

# **Science for Solutions: Bringing Stakeholders Together to Improve Ocean Planning and Governance in ABNJ of the South-East Pacific**

10 - 12 June 2019  
Cape Town, South Africa



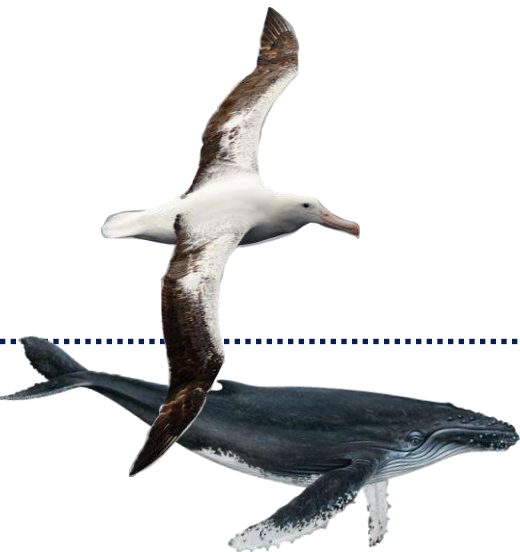
# **An Introduction to ABNJ and the BBNJ Negotiations**

**Dr. Carole Durussel**

**Institute for Advanced Sustainability Studies (IASS)**



# What are Areas Beyond National Jurisdiction (ABNJ)?



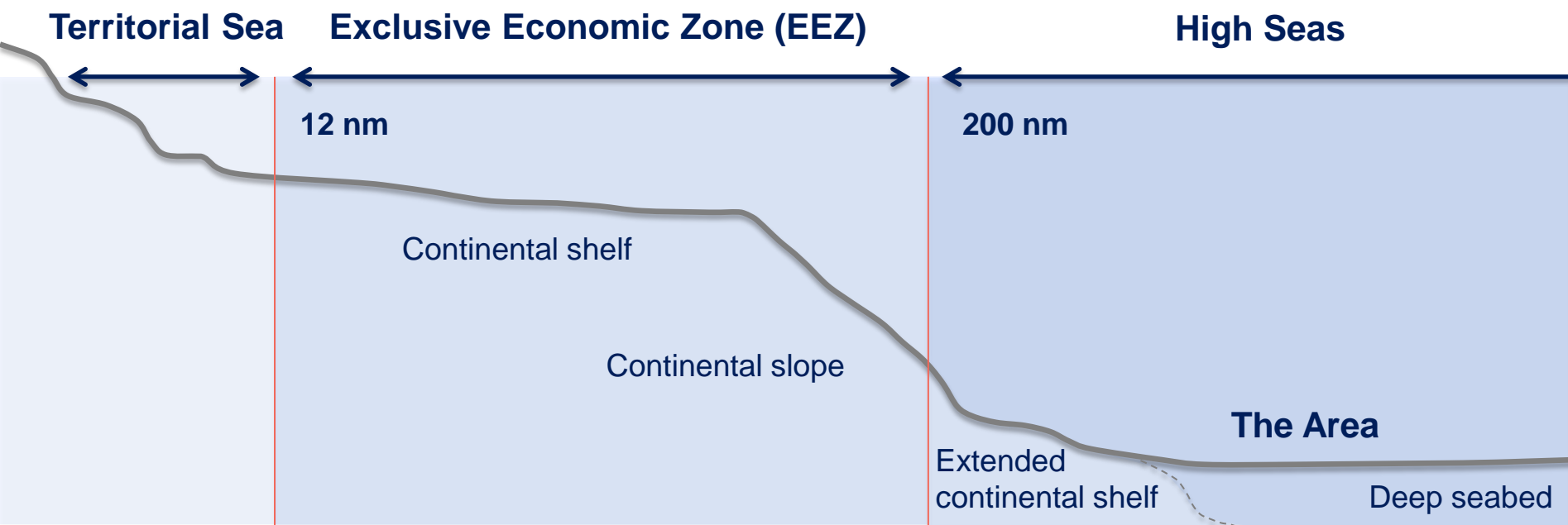


# ABNJ explained

71% of the planet  
are covered by  
oceans



~ 60% of the  
oceans are high  
seas



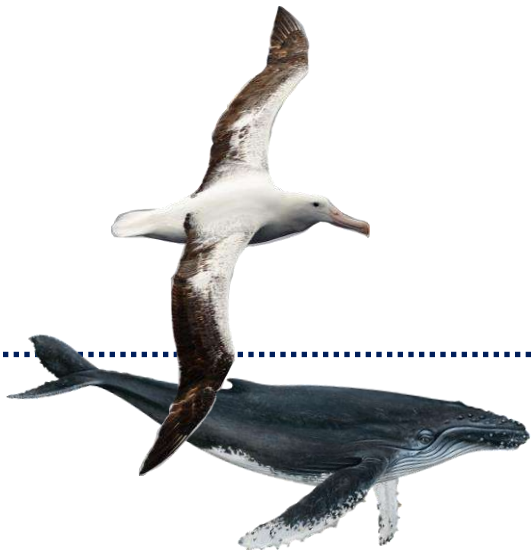


# The High Seas in view





# Why do ABNJ matter?





# The High Seas are full of life

- Deep-sea species often show **longevity**, **high endemism**, **low growth rates**, **late maturity** and **high sensitivity to disturbances**
- **Unique oceanographic and biological features**, e.g. seamounts, hydrothermal vents and cold seeps
- **Highly productive ecosystems**
- Largely **unexplored** and **understudied**



