

# **THE APPROACH TO SPATIAL MANAGEMENT SYSTEM FOR SOUTH AFRICA'S MARINE PLANNING AREAS**

## **1. Purpose of the Document**

This document sets out the proposed approach to spatial development and management for South Africa's Marine Planning Areas. Building on the Marine Spatial Planning Act (Act No. 16 of 2018) and the National Framework for Marine Spatial Planning in South Africa, it translates the overarching vision and high-level directions for developing South Africa's ocean space into a spatial management system that applies to all Marine Planning Areas.

The aim of the proposed spatial management system is to facilitate the development of Marine Area Plans that are consistent across the country and whose provisions are transparent to all sectors and uses.

## **2. Definition and Goals of Marine Spatial Planning**

Marine Spatial Planning has been defined in South Africa as the governance process of collaboratively assessing and managing the spatial and temporal distribution of human activities to achieve economic, social and ecological objectives. Marine Spatial Planning seeks to achieve a productive, healthy and safe ocean that is accessible, understood, equitably governed and sustainably developed and managed for the benefit of all.

Four high-level goals have been defined that describe the desired outcomes of the Marine Spatial Planning process in South Africa. They are:

### **Goal 1: Unlocking the ocean economy**

This goal aims to stimulate the sustainable economic growth of South Africa's marine sectors to increase the ocean contribution to the national Gross Domestic Product, create jobs, and, ultimately, eradicate poverty. It does so by ensuring greater certainty of access to desirable areas for new investments. It seeks to identify compatible uses and reduce conflicts between incompatible uses. It promotes the efficient use of resources and space and improves the capacity to plan for new and changing human activities, including emerging technologies and

their associated effects. It also promotes streamlining and improved transparency in permit and licensing procedures for ocean resources.

### **Goal 2: Engaging with the ocean**

This goal builds on South Africa's marine heritage and seeks to strengthen our marine identity. It aims to increase our awareness of the value, opportunities and societal benefits of South Africa's ocean territory. It encourages all communities and citizens to engage in education about the sea, good stewardship, and participation in marine management. The goal promotes the identification and improved protection of cultural heritage and social and spiritual values related to ocean use.

### **Goal 3: Ensuring healthy marine ecosystems**

This goal is aimed at protecting, conserving and restoring South Africa's rich marine biodiversity by managing its living and non-living resources in a harmonious manner. It does so by identifying ecologically and biologically important areas and by integrating biodiversity objectives into decision-making. It allows for the identification and reduction of conflicts between human uses and nature, the allocation of space for biodiversity and nature conservation and the reduction of the cumulative effects of human activities on marine ecosystems.

### **Goal 4: Contributing to good ocean governance**

This goal requires a collaborative approach between organs of state relating to the ocean matters, through the establishment of formal and informal relations. It requires that decision-making be underpinned by sound knowledge and adaptive management. It also requires relations to be built with non-state organisations and communities that should be encouraged and enabled to contribute to planning processes as a means to enable effective ocean governance.

## **3. Marine Area Plans**

South Africa will develop Marine Area Plans for four distinct bio-geographic marine areas. Marine Area Plans strategically allocate the spatial and temporal distribution of human activities to achieve ecological, economic and social objectives. They guide planners and sectors in their decision-making to ensure that future marine patterns of use are coordinated and do not conflict and are in line with overarching sustainability goals.

Marine Area Plans are developed on the basis of a comprehensive information and knowledge base and associated stakeholder consultation. Elements to be included and considered in the development of a Marine Area Plan are outlined in sections 7 (1) and 9 (2) (b) of the Marine Spatial Planning Act (Act No. 16 of 2018). They comprise ecological, social and economic information, as well as information relating to all sectors including, where available, existing and future uses and marine sector plans.

In line with the notion of subsidiary policy frameworks, Marine Area Plans must conform to South Africa's Marine Spatial Planning goals, national principles and criteria for Marine Spatial Planning.

#### **4. Principles and Criteria Guiding the Development of Marine Area Plans**

Section 5(1) of South Africa's forthcoming Marine Spatial Planning Act, 2018 (Act No. 16 of 2018) describes the principles and criteria that direct the development of South Africa's Marine Area Plans. While they set out how marine space should ideally develop, they also apply to the marine planning process itself and the need to balance various interests.

