MSP in NAM
MARINE SPATIAL PLANNING IN NAMIBIA

MARINE SPATIAL PLANNING IN NAMIBIA:

DATA & INFORMATION MANAGEMENT STRATEGY

MARISMA
Enabling Sustainable Ocean Use in the Benguela Current Region

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

On behalf of:
Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
of the Federal Republic of Germany

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1. Introduction

This strategy guides the work of the Namibian Marine Spatial Planning (MSP) Working Group in establishing and implementing MSP in Namibia and developing the first marine spatial plan. It sets out what will be done to ensure appropriate data and information is available for the purpose of MSP, and what will be done to ensure this data and information is managed in line with the best possible standards for its immediate use and in the long term. The strategy is a public document that intends to contribute to the transparency of the MSP process.

2. Background to Marine Spatial Planning

a. What is MSP?

Marine Spatial Planning (MSP) is a participative decision-making process that guides where and when human activities occur in marine spaces, providing for comprehensive, integrated and complementary planning and management across all sectors and for all ocean uses in order to enable sustainable ocean development".

b. What is the role of data and information in MSP?

MSP involves analyzing and allocating the spatial and temporal distribution of human activities to achieve ecological, economic, and social objectives. In Namibia, these objectives are specified through a political process.

In order to achieve broad acceptance, MSP decisions in Namibia must rely on transparent information and good quality data from as many knowledgeable sources as possible, including stakeholders. The better the knowledge base, the more informed MSP decisions will be and the less likely it is that important issues are overlooked. Evidence can be provided by experts or practitioners, but also collectively through stakeholder processes

Mechanisms are therefore needed that:

- Help identify data and information required for MSP,
- Ensure access to this data and information at the right time in the planning process,
- Ensure the quality of the data and information used,
- Ensure the availability of data outputs and products,
- Ensure appropriate stakeholder engagement and communication.

c. MSP in Namibia

Namibia is a maritime nation with a rich ocean wealth and an ocean area that is 540,000 km^2, which is approximately two thirds the size of its land area. There is a growing range of industries in Namibian ocean space that need to be managed in a coordinated way in order to avoid conflicts between marine uses and pressures to the natural environment. Namibia is therefore implementing MSP to facilitate integrated management of human uses in the ocean.

d. Who is responsible for MSP in Namibia?

Namibia has committed, through the Second National Biodiversity Strategy and Action Plan (NBSAP 2), National Development Plan 5 and the regional BCC Strategic Action Programme, to implement MSP. Through NDP5 and NBSAP2, the Namibian Cabinet has tasked MFMR to coordinate the process of MSP in Namibia. The MFMR initiated the formation of the Marine Spatial Planning National Working Group (MSP-NWG) in 2016 which leads and implements the technical MSP process. The MSP-NWG consists of representatives from the following ministries and institutions:

- Ministry of Fisheries and Marine Resources (MFMR)
- Ministry of Mines and Energy (MME)
- Ministry of Works and Transport (MWT)
- Ministry of Environment and Tourism (MET)
- National Planning Commission (NPC)
- Ministry of Defence (MoD)
- Ministry of Urban and Rural Development (MURD)
- Ministry of Land Reform (MLR)
- Ministry of Agriculture, Water and Forestry (MAWF)
- Ministry of Industrialization, Trade and SME Development (MITSMED)
- National Commission on Research Science and Technology (NCRST)
- University of Namibia (UNAM)
- Namibia University of Science and Technology (NUST)

e. Namibia's first marine spatial planning area

The central Namibian sea has been chosen as the planning area for the country's first Marine Spatial Plan. The core planning area is bound northwards by Cape Cross and southwards by Conception Bay. The inward boundary of the planning area is the high-water mark. The outward boundary of the area is the outer limit of Namibia's marine area, as determined by the limit of its Exclusive Economic Zone (200 nautical miles) (EEZ). The ultimate goal is to have marine spatial plans covering the entire ocean space of the country.

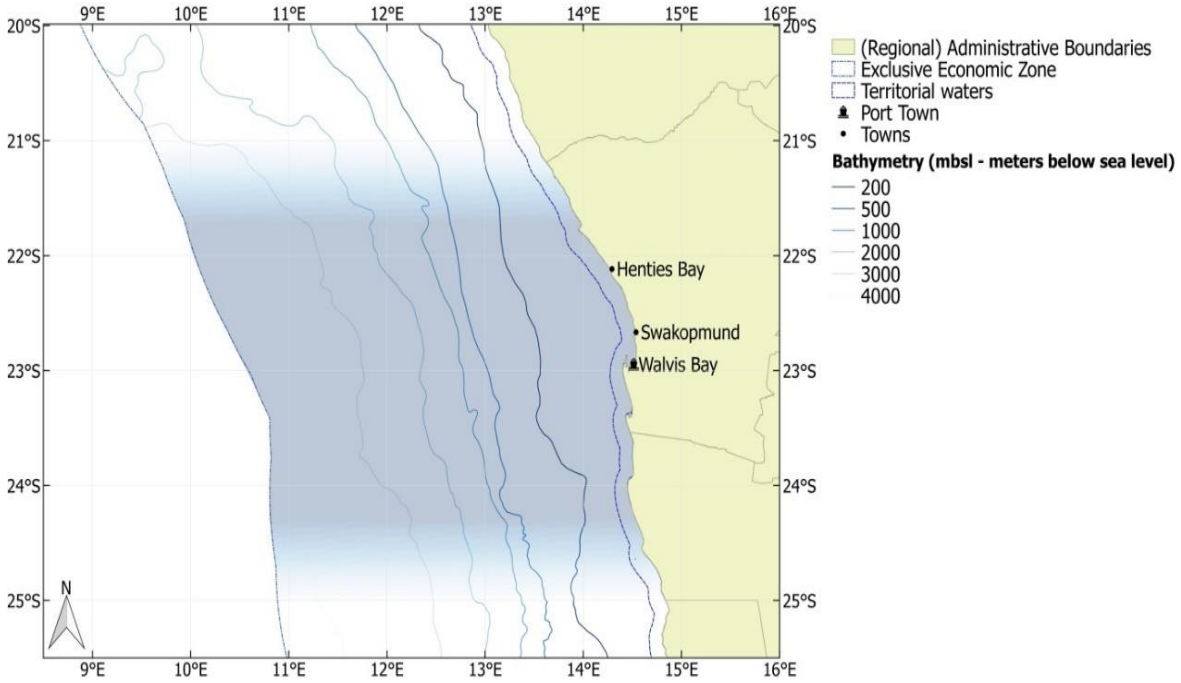

Figure 1: Namibia's first core MSP area

f. The roadmap for the first marine spatial plan in Namibia

The MSP-NWG identified a roadmap with the proposed milestones and activities for the year 2018 and mid 2019 towards developing the first marine spatial plan (see figure 2).

Figure 2: The MSP process road map to towards the first marine spatial plan

3. Definition of data and information in the context of MSP

Data is typically a series of qualitative or quantitative variables that can be measured, collected or reported. These in turn can be collated, assembled, or processed in a logical manner to create **information**.

Evidence is generated when information is analysed and interpreted. MSP is often described as "evidence based", where evidence essentially means all the information that can be used in planning decisions. Since a perfect evidence base is highly unlikely, planning will rely on the "**best available evidence**" at the time.

Data often needs synthesis, processing or interpretation before it can be used in MSP. A typical example would be ecological data that is collected to provide information on habitats or species.

When such information is interpreted further, this information can become evidence, such as distribution maps of particular habitats, or sensitivity analyses of a habitat to human pressures (e.g. pollution). For such interpretation to be reliable, the original data must be robust and of a certain quality. Evidence can be produced by experts or practitioners, but also collectively through stakeholder processes.

Spatial data is a particular type of data needed for displaying information about the planning area in a map or GIS system, or for displaying planning decisions on a map.

4. Mission for data and information in the context of MSP

The mission for the NWG for MSP data and information is:

> "To develop and implement the best possible data and information management system that identifies, collects, stores and processes MSP data from all sectors and stakeholders to produce relevant data outputs that will be made available and accessible."

The goals set out in this strategy seek to ensure that the high quality data and information can be used to contribute to the MSP process at all stages. They also enable the provision of specific data products, including:

- Hosted MSP data including an MSP atlas;
- A dedicated MSP data portal;
- An MSP webpage;
- Maps for download at different scales; and
- Other communication tools.

5. Strategic goals

The strategy has four overarching strategic goals, each of which relates to a specific element of the above mission:

STRATEGIC GOAL 1: Provide the best possible adaptable and accessible data and information management system.

