in administrative organizations and legal systems that give rise to a wide variety of strategies, including integrated coastal zone management policies, (Bentral, 2020).

However, considering the notion of the continental shelf from which the principle of "the land dominates the sea", when it states that "it comprises the entire bed and subsoil of the submarine areas that extend beyond its territorial sea, in the entire extension of the natural extension of its terrestrial territory, to the outer edge of the continental margin", and having regard to the provisions of Law No. 3/04, of 25 June, Law on Spatial Planning and Urbanism, it will be concluded that the legislator adopted the interpretation and implementation of the latter diploma, extending it to the maritime space, (Bentral, 2020).

The first line of finding is made under the terms of Article 2(a) of the Spatial Planning and Urbanism Law (LOTU), which decrees that "inland waters, continental shelf, territorial sea and exclusive

economic zone that, as natural resources subject to use and occupation, are relevant for the purposes of spatial planning". As mentioned above, the notion of territory encompasses the spatial elements land, sea and air, therefore, the law in question only equates land to territory, defining it as "biophysical space consisting of the set of urban and rural soils, the subsoil, inland waters, the territorial sea, the continental shelf, as well as the exclusive economic zone".

Although the legislator could have covered the treatment of maritime and territorial spatial planning and urban planning in Law No. 3/04, the fact is that this law deals with the organization and management of the territorial, urban and rural biophysical space, due to the material content and the objectives pursued and the policy of actions that achieve them, valuing soils, organizing them, infrastructures them for general and collective use, as systematic forms of intervention by the State and local authorities in spatial planning, (Bentral, 2020).

It is important to underline that the law in question aims to deal exclusively with land development, in this context, it is clear that maritime space has not been taken as a territory in the overall conception of the problem of territorial planning. Certainly, because many factors have contributed to the lack of affection of spatial planning for the sea, since the maritime space is not as dominable as the land space and because it is not susceptible to human occupation for housing purposes.

Table 1 presents of Comparison between the spatial planning and urban planning regimes in force, namely, between the legislation applicable to coastal zones and the legislation applicable to maritime space, highlighting the territorial management instruments and their articulation.

Table 1: Comparison between the spatial planning and urban planning regimes in force.

	Spatial Planning in the Areas Coastal	Spatial Planning
Legal Framework	Law N° 3/04 of 25 June. Law on Spatial Planning and Urbanism	Law N°. 14/10 of 14 July. Maritime Spaces Law
	Lei de Terras. Lei N° 9/04 de 9 de Novembro Land Law. Law N° 9/04 of 9 November	Decree No. 4/01 of 02 February. Regulates the preparation and management plans of the Coastline
	Water Law. Law N° 6/02 of 21 June	
	Environmental Law. Law No. 5/98 of 19 June	The United Nations Convention on the Law of the Sea (UNCLOS)
Territorial Management Instruments	<ul style="list-style-type: none"> • Land Use Plans • Rural Urban Plans • Environmental Management Plan • Defense and Security Area Management Plans 	Coastal Management Plans (POOC)
Articulation	Article 2 (general definitions) of Law No. 3/04 of 25 June, Law on Spatial Planning and Urbanism. Inland waters, continental shelf, territorial sea and exclusive economic zone, which as natural resources subject to use and occupation, are relevant for the purposes of spatial planning	

2. Methods

According to the objectives of this work, with regard to the approach, it was decided to carry out research of a demonstrative nature, with a qualitative aspect. The qualitative aspect focused on exploratory analysis, including the interaction of variables to understand the nature and characteristics of the phenomena.

The development of this research was based on a set of tasks, so the collection of data and information from the pilot area under study took place, the guidelines were analyzed, as well as the degree of execution was evaluated. From the work, we analyze the following for the fulfillment of the objectives:

- Legislation on spatial planning and urban planning;
- Environmental and Maritime Legislation;
- Reports on Maritime Spatial Planning in Angola of the Palmeirinhas – Foz do Tapado Experimental Area;
- The study of the evolution of the project for the Planning and Governance of the Maritime Spatial of the Benguela Current, (MARISMA);
- The study of the Preliminary proposal of the Maritime Spatial Planning Plan in Angola: Palmeirinhas Pilot Area – Mouth of the Tapado River;

- The study of the evolution of the work carried out by the National Coordination Group for Maritime Spatial Planning in the Palmeirinhas – Foz do Tapado Experimental Area;
- The analysis of maritime spatial planning and management models adopted by other countries, Namibia and South Africa, and comparison with the Angolan legal framework;
- Identification of maritime spatial planning policy, the supervision of maritime affairs, typology of territorial management instruments and licensing regime.

2.1. Data Collection and Processing

Data were collected based on bibliographic research, reading of scientific articles, national reports and reports of international organizations, maps of mineral and petroleum extraction to support the conceptualization of the theme under study.

Another phase was dedicated to fieldwork, which resulted in the visit of the entire project area for direct contact with the different local realities; the consultation of the main institutional actors (Communal Administrators, Chiefs of the Captaincy and Armed Forces, Neighborhood Sobas, Presidents of associations and cooperatives).

The structured interview was used, which followed a plan consisting of a series of questions previously chosen and integrated into a questionnaire.

2.2. Identification of common and special causes

The Cause-and-Effect Diagram was applied in this study with the objective of identifying the special causes that will be negatively influencing the control of the governance management process of the Pilot Area, based on the information acquired and the reality that was witnessed.

In view of this, the diagram below, illustrated in (Figure 1), was developed, from which we can observe the various critical points in the governance process, which leads us to question the need for the application of MSP to change them. Possible causes are: Fishing without or with little control, poor maintenance of resources, difficulty in positioning raw material, fisherman fatigue, lack of training, lack of constant production and lack of constant energy, oil blocks not tendered and without production, pollution of beaches/coast and storage.

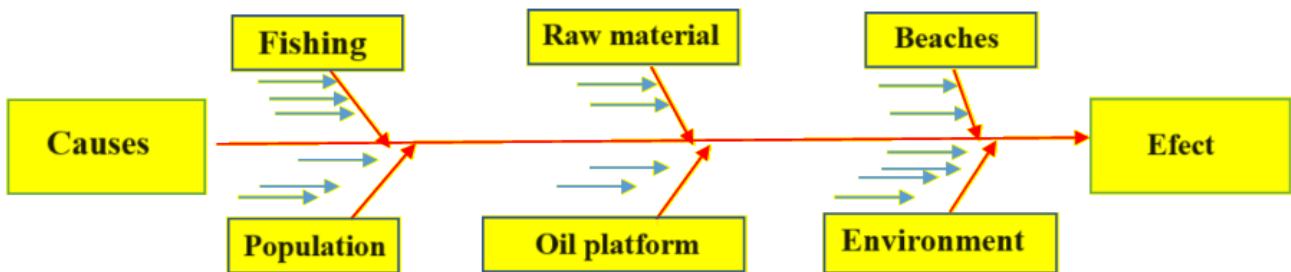


Figure 1: Cause and effect diagram for identifying special causes in the governance management process.

3. Results and Discussion

3.1. The OEM within the Framework of BCC

Angola, in partnership with Namibia and South Africa, are members of the Benguela Current Convention (BCC) (Safeca, 2020). Countries have committed to implementing an ecosystem management called EBM9 for the marine environment in that area in order to promote the responsible use of its oceans and resources and put into practice the principles of sustainable development¹⁰ (Safeca, 2020).

The BCC is a legally constituted collaborative mechanism that relies on the MARISMA program or The Marine Spatial Management and Governance Program of BCLME or (Benguela Current Large Marine Ecosystem). It was founded by the Global Environment Facility and implemented in the Benguela region between 2002 and 2008 (Safeca, 2020).

With the support of the MARISMA Project (Benguela Current Marine Space Management and Governance Project), implemented by the German Development Cooperation (GIZ) in the three countries of the region (Angola, Namibia and South Africa), the Ministry of Fisheries and Marine Resources, through the National Directorate for Sea Affairs and Marine Resources, carried out a proposal for a Marine Spatial Planning Plan of Angola with a pilot project in the Palmeirinhas area – mouth of the Tapado River and contributed to the process of the National Strategy of the Sea of Angola (ENMA) ensuring better maritime and coastal management for the development of the Blue Economy.

3.2. Identification and Analysis of Policies, Strategies for the Sea and Blue Growth

3.2.1. South Africa

With South Africa being the first country in the region (under the BCLME) to develop MSP in 2015 with a national framework for maritime spatial planning prepared for public comment and a national draft law authorizing MSP under maritime extension approved by the Council of Ministers in 2017 and sent to parliament, these two instruments, provided high-level guidance for the implementation of MSP in the context of existing South African legislation, planning regimes and policies.

3.2.2. Namibia

Namibia has a coastline of 1572 km that stretches along the Southeast Atlantic with a marine environment shaped by the cold, wind-driven upwelling system of the Benguela Current, (Martins, 2016). The introduction of MSP in the current stages of maritime development with relatively low but increasing usage intensity is a strategic advantage for BCC countries of which Namibia is a part, compared to other regions of the world of which MSP was introduced only when space congestion, competition and governance issues were already occurring (FINC et al., 2020). OEM in BCLME, therefore, has the potential to prevent escalation and new conflicts.

3.2.3. Angola

Angola is located in the western part of Africa, specifically in the southern zone. Its territory corresponds to a sea coast of 1,650 km from north to south that covers 7 provinces, bathed by the Atlantic Ocean,

and an Exclusive Economic Zone (EEZ) with approximately 518433 km² where a series of economic development, environmental protection and defense activities are developed. It has a surface area of 1,246,700 km², covering a sea surface of 162,000 m, with a depth ranging from 3 to 5 meters, reaching 5,000 to 5,500 m in the central and southern slope zone¹³ (Bentral, 2020).

Angola in its inland waters, territorial sea, contiguous zone, exclusive economic zone and sovereignty rights over the continental shelf, (Bentral, 2020). We can refer that, in the Angolan doctrine, the subject of Maritime Planning, It began with the thought of the construction of the MARISMA15 project, in the perspective of a project of Planning and Governance of the Maritime Spatial of the Great Ecosystem of the Benguela Current with the aim of contributing to the diversification of the economy in the three member countries through the implementation of measures that help the sustainable development of the economy of the sea and the strengthening of the capacity for the sustainable management of biodiversity and marine natural resources.

4. Conclusions

The BCC countries and the BCLME as a whole are among the first African countries and among the first developing countries and LMEs worldwide to introduce MSP. This paper illustrates the national and regional MSP processes that have been carried out in this context to date (FINC et al., 2020). The case of BCLME illustrates that the region introduced MSP in response to the increase in space claims and the multiplication of uses in BCLME (Sowman and Cardoso, 2010). In part, this was driven by national efforts towards more coordinated and sustainable marine use in the three BCC countries.

MSP provides a strategic, integrated and forward-looking approach to all uses of the sea, with the aim of promoting sustainable development based on social, environmental and economic objectives.

The rational allocation of maritime space will avoid or minimize conflicts between the various existing and potential uses and activities and will contribute to the promotion of the development and growth of the maritime sector. Although Angolan maritime legislation follows CNDUM guidelines for maritime space, it does not deal with planning issues, but rather aims to develop a law for maritime spatial planning in Angola, (Bentral, 2020). In fact, in Angola, both the Spatial Planning legislation and the legislation on maritime spaces concentrate more on the development of the regime for the exploitation and licensing of space and maritime resources, it does not introduce measures and actions from an ecological, environmental and sustainability point of view.

The institutional frameworks of the entities with direct responsibilities for maritime spatial planning and management allow us to conclude that the maritime sector is complex and involves a vast network of interests and sectors that need to be managed in an integrated manner. For South Africa and Namibia, they present an approach to centralizing all responsibilities and functions of maritime governance and management in one government entity or ministerial body (see Table 6.5). Angola chooses to maintain its governmental structures, presenting a structural network of various entities involved in maritime spatial planning and management, all under the guidance of the members of the National Coordination Group for Maritime Spatial Planning (GNC-OEM).

In terms of advantages, the model adopted by South Africa is based on the environmental and sustainability objectives that it intends to promote for the implementation of spatial planning substantiated in the law. The introduction of the OEM 76 in the current stages of maritime development is another advantage for the BCC countries. The involvement of stakeholders in the elaboration of land use plans is another of the advantages that the models of South Africa, Namibia and Angola present, as well as in the support of the United Nations Convention on the Law of the Sea, which establishes that each coastal State may submit to the Commission on the Limits of the Continental Shelf, the limits of the continental shelf beyond 200 miles. On the continental shelf, coastal states exercise sovereign rights for the purpose of exploiting natural resources that encompass mineral and other non-living resources on the seabed and its subsoil.

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