*Hydromedusa*



*Hydrothermal vents  
in the Lau Basin*



*Deep sea sponge  
covered with  
anemones*



*Unidentified  
swimming organism*

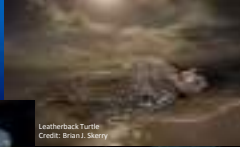




Red's king crab  
Credit: David Wroble, SeaPics



Pacific Ocean Ray  
Credit: Paul Souder/WorlFoto/Getty Images



Leatherback Turtle  
Credit: Brian J. Skerry



Atlantic Wolffish Ray  
Credit: Jonathan Best, SeaPics



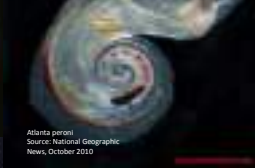
Zooplankton  
Source: National Geographic News, October 2010



Giant Tusk Worm  
Credit: National Geographic



Fangtooth Fish  
Credit: David Wroble, SeaPics



Atlanta gunnel  
Source: National Geographic News, October 2010



Nautilus  
Source: National Geographic News, October 2010



Comb jelly  
Source: National Geographic News, October 2010



White Shark  
Credit: Colin Parker, My Shot



Spineless Worm  
Credit: Daryl A. Muroski/National Geographic



Yeti Crab  
Credit: Bremer A. Fife, Census of Marine Life



Glowing sucker octopus  
Source: www.getstuffedto.com/mariana-trench-the-deepest-part-of-the-ocean/  
Source: www.getstuffedto.com/mariana-trench-the-deepest-part-of-the-ocean/



Woolfish  
Credit: Susan Redder, SeaPics



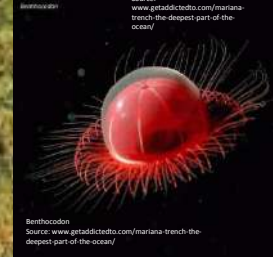
Source: http://almarine.blogspot.com.au/2009/11/deep-sea-seems-with-cross-eyed-sea.html



Hard coral  
Credit: INDEX SATAL/NOAA  
Source: National Geographic News, August 2010



Purple octopus  
Credit: Bedford Institute of Oceanography  
Source: National Geographic News, July 2010



Bioluminescent  
Source: www.getstuffedto.com/mariana-trench-the-deepest-part-of-the-ocean/



Ten-armed sea star  
Credit: INDEX SATAL/NOAA  
Source: National Geographic News, August 2010



Blobfish  
Credit: NORFANZ 2003/Founding parties



A sea anemone has sea anemone on a hermit crab.  
Credit: INDEX SATAL/NOAA  
Source: National Geographic News, August 2010



Oil Worm  
Source: http://almarine.blogspot.com.au/2009/11/deep-sea-seems-with-cross-eyed-sea.html



Coral With Sea Anemones  
Credit: Bedford Institute of Oceanography  
Source: National Geographic News, July 2010



Green pigfish  
Depth: 1000 m  
Depth: 1000 m  
Depth: 1000 m

Dumbo octopus  
Source: www.getstuffedto.com/mariana-trench-the-deepest-part-of-the-ocean/



Baby octopus  
Source: National Geographic News, October 2010



Bluefin Tuna  
Credit: Brian J. Skerry, National Geographic



Planarian  
Credit: Tobias Bernhard Photography/Getty Images



Shark  
Credit: Bedford Institute of Oceanography  
Source: National Geographic News, July 2010