STRATEGIC GOAL 2: Identify and collect relevant MSP data.

STRATEGIC GOAL 3: Process data to produce MSP products.

STRATEGIC GOAL 4: Ensure communication with stakeholder and raise awareness.

The following specifies the outputs to be achieved by each of these strategic goals, together with specific targets, related activities and a timeframe. It also allocates responsibility for each activity.

STRATEGIC GOAL 1: Provide the best possible adaptable and accessible data and information management system.

OUTPUTS	DEFINITION	TARGET	ACTIVITY	TIMEFRAME	Responsible
MSP specific standards	Standards that will guide the process of creating, collecting and storing data and information.	At least one standard each for creating, collecting and storing data and information.	1. Review existing standards	2017	D&I TT
			2. Select suitable standards	2017	D&I TT
			3. Develop new standards as required	2017	D&I TT
MSP specific data policies	Policies that will guide the creation, collection and storage of data and information.	A specific data policy for MSP	1. Review existing data policies	2017	D&I TT
			2. Select suitable data policies	2017	D&I TT
			3. Develop new data policies as required	2017	D&I TT
An MSP database	A list of the data and information used in the production and monitoring/ evaluation of Namibia's marine plans, as well as the owners/ holders of that data, the data format (e.g. shape file) and accessibility (open/restricted)	A functional database that is regularly maintained and updated.	1. Review the existing data list and adapt its structure if necessary to become an MSP database.	2017	D&I TT
			2. Identify all data owners and holders in the list.	2017	D&I TT
			3. Specify data formats and accessibility in the list.	2017	D&I TT
			4. Set up a mechanism to ensure the list is regularly updated.	2017	D&I TT
An MSP data centre	The data centre will serve as a data repository and a connectivity hub to other data sources (in conjunction with the MSP data portal)	A data manager is appointed	Set up infrastructure (software & hardware) <u>Ongoing tasks:</u> Review, customise and develop if necessary, updating, maintenance	2018	MSP-NWG
			Consult NSA-NSDI for possible linkages		

STRATEGIC GOAL 2: Identify and collect relevant MSP data

OUTPUTS	DEFINITION	TARGET	ACTIVITY	TIMEFRAME	Responsible
Datasets	The datasets collected from different stakeholders	All relevant datasets are collected.	1. Compile a comprehen-sive data list with data sets to be collected.	2017	D&I TT
			2. Collect data	2017	D&I TT
			3. Upload data to data storage system if necessary	2017	D&I TT
Metadata	Metadata is information about data.	A metadata system is in place	1. Review existing metadata standards	2017	D&I TT
			2. Select suitable metadata	2017	D&I TT
			3. Develop new metadata as required	2017	D&I TT
			4. Develop metadata communication (instructions, assistance) to data owners	2017	D&I TT
Quality assurance	To ensure data meets the required standards and needs.	A process is in place to ensure data compliance and correctness.	Develop the quality assurance process (should specify something for data needs)	2017	MSP-NWG

STRATEGIC GOAL 3: Process data to produce MSP products.

OUTPUTS	DEFINITION	TARGET	ACTIVITY	TIMEFRAME	Responsible
Data analysis	The analysis of relevant data based on specific and/or ongoing needs and questions.	Analysis for specific needs is conducted.	1. Identify relevant data	Ongoing - 2017 -2020	D&I TT
			2. Collect relevant data		
			3. Quality assure data		
			4. Process and analyse data		
Data interpretation	Unbiased interpretation of findings from data analysis.	Interpreted findings are available.	Converting analysed data to interpreted findings and information		

STRATEGIC GOAL 4: Ensure communication and awareness for stakeholders

OUTPUTS	DEFINITION	TARGET	ACTIVITY	TIMEFRAME	Responsible
Communication materials	Materials that will be used to disseminate information and to communicate non-technical messages to the public.	Communication materials developed	Develop communication materials (in relation to the overall MSP strategy)	2017	MSP-NWG
Web page	Page on the MSP website meant to disseminate D&I information	A functional web page	Develop the web page	2017	MSP-NWG
Access to data and information	Informing the public on how to access D&I and ensuring that access	The number of requests for information The number of portal and web page hits The number of outreach activities e.g. number of brochures printed vis a vis brochures distributed	Inform stakeholders and the public about data and information availability (could specify where this information takes place – e.g. during events – and by what means – e.g. brochure)	2018	MSP-NWG