The principles are based on recognition that a thriving oceans economy is dependent on healthy marine ecosystems. Marine Area Plans serve to protect and sustainably use marine biodiversity and natural resources while at the same time ensuring access to key resources for marine users and sectors. Achieving this balance requires the best possible integration among different objectives and economic sectors which in turn demands substantial input by relevant sectors and stakeholders during the development of Marine Area Plans.

Marine Area Plans are integrated sustainable development plans; as such, they are distinct from sectoral development plans. They recognise that ocean space and resources should be developed sustainably, fairly and iteratively to ensure they can support as many multi sector demands as possible in the long term. There is a presumption that all sectors have an equal right to claim access to ocean resources but that conflicting interests must be balanced in the process of developing a Marine Area Plan. Robust stakeholder engagement and a sound evidence base in terms of (spatial) data and information are therefore necessary ingredients of such Marine Area Plan development processes.

## **5. Key Elements of Marine Area Plans**

The key elements that Marine Area Plans will consist of, but are not necessarily limited to, are:

- a) Text that outlines the objectives of the Marine Area Plan, and its general and sector development guidelines;
- b) The zoning scheme with a description of the zones and their associated regulations that apply;
- c) A map that indicates the location of the zones and provides additional information on the location where existing spatial regulations apply (e.g. designated marine protected areas or port limits);
- d) An implementation section detailing how the Marine Area Plan will be implemented; and
- e) A monitoring and evaluation section detailing how the Marine Area Plan will be monitored and evaluated.

## **6. South Africa's Marine Planning Areas**

In order to make the development of Marine Area Plans manageable and sufficiently relevant in terms of the objectives each one of them seeks to achieve, South Africa's ocean space will be divided into the following four smaller bio-geographic areas that will serve as planning units:

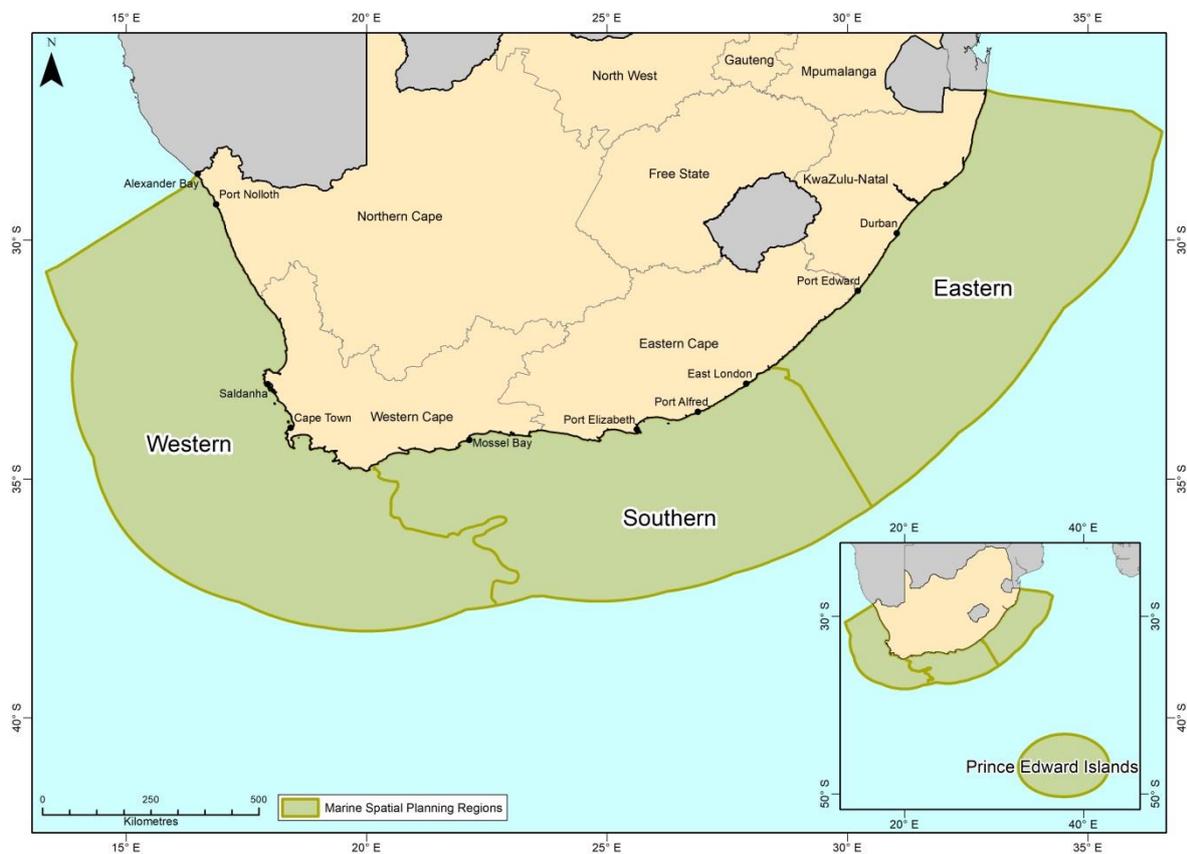
- Western Marine Planning Area
- Southern Marine Planning Area
- Eastern Marine Planning Area
- Prince Edward Islands Marine Planning Area

Three of the four Marine Planning Areas are situated along the South African mainland while the fourth is located around the Prince Edward Islands.

The Western and Eastern Marine Planning Areas are bounded by the neighbouring Republic of Namibia and Republic of Mozambique, respectively, and thus delimited on one side by international borders. This is not the case for the Prince Edward Islands Marine Planning Area which does not border any other country.

Internally, the three Marine Planning Areas around continental South African land territory are based on the country's marine bioregions. These bioregional boundaries have been partially adjusted to accommodate current human activities to the best possible extent, avoiding separating areas that are used by specific industries. Furthermore, delineation has sought to avoid separating areas of high natural value or areas already under special management for the purposes of biodiversity conservation.

The seaward boundary and outer limit of all Marine Planning Areas is South Africa's Exclusive Economic Zone (EEZ). The landward limit is the high-water mark.



Map 1: The four Marine Planning Areas of South Africa

## 7. The Spatial Management System

To enable the development of all Marine Area Plans in a coherent and transparent manner, this section proposes a consistent approach to translating the above criteria and objectives (section 4) into Marine Spatial Planning practice.

For each Marine Area Plan, a spatial management system is proposed that consists of: a) general development guidelines, b) sector development guidelines, and c) a zoning scheme with spatial regulations. This uniform approach to area-based management will provide for coherence and consistency across all four Marine Area Plans.

The system builds on South Africa's spatial planning approach on land in terms of regulations of uses and defined zones for particular uses. While the general development guidelines are broad enough to apply to all Marine Area Plans, sector development guidelines may vary between Marine Area Plans to accommodate the social, economic and ecological differences of each of the four Marine Planning Areas and to meet distinct Marine Area Plan objectives. The principles of the zoning scheme will also apply throughout all Marine Area Plans, although the precise details of the zones and their allocation in space will obviously vary.

*a) General development guidelines*

The purpose of the general development guidelines is to provide a framework for planners and sectoral decision-makers to enable sustainable ocean development throughout the Marine Planning Area. Guidelines of this nature are essential for achieving South Africa's vision for sustainable ocean use and the Marine Spatial Planning goals (see section 2). The final set of general development guidelines will need to be developed in close consultation with all relevant stakeholders during the preparation of the first Marine Area Plan. They could encompass:

- Alignment of proposed developments with Spatial Development frameworks and Integrated Development Plans objectives;
- A presumption in favour of sustainable development and use of the Marine Planning Areas;
- Sustainable development and use which provide strong economic and social benefit to the South African people are favoured;
- Proposals which enable coexistence with other sectors and activities in the marine area are favoured;
- Developments and activities in the marine environment should be resilient to coastal change and not have unacceptable adverse impact on coastal processes;
- Development and use of the marine environment must:

- a) Comply with legal requirements for marine protected areas and protected species;
- b) Not result in significant impact on key biodiversity features;
- c) Protect and, where appropriate, enhance the health of the marine area; and
- All developmental proposals will be treated with fairness and in a transparent manner when decisions are being made in the Marine Area Plans.