Pacific Viperfish  
Credit: David Wroble, SeaPics



Frilled Shark  
Credit: Awashima Marine Park, Getty Images



# The High Seas are providing

Seafood, raw materials,  
genetic and medicinal  
resources

## **Provisioning services**

Climate regulation,  
carbon sequestration, air  
purification, habitat

## **Regulating services**

## **Supporting services**

Nutrient recycling,  
primary production

## **Cultural services**

Recreation, spirituality,  
history, science and  
education



# The High Seas are under pressure

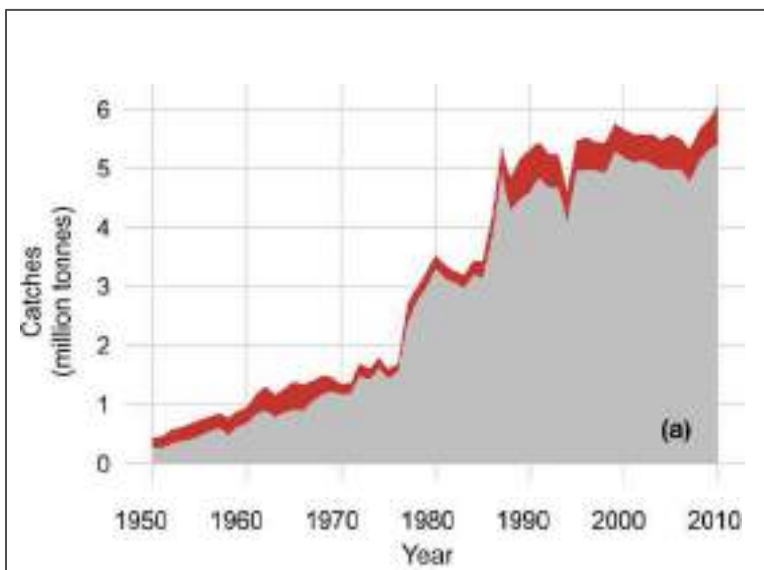
Shipping

Fishing

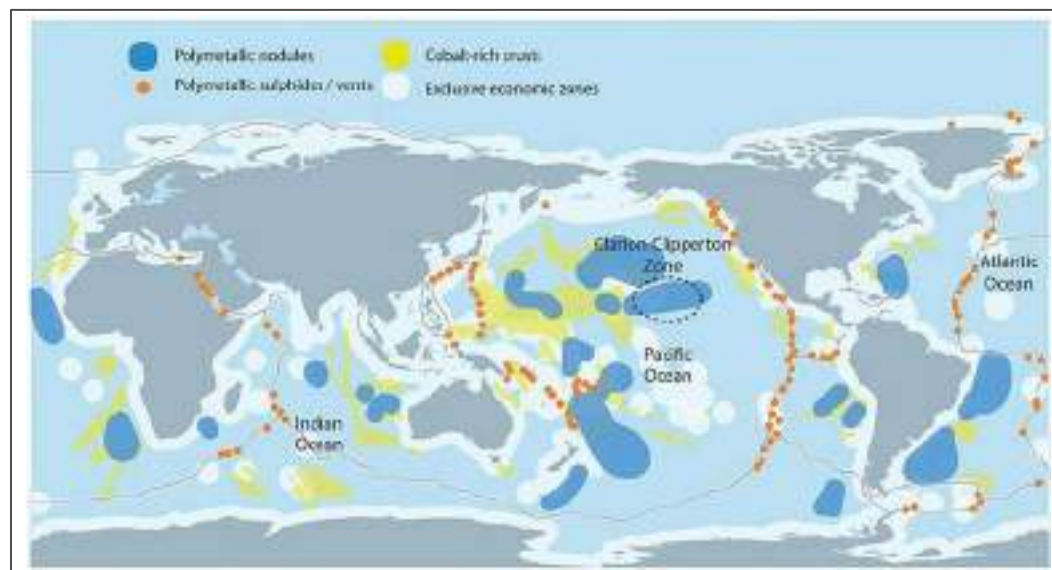
Pollution

Seabed mining

Climate change



*Rising high seas catches*

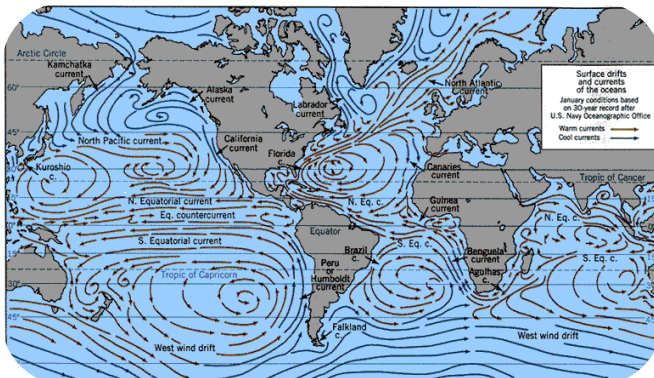


*Location of deep-sea minerals*



# The high seas are connected to national waters

- Clear-cut **jurisdictional and geopolitical distinction** between ABNJ and national waters, but tight **ecological connectivity**
- Connectivity is **essential for the functioning of ecosystem** (restocking of marine resources)



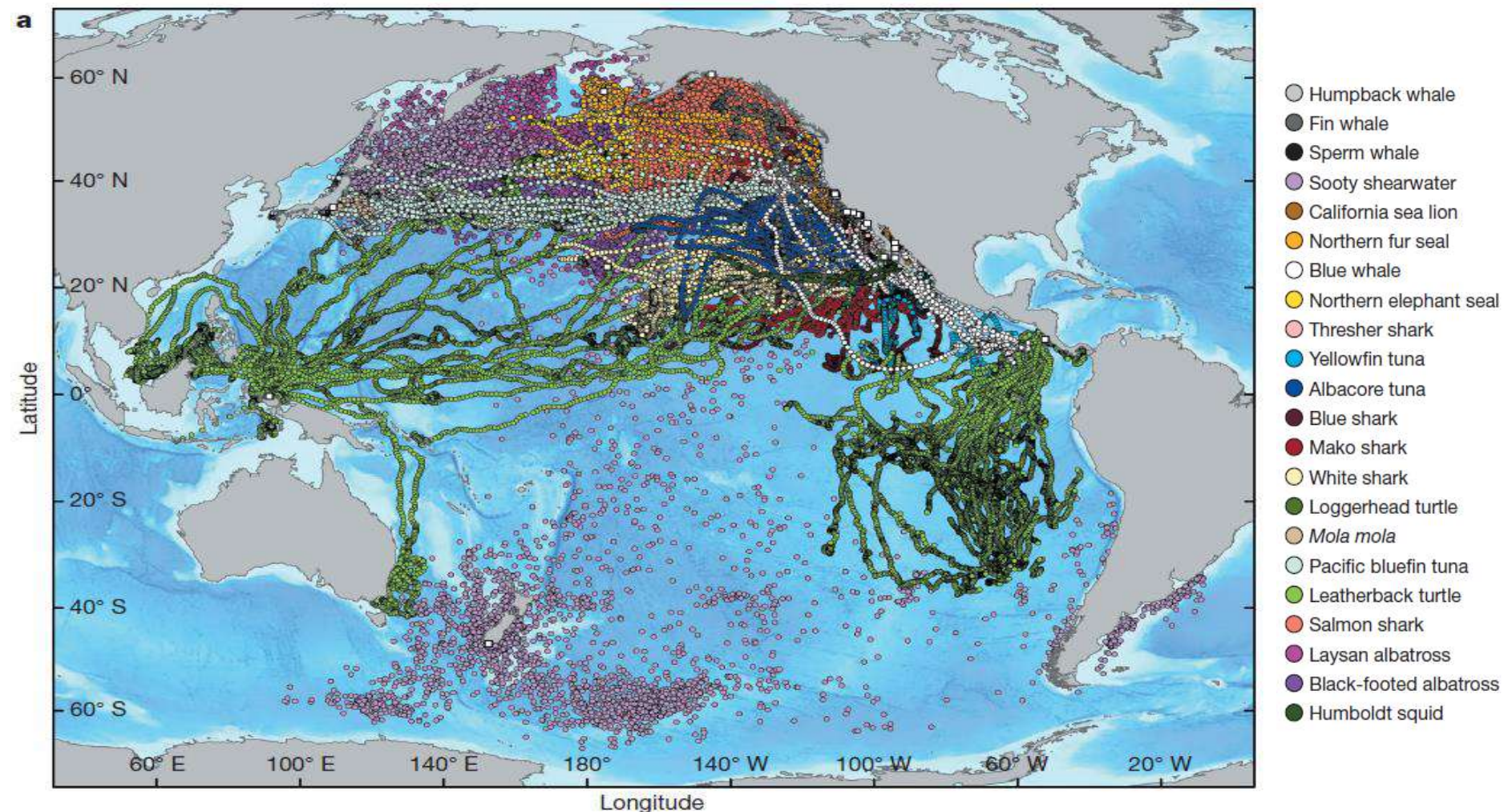
**Circulatory (passive) connectivity**  
transports plankton and larvae



**Migratory (active) connectivity**  
through tuna, whales, turtles, etc.

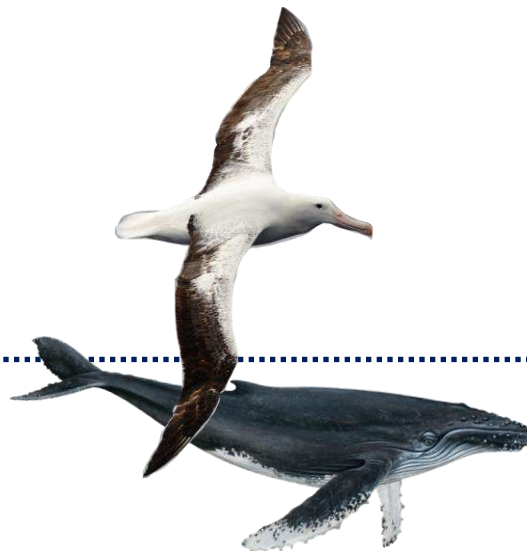


# Migratory connectivity in action



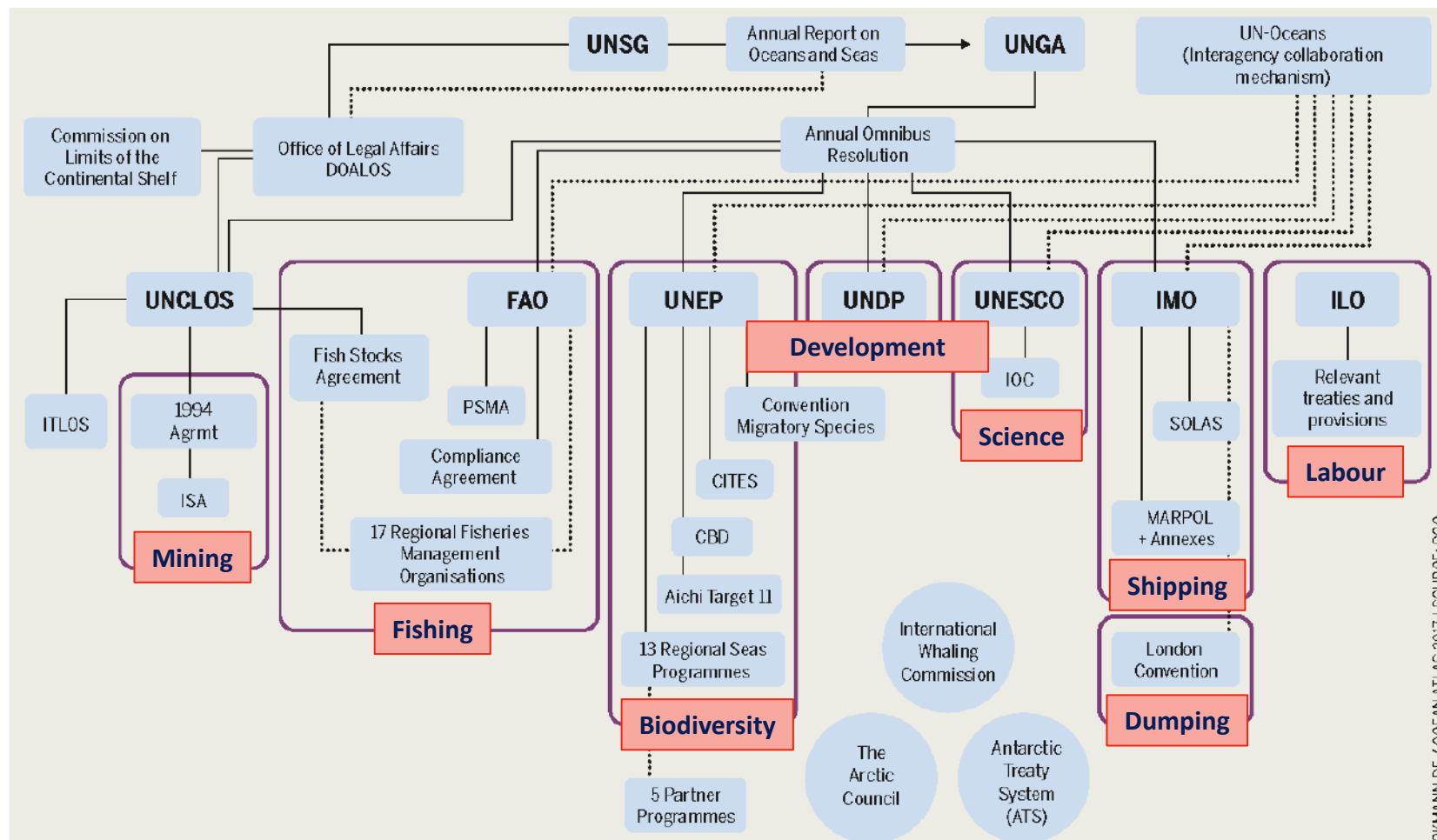


# How are the ABNJ governed?



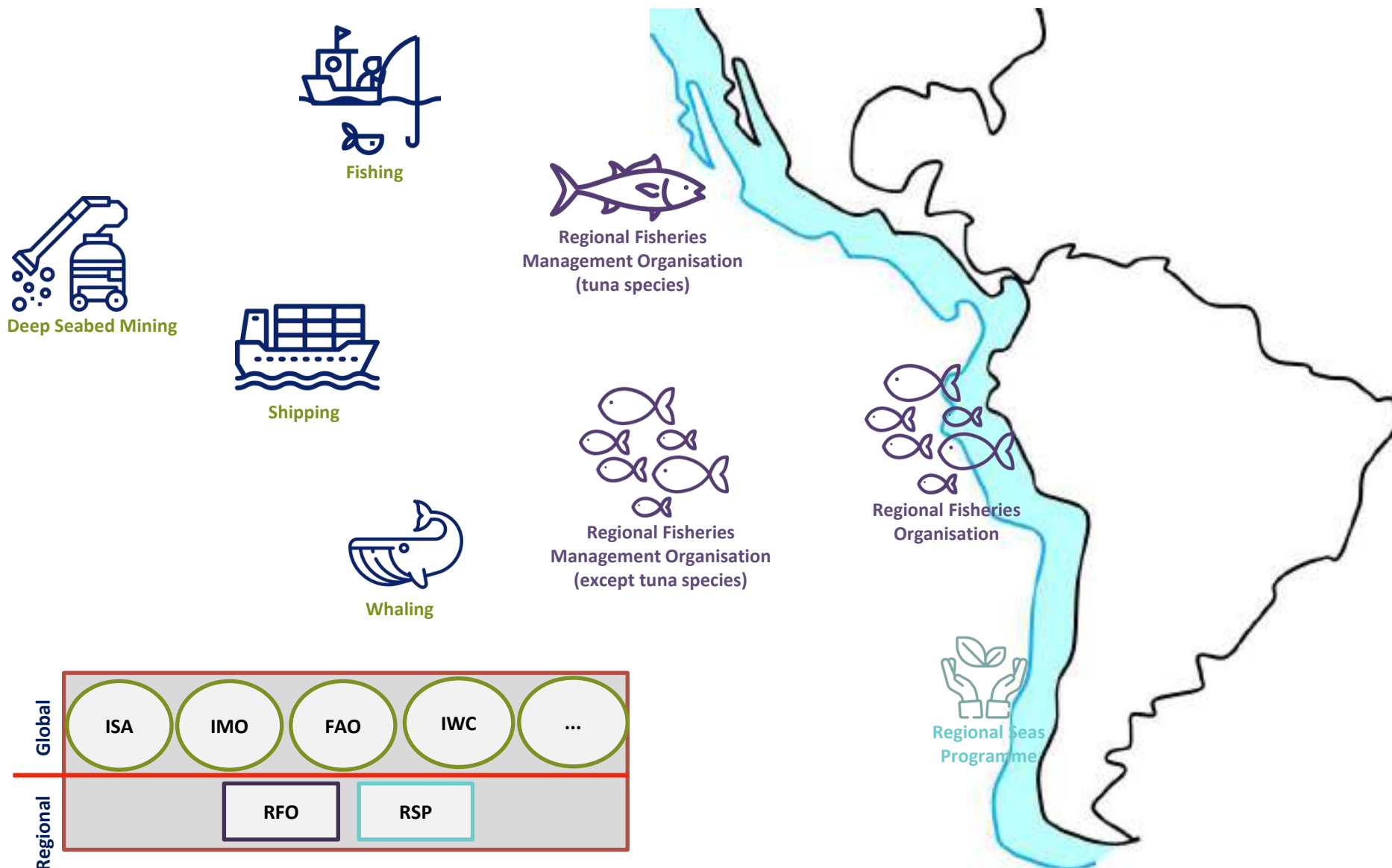


# Complex, fragmented governance framework



**CBD** Convention on Biological Diversity; **CITES** The Convention on International Trade in Endangered Species of Wild Fauna and Flora; **DOALOS** Division for Ocean Affairs and the Law of the Sea; **FAO** Food and Agriculture Organization [of the United Nations]; **ILO** International Labour Organization; **IMO** International Maritime Organization; **IOC** Intergovernmental Oceanographic Commission; **ISA** International Seabed Authority; **ITLOS** International Tribunal for the Law of the Sea; **MARPOL** International Convention for the Prevention of Pollution from Ships; **PSMA** Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing; **RFMOs** Regional Fisheries Management Organisations; **SOLAS** International Convention for the Safety of Life at Sea; **UNDP** United Nations Development Programme; **UNEP** United Nations Environment Programme; **UNESCO** United Nations Educational, Scientific and Cultural Organization; **UNGA** United Nations General Assembly; **UNSG** United Nations Secretary-General

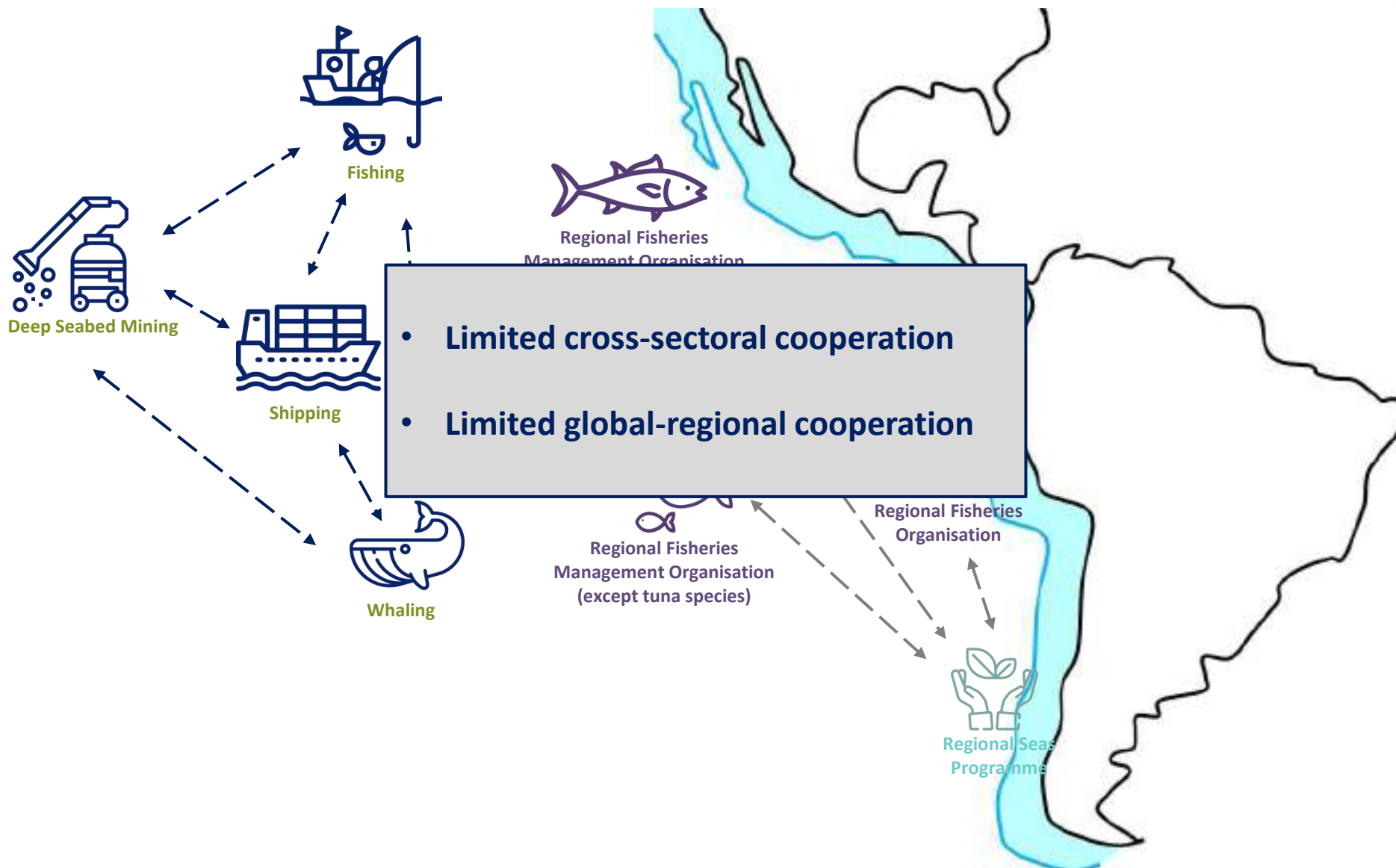






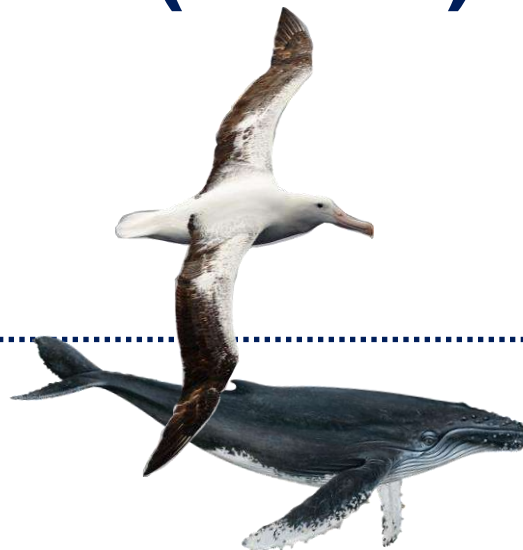
Global

Regional



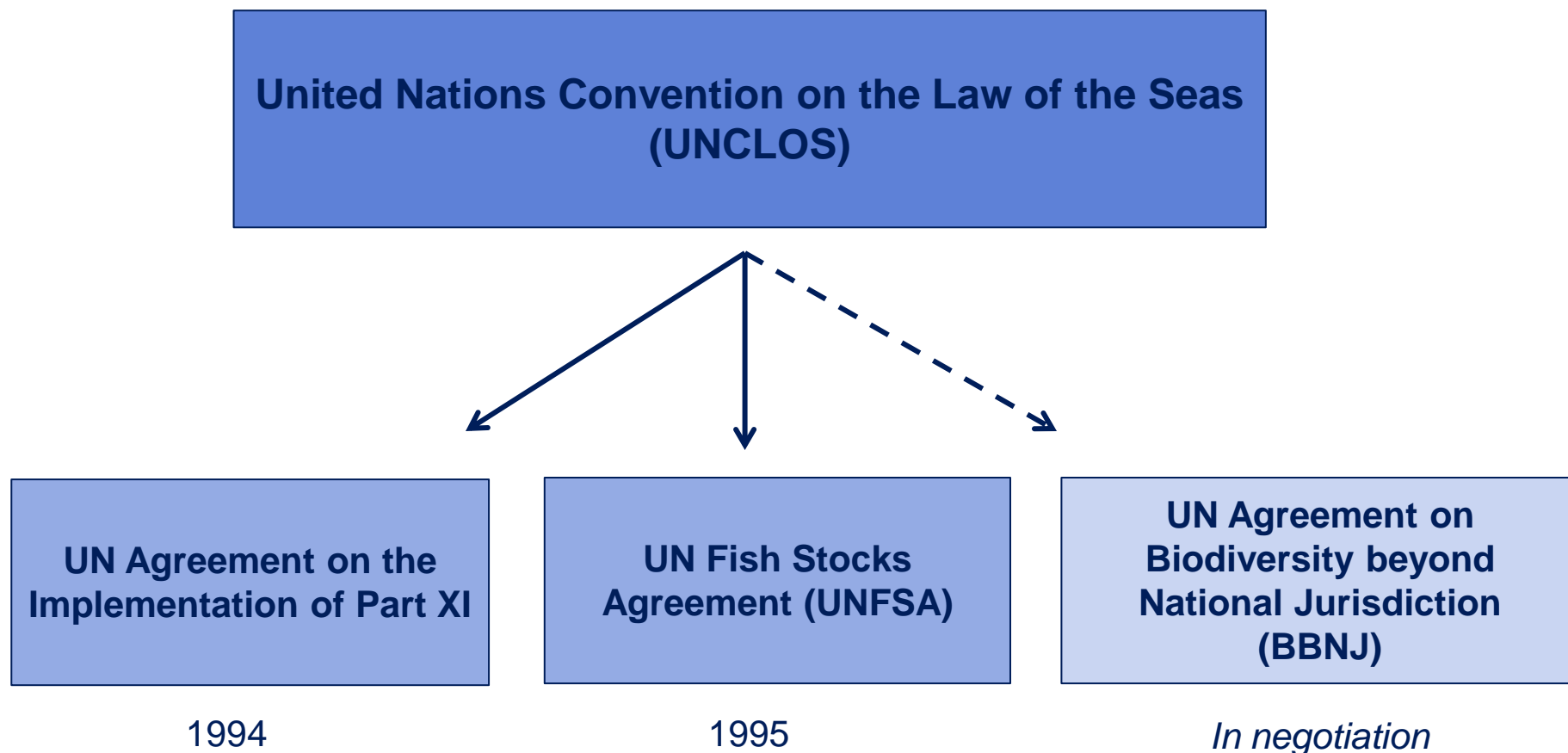


# What are the Negotiations on Biodiversity Beyond National Jurisdiction (BBNJ)?





# The Future BBNJ Agreement





# The BBNJ negotiations: Elements

## Marine genetic resources

... or how genetic resources from marine species **can be accessed, used, and their benefits shared** in an equitable and transparent manner

## Area-based management tools

... or how to regulate human activities in ABNJ in and around ecologically important or vulnerable marine areas in a more integrated manner **using spatial management tools**

## Environmental impact assessments

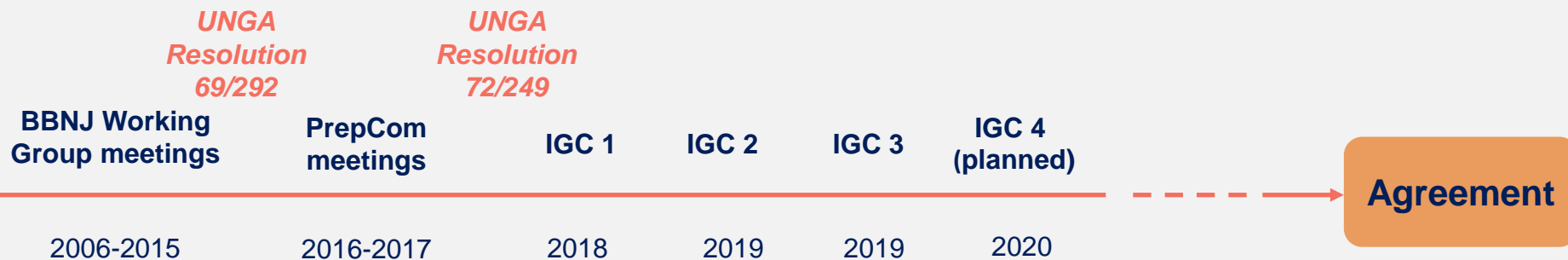
... or how to evaluate the impact of current and future human activities on the marine environment and, when activities are deemed to have an impact, **to either cease them or establish strict regulations on how they should be carried out** to reduce and limit the environmental impacts

## Capacity building and technology transfer

... or how **to ensure the ability of developing and geographically disadvantaged states to participate** in ABNJ research, commercial use, and management

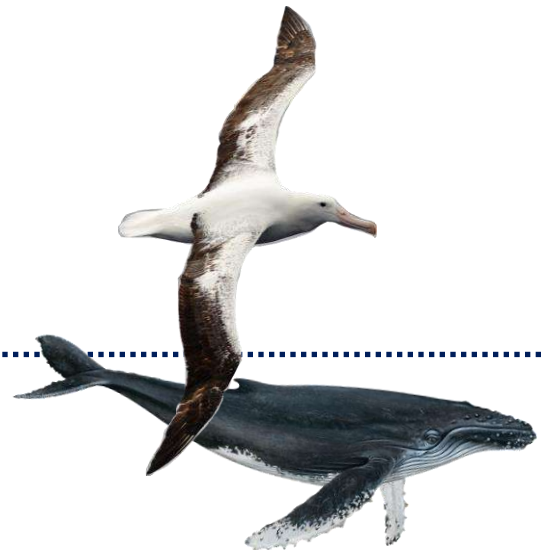


## The BBNJ negotiations: Timeline





# How are the BBNJ Negotiations going?





# Intergovernmental Conferences 1 & 2

## IGC 1 – September 2018

Plenary discussion of all four package deal elements guided by the *President's Aid to Discussion*



Credit: Photo by IISD/ENB | Francis Dejon

## IGC 2 – March/April 2019

Further plenary discussionon guided by the *President's Aid to Negotiations*



Credit: Carole Durussel, 2019



# I. Marine Genetic Resources (MGRs)

## **There is some convergence on:**

- Need for a benefit-sharing mechanism
- Purposes of benefits
- Need for a general provision on cooperation

## **Further discussion needed on:**

- Application of Freedom of the High Seas, Common Heritage of Mankind or other principle?
- What should be included: access in situ, ex situ, in silico, digital sequencing information for MGRs and derivatives?
- Whether and how to regulate access vs. promoting marine scientific research
- Options related to monetary or non-monetary of benefit-sharing?
  - Voluntary or non-voluntary nature of benefit-sharing?
  - Who shares the benefits and with whom?
- Intellectual property rights?
- Options on if and how to monitor MGR utilisation?
- Agreement to address MGRs in the High Seas and The Area, in ABNJ or only in the Area?



## **II. Area-based management tools (ABMTs), including marine protected areas (MPAs)**

### **There is some convergence on:**

- The use of approaches and principles, such as the precautionary approach, the ecosystem approach and the science-based approach
- Need to consider scientific information as well as traditional knowledge
- ABMT proposals are to be submitted by State Parties to the Secretariat
- Need to promote coherence, complementarity, and synergies with other frameworks and bodies
- The future agreement should not prejudice the rights of coastal States

### **Further discussion needed on:**

- Standards and criteria for ABMTs and MPAs
- Whether MPAs should be permanent or temporary
- Modalities for scientific assessments of ABMTs
- Which should be the decision making mechanisms under ABMTs
- Who will be responsible for monitoring and review of ABMTs? Global or regional bodies? Others?



### **III. Environmental Impact Assessments (EIAs)**

#### **There is some convergence on:**

- Obligation to conduct EIAs
- The need to not undermine, streamline and avoid duplication with EIA processes under existing instruments, frameworks and bodies

#### **Further discussion needed on:**

- Activities requiring an EIA & exemptions
- Modalities for the relationship with relevant global, regional and sectoral bodies
- Whether and how to address cumulative and transboundary impacts
- How would the monitoring, report, review and compliance of EIAs be done and by whom?
- Inclusