Capacity Development in Marine Spatial Planning tools and Information Management in the WIO Region

Mombasa-Kenya

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INFORMATION MANAGEMENT STRATEGY (IMS)

german cooperation
DEUTSCHE ZUSAMMENARBEIT

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UN environment programme

Nairobi Convention

NAIROBI CONVENTION

Presentation Outline

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NAIROBI CONVENTION

Data Collection

- Demanding Process
- Costly

WIO Region

- Data exchange

- Preventing Data loss

National level

- Available data and information on ecological, social and economic aspects are essential for all WIO countries

- Collective interest is based in the shared use of the same ecosystems and blue economy

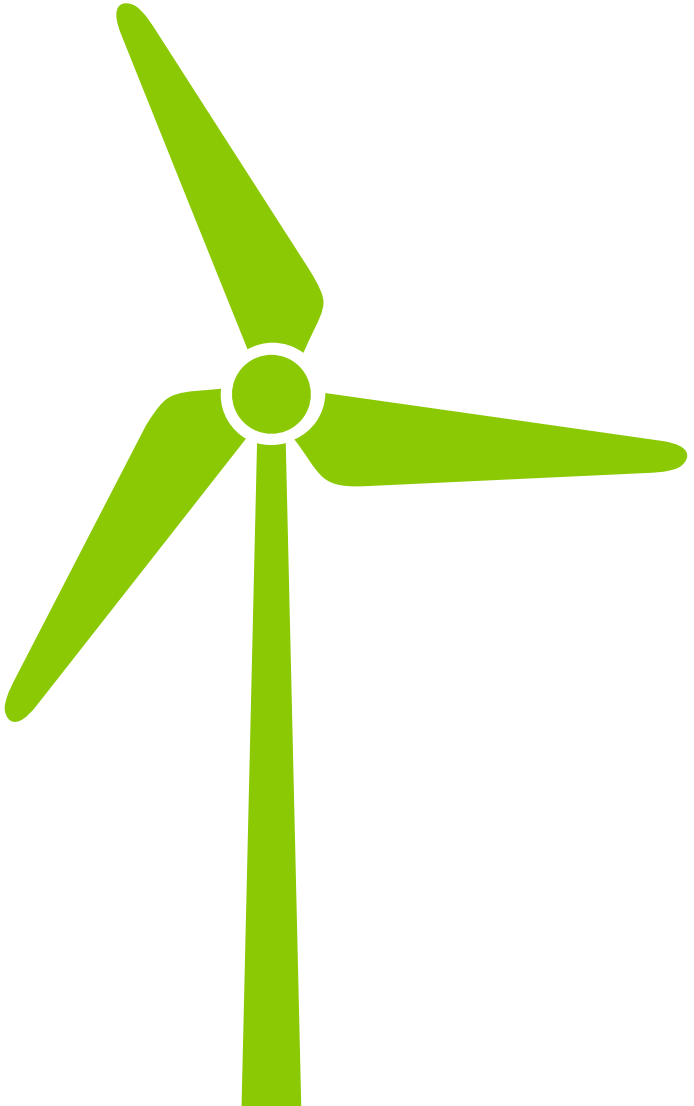
1. Clearing House Mechanisms

2. Knowledge Information Management

Mandate

Nairobi Convention COP 4/8 led to 2006 Knowledge Management Strategy and Clearing House Mechanism

Decision COP 10/5.3:
To request the secretariat to strengthen national data centres, through capacity development on information and knowledge management, and in collaboration with partners, to develop a regional information management strategy and mechanisms to address common challenges and take informed decision-making for ocean governance



Approach

IMS MULTI-STAKEHOLDER WORKING GROUP(MSWG)

Nairobi Convention countries, NGOs, academia and other stakeholders

- Three clusters:
  - Oceanography and Geomorphology
  - Biological
  - Socio economic

- Technical webinars:
  - Information Needs for Ocean Accounting
  - Data sharing Frameworks, Interoperability of Systems
  - IMS Institutional Arrangements

2nd Draft Strategy Developed

Co-creation-Engaging Stakeholders through Technical Dialogues

Final Draft Information Management Strategy
Will be presented for adoption at the 11th Conference of Parties for the Nairobi Convention to be held in Q1 2024

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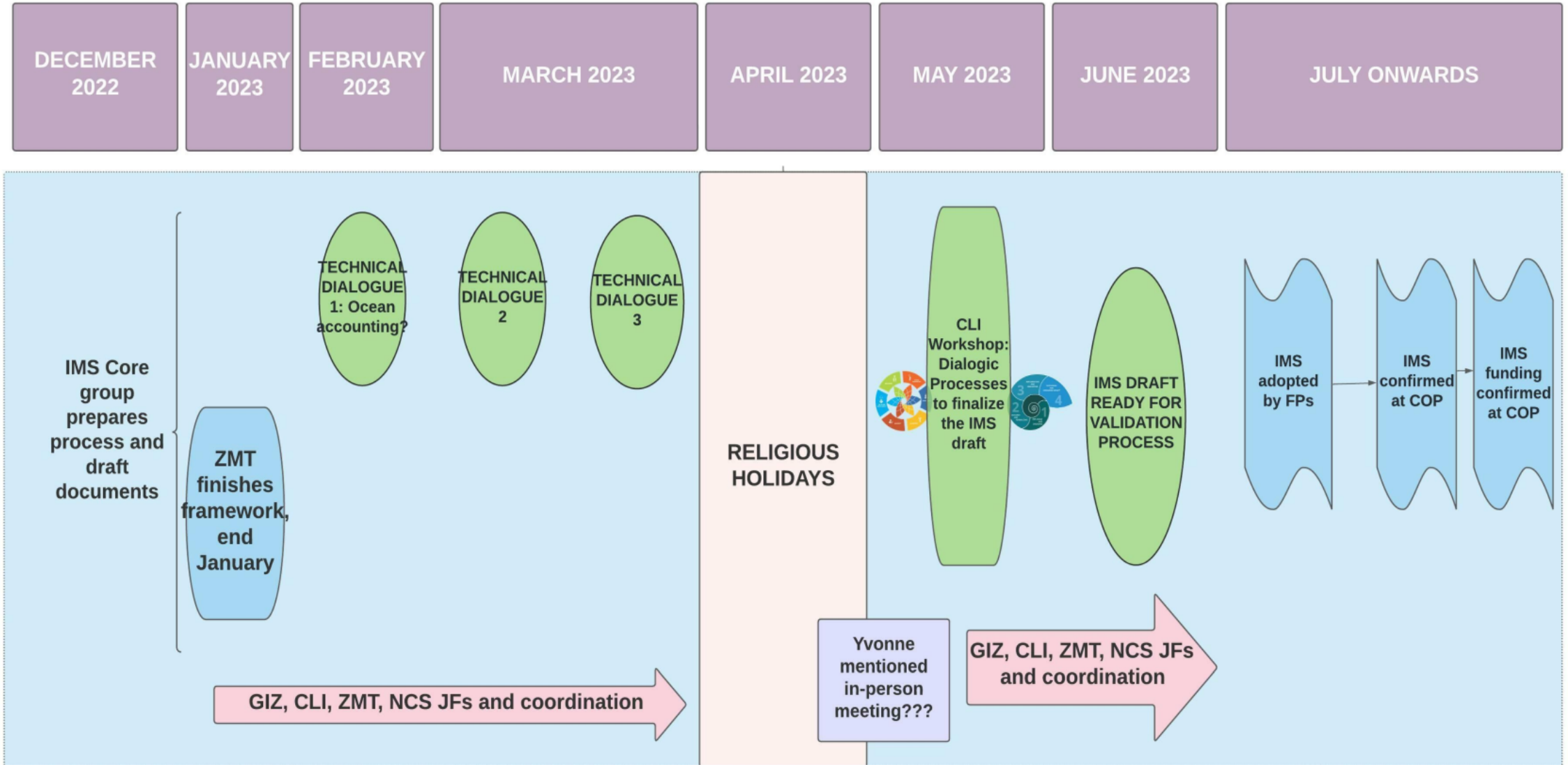
WIO Information Management Strategy Process and Timeline 2023



NAIROBI CONVENTION

1. Introduction - towards a common information management in the WIO region

- 1.1 Vision and Objective
- 1.2 Data and Information in the WIO region
- 1.3 Guiding Principles of the IMS
- 1.4 Mandate for the IMS development process

2. Core Components of WIO regional information management –where to start

- 2.1 Governance and Stewardship
  - 2.1.1 Developing a governance structure
  - 2.1.2 Stewardship and team organization
  - 2.1.3 Regional Focus Topics
- 2.2 Standards and Regulations
  - 2.2.1 Securing Data & Information Ownership
  - 2.2.2 Regional Data Collection Standards and Regulations
  - 2.2.3 Regional Data Sharing Agreement
  - 2.2.4 Metadata Quality Management
- 2.3 WIO data and information platform
  - 2.3.1 Technical Requirements
  - 2.3.2 Secure Technical Infrastructure
  - 2.3.3 Levels of Access
- 2.4 Capacity Development
  - 2.4.1 Fostering human capacity through regional management and networks
  - 2.4.2 Strengthening Institutions and supporting political decision-makers

3. Strategy Implementation - the way forward

- 3.1 Visualization of key milestones for IMS Implementation
- 3.2 Critical focus topics for the IMS implementation

1. Introduction - towards a common information management in the WIO region

Drawing on the mutual supportive

Regional Ocean Governance and Information Management Strategies (ROGS & IMS), diverse, multi-stakeholder and Multi-stakeholder and multi-stakeholder and multi-level WIO Actors can help enhance…..

…. Ocean Governance decision making process

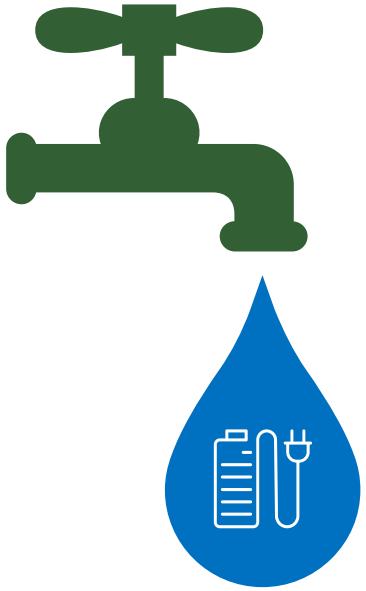
…. Enable a more inclusive and equitable ocean govern

…. Identify key areas and data gaps for information needs to support policy process and strategies implication

…. setting baseline and tracking progress towards stored information management and Ocean governance goal

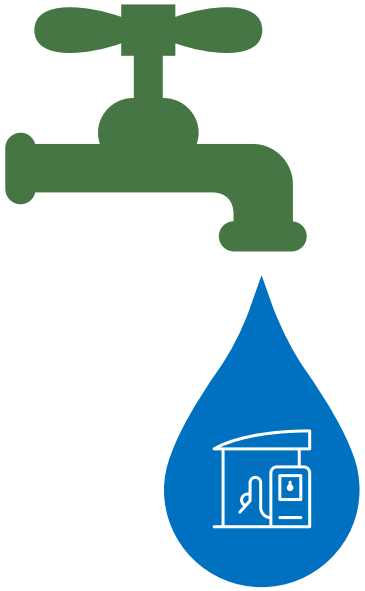
Guiding Principles

FAIR principles focus on technical aspects of data storage and emphasize the capacity of machine-actionability with stored content



- **F** → Findability
- **A** → Accessibility
- **I** → Interoperability
- **R** → Re-usability

CARE principles specify that indigenous data should benefit to indigenous communities that are related to the origin of the data



- **C** → Collective Benefit
- **A** → Authority Control
- **R** → Responsibility
- **E** → Ethics

TRUST relate to the ability of digital Repositories to provide a trustful and long-term services to their user

- **T** → Transparency
- **R** → Responsibility
- **U** → User-focus
- **S** → Sustainability
- **T** → Technology

Regional Focus Topics:

- Main focus lies primarily (but not exclusively) in the collection, curation and referencing data and information within coastal, marine and ocean-related topics

Standards and Regulations

Regional Data Collection Standards and Regulations

Securing Data and Information Management

Regional Data sharing Agreement

Meta Data quality Management

Regional Data Collection Standards and Regulations

- Collected data needs to comply with existing standards for data collection methods and practices.
  - A regional data management plan monitoring the planned and executed (short and long-term) data collection activities and metadata standards
    - harmonization of reporting metrics
    - Provision of adequate storage facilities for collected datasets
    - The IOC-UNESCO and EAF-NANSEN survey protocols can serve as best practices for the overview of the WIO collection standards

Metadata Quality Management

Attributes to be included: methodology, data source, ownership/authorship, data format, location, spatial and temporal resolution, time(stamps) of data collection and publication

Securing Data and Information ownership

- Copyright and licensing are essential for safeguarding data and information
- Legal and policy frameworks that protect owner rights and ensure proper attribution need to be adopted
- Promote and support the FAIR publication of data and information in suitable TRUSTed long-term repositories

Regional Data sharing Agreement

- Regulating the terms of use and the sharing of data, information and metadata within the WIO region needs to be in place

- Its task is to provide transparency on how the content in the WIO data and information platform (will be handled and build trust with data owners as well as data users.

WIO Data and Information Platform

- The **WIO platform** hosted by the Nairobi Convention Secretariat will provide an **overview of the existing information and datasets from the WIO countries** to ensure a FAIR data utilization- will be built on the existing Clearing House Mechanism (CHM)

- Entry point to all stakeholders interested in WIO data and information, providing the service of data and metadata hosting, and functioning as an informative source on all topics related to WIO regional information management.

- Datasets alongside their metadata hosted on the regional level in the WIO platform. When this is not possible, they can provide the metadata to the platform and continue to be hosted within individual countries and institutions

Technical Requirements

- The technical set-up should ensure a FAIR handling of contents on a system that is aligned with the TRUST principles.

- The key to successful implementation in terms of willingness to data sharing is transparency on how the provided content is stored, secured and made available on the platform.

- Data storage security, the WIO platform needs to include a robust back-up strategy with parallel storage servers

Capacity Development

01

Fostering human capacity through regional management and networks

02

Strengthening **institutional capacity** involves improving the equipment, tools, and technologies used for data and information management. There is a need to address the lack of equipment and outdated technology in many organizations

03

Political capacity: produce summaries, such as factsheets and policy briefs, that are targeted toward decision-makers.

Recommendations

01 Technical Infrastructure and Security

- Addressing the critical challenge of technical security, the IMS proposes the establishment of a secure, centralized database infrastructure

- The technical framework must be versatile enough to accommodate data storage at both national and regional levels, promoting data exchange and ensuring the reliability of datasets.

02

Governance and Oversight

- The IMS recommends the establishment of a Regional Steering Committee as the apex governing body responsible for data and information sharing.

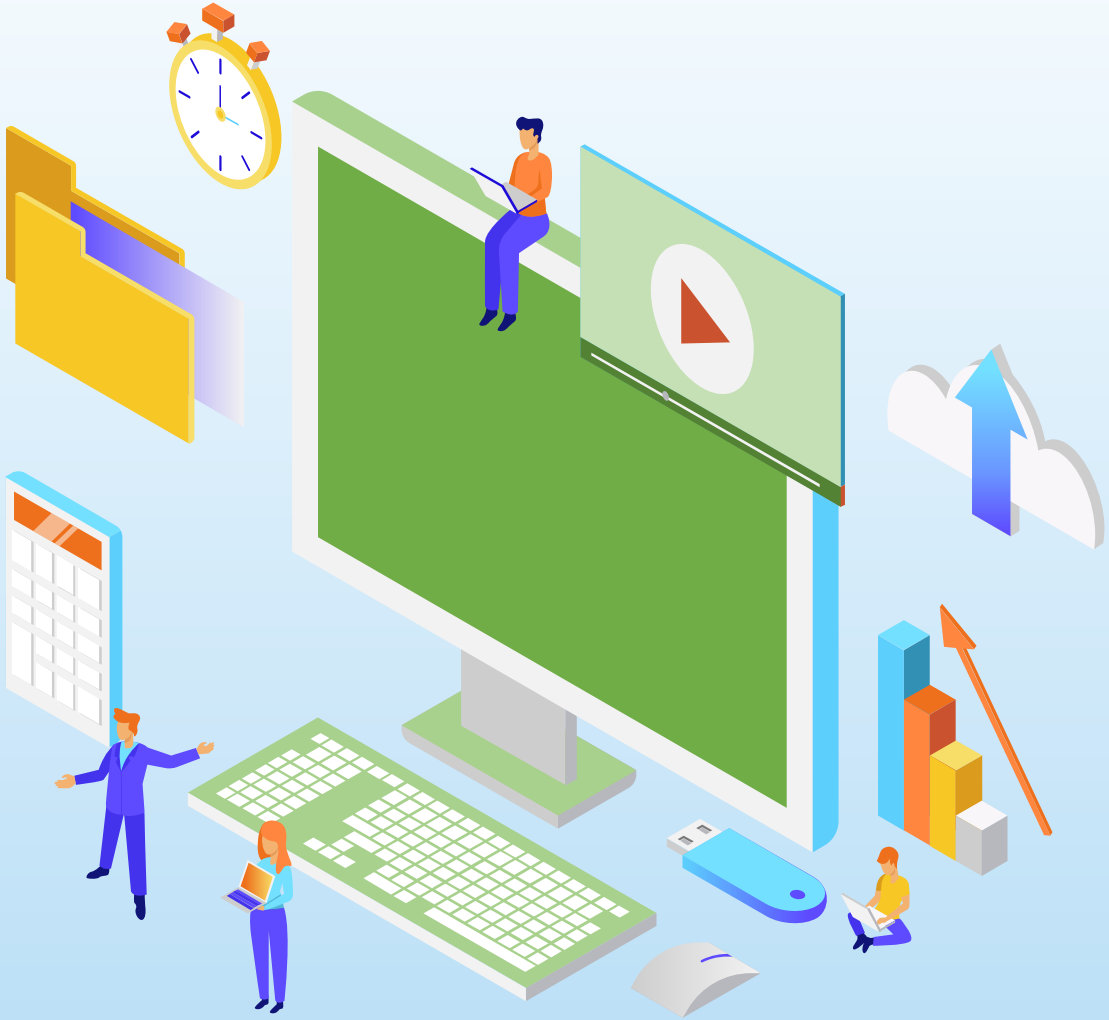
- This committee assumes the crucial role of overseeing the development and implementation of standardized practices at local and national levels.

03

Data Access and Licensing

- Acknowledging the varying sensitivity of datasets, the IMS suggests implementing user authentication mechanisms on the WIO data platform

- This approach allows for different access rights based on user roles, managing the accessibility of open and restricted datasets.



04

Capacity Development

- The IMS underscores the significance of human, institutional, and political capacities for the successful implementation of the strategy.

- The goal is to empower stakeholders with the skills necessary to navigate the intricacies of the IMS, ensuring its sustainable and effective implementation.

Lesson Learned

Political will and a mandate for developing an Information Management Strategy

A mandate from the Parties to the Nairobi Convention forms the basis for co-designing an Information Management Strategy for the Western Indian Ocean

Enabling Factors

- Regional consensus and ownership of the IMS development process ensures mainstreaming of the IMS into national planning processes
- Country participation in the creation of the strategy

Lessons Learned

- Long process leading to the adoption of the decision in 2021
- Coordination of such a regional and political process requires continuous capacities on all sides and a strong will to participate actively
- Continuity and a long-term process for developing and implementing strategy needs to exist before the start of the process

Lesson Learned

Developing the regional Information Management Strategy in a co-creation process

A Multi-Stakeholder Working Group (MSWG) composed of Nairobi Convention Contracting Parties and relevant stakeholders is responsible for designing and driving the IMS process. The collective approach values multi-stakeholder dialogue as key for co-developing a strategy informed by diverse voices and owned by a broad and representative set of stakeholders.

Enabling Factors

- A series of physical meetings were essential in developing the basic structure and content of the strategy
- Physical meetings also helped to keep the momentum alive for further online collaboration in the strategy development

Lessons Learned

- Need to assign clear roles within the process including someone who drives the process forwards according to set timelines

Thank you

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