***b) Sector development guidelines***

In addition to the general development guidelines, sector development guidelines will be developed for specific maritime sectors in the respective Marine Planning Areas. Their aim is to promote the sustainable development of the respective sectors in line with (national and sub-national) sector objectives (e.g. as already specified in sector policies, strategies or plans, or as specified in dedicated consultation processes) and in line with the overall objectives for the particular Marine Planning Area.

Table 1 lists examples for sector objectives and the development guidelines that could be put forward in the Marine Area Plan. As in the case of general development guidelines, the full complement of objectives and associated development guidelines for maritime sectors will need to be developed in collaboration with the respective stakeholders during the preparation of the Marine Area Plans.

Table 1: Examples for sector objectives and development guidelines

<b>Sector</b>	<b>Objectives</b>	<b>Development Guidelines</b>
Fisheries	<ul style="list-style-type: none"> <li>● Fish stocks are harvested sustainably.</li> <li>● A fishing fleet that can secure an income in the long term.</li> </ul>	<ul style="list-style-type: none"> <li>● Existing fishing opportunities and activities are safeguarded wherever possible.</li> <li>● An ecosystem-based approach to the management of fishing which ensures sustainable and resilient fish stocks and avoids damage to fragile habitats.</li> <li>● Protection of vulnerable stocks and/or key areas supporting fisheries (e.g. spawning areas), inter alia through</li> </ul>

		closures where and when appropriate.
Marine Tourism	<ul style="list-style-type: none"> <li>● Protection of the natural resources that attract visitors.</li> <li>● Continued and improved access to marine and coastal resources for tourism activities.</li> </ul>	<ul style="list-style-type: none"> <li>● Opportunities to promote sustainable development of marine recreation and tourism are supported.</li> <li>● The aesthetic qualities, coastal and marine character and wildlife experience of the Marine Planning Area is enhanced.</li> </ul>
Underwater Infrastructure	<ul style="list-style-type: none"> <li>● Protect submarine cables.</li> <li>● Achieve successful seabed user co-existence.</li> <li>● Safeguard the global communications network.</li> </ul>	<ul style="list-style-type: none"> <li>● Cables should be suitably routed to enable safe installation and cable protection.</li> <li>● New cables should use methods to minimise impacts on the environment, seabed and other users.</li> </ul>

Like the general development guidelines, sector development guidelines will apply throughout the entire Marine Planning Area, irrespective of any zoning scheme and sector prioritisation that may additionally apply.

***c) Zoning scheme***

“Zone” in the context of the zoning scheme of the Marine Area Plans means a defined category of sea use that is shown on the map for the Marine Area Plan.

Zones go beyond the general and sector development guidelines in that they pre-define desired combinations of use for specific marine areas. They are arranged in the Marine Plan Area in such a way as to enable the best possible pattern of use. Zones allow priorities to be set for certain uses and activities based on criteria such as suitability and compatibility, and can be used to restrict activities in certain marine areas. The advantage of a zoning scheme is a more coordinated spatial approach that minimises conflicts, creates greater transparency for developers and investors, and makes processes such as licensing more efficient.

Zones reflect the general and sector development guidelines to the best extent possible in that they provide for detailed spatial regulations (see section 8).

Zones and their regulations are based on the following types of use:

- Primary use is an activity that is given priority in a particular zone. Other activities are only allowed in the zone if they do not impede the primary use.
- Consent use is an activity that is compatible with the primary use of the zone and which can be approved in a primary use zone under specified conditions.
- Prohibited use is an activity that is not allowed in the zone as it would impede the primary use.

The regulations of each zone do not replace existing sector regulations for specific uses (e.g. marine protected area regulations, fisheries regulations, UNCLOS, port regulations). Rather, their specific purpose is to guide development and, in some cases, complement the existing regulations on a spatial planning level.

The zones that can apply in South Africa's Marine Area Plans are based on current and prospective uses and activities. The zones are justified on the basis of the sustainable development needs and objectives of maritime sectors and human interests. They intend to ensure and enable:

- preferred access to key areas and resources for marine users (e.g. key fishing areas, known geological resources, suitable areas for the anchoring of ships);
- a safe operating environment for industries (e.g. for mining, marine aquaculture, or marine tourism operations, or to avoid that dumped ammunition becomes a danger to other uses);

- protection, and in some cases, enhancement of the resources or features the sector or interest requires (e.g. nursery and spawning grounds, bio-diverse areas, marine species threatened by extinction, migration routes of marine species); and
- sustained provision of the marine (and coastal) ecosystem services harnessed by marine users (e.g. clean water, food, cultural, spiritual, recreational).

It is against this background that the following zones are proposed:

- Conservation Zones
  - Strict Protection Zone
  - Environmental Management Zone
- Disposal Zones
  - Dredge Disposal Site
  - (Disused) Ammunition Dumping Site
- Fisheries Zones
  - Priority Fishing Zone
  - Fisheries Resource Protection Zone
  - Small Scale/Subsistence Fishing Zone
- Heritage Conservation Zone
- Marine Aquaculture Zone
- Marine Tourism Zone
- Maritime Transport Zones
  - Shipping Lane
  - Anchorage Area
- Mining Zone
- Underwater Infrastructure Zone
- Marine Special Economic Zones

Zones are named for their respective primary uses. In a mining zone, mining constitutes the primary use; in an aquaculture zone, aquaculture constitutes the primary use and so on. Consent and prohibited uses are specified for each zone depending on compatibilities with the primary use.

The above list of zones may change with changing requirements, the development of new (co-)uses, or in line with the specific needs of a particular Marine Planning Area.

Areas not zoned in Marine Planning Areas are general use areas. This means no priority is given to a specific use in such areas. Uses and activities may overlap in these areas but are not conflicting enough to warrant zoning. Re-zoning may occur in the future as Marine Area Plans are updated to accommodate changes in use necessary to meet developmental needs of the country at the time.

Zones are delineated and arranged in Marine Planning Areas based on:

- the natural conditions and environmental opportunities and constraints of the Marine Planning Area,
- the distribution of key resources within the Marine Planning Area(e.g. Oil and Gas ),
- existing spatial allocation and regulations within the Marine Planning Area (e.g. marine protected areas, fishing grounds);
- specific sectoral needs and constraints within the Marine Planning Area;and
- opportunities for co-location and synergy between uses and activities.

Developing and agreeing on a zoning scheme is an essential element in the preparation of a Marine Area Plan. As in the case of general and sector development guidelines, the zoning scheme itself, together with the consent and prohibited uses for each zone and including the conditions under which consent uses can be approved in a primary use zone, will need to be developed in close collaboration with the respective stakeholders.

The Knowledge and Information System, as stipulated by the Marine Spatial Planning Act, 2018 (Act No. 16 of 2018) (section 7), and the forthcoming National Marine Spatial Planning National Data and Information Report as specified by the National Framework for Marine Spatial Planning in South Africa (section 5.3), will inform the delineation and arrangement of zones in the Marine Planning Areas.

Sectors will contribute to ensuring the alignment of Marine Area Plan zones and their regulations with existing sectoral spatial allocation and regulations of the respective sector. For example, in the case of Conservation Zones, a Strict Protection Zone could be delineated on the basis of marine protected areas designated under the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003), high priority areas designated as Critical Biodiversity Areas (1 & 2) through systematic (spatial) biodiversity planning under the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), as well as any other identified priority areas. An Environmental Management Zone could be delineated on the basis of areas designated as Ecological Support Areas (1 & 2) through systematic (spatial) biodiversity planning under the National Environmental Management: Biodiversity Act, as well as any other identified priority areas.

Where necessary, and depending on local circumstances, more detailed objectives for a given zone may be required to aid the process of justifying a particular zone, defining its specific regulations, and monitoring and evaluation.

Once the Marine Area Plan comes into force, the zoning scheme will be binding to all sectors in line with the regulations that apply for each zone.

### **8. Examples for Regulations for the Proposed Zones**

Table 2 gives examples of the regulations that will apply in each of the proposed zones in terms of consent and prohibited uses.

Existing sector regulations for specific human activities are not replaced but complemented by this area-based management system in that they may become the primary means of implementing spatial planning regulations (e.g. using existing locations of shipwrecks to implement a Heritage Conservation zone).

Table 2: Examples for regulations for the proposed zones

<b>Type of zone</b>	<b>Specific zone (if applicable)</b>	<b>Example for regulations</b>
Conservation Zones	Strict Protection Zone	All uses that impede the long-term protection of key biodiversity features will be restricted (e.g. mining, fishing).

	Environmental Management Zone	All uses that impact key biodiversity features in such way that they are no longer in a functional state will be restricted (e.g. mining, fishing).
Disposal Zones	Dredge Disposal Site	All uses that do not impede the safe, efficient and long-term disposal of dredging material are classed as consent uses. In these cases, conditions may apply (e.g. temporal restrictions). Uses that may interfere with the continued use and access to these sites will be restricted (e.g. fixed installations).
	(Disused) Ammunition Dumping Site	All uses that do not interact with dumped ammunition in any way (directly or indirectly) are permitted (e.g. shipping). All uses that may interact with dumped ammunition in any way will be restricted (e.g. dredging, anchoring, bottom trawling).
Fisheries Zones	Priority Fishing Zone	All uses that do not impede fishing operations or the key resources of these areas are classed as consent uses. Conditions may apply (e.g. temporal restrictions). Uses with serious and long-term environmental impacts on these resources will be restricted, as will competing activities that could restrict access to fishing vessels.
	Fisheries Resource Protection Zone	All uses that do not impede the key fisheries resource of this area are classed as consent uses. Conditions may apply (such as temporal restrictions). Uses with serious and long-term impacts on these resources will be restricted, including fishing.
	Small Scale / Subsistence	All uses that do not impede fishing operations or the key resources of these areas are classed as

	Fishing Zone	consent uses. Uses with serious and long-term impacts on these resources will be restricted, as will competing activities that may restrict access.
Heritage Conservation Zone		All uses that do not interfere with tangible heritage (e.g. shipwrecks or archaeological sites) and places or resources essential for the continued practice of traditional activities of spiritual and cultural significance are classed as consent uses. Conditions may apply. Uses with serious and long-term impacts on these sites and resources will be restricted, as will competing activities that may restrict access or otherwise impact on the integrity of these sites (e.g. pollution, infrastructure).
Marine Aquaculture Zone		All uses that do not impede aquaculture operations are classed as consent uses. Uses with serious and long-term environmental impacts, particularly those with impact on water quality, will be restricted. Competing activities that may restrict access to operators and pose a risk to aquaculture infrastructure are also restricted. Consideration can be given to the needs of abalone ranching.
Marine Tourism Zone		All uses that do not impede marine tourism operations or the resources and environmental quality they depend on are classed as consent uses. Conditions may apply (e.g. seasonal restrictions, restrictions on gear etc.). Uses with serious and long-term impacts on these resources, particularly those that negatively impact on key species and their habitats (e.g. whales, sharks) and aesthetic qualities (e.g. coastal scenery and landscape) that tourists come to experience, will be restricted.

		Competing activities that may restrict access to operators and pose a risk to tourism operations and related infrastructure are also restricted.
Maritime Transport Zones	Shipping Lane	All uses that do not impede maritime navigation in line are classed as consent uses. Conditions may apply in line with existing shipping regulations. Uses that could interfere with the use of important shipping routes (e.g. those important to seaborne trade) will be restricted (e.g. fixed installations such as oil platforms).
	Anchorage Area	All uses that do not interfere with ships lying at anchor are classed as consent uses. Uses that may interfere with the operation of, and access to these areas will be restricted (e.g. fixed installations or marine aquaculture operations).
Mining Zone		All uses that do not impede the safe running of active mining operations are classed as consent uses. Conditions may apply (e.g. temporal restrictions). More consent uses are conceivable when there are no active mining operations such as access to ships, recreational use and fishing.
Underwater Infrastructure Zone		All uses that do not impede the safe, efficient and long-term operation of underwater infrastructure (e.g. cables and pipelines) are classed as consent uses. Uses that may interfere with the laying of such infrastructure, its maintenance or cause damage will be restricted (e.g. bottom trawling, anchorage, mining).

Marine Special Economic Zone		All uses that of specifically targeted economic activities, supported through Strategic Infrastructure projects
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## 9. References

Marine Spatial Planning Act, 2018 (Act No.16 of 2018) Sections 7 and 9 of the Marine Spatial Planning Act, 2018

National Framework for Marine Spatial Planning in South Africa, 2017 (Section 5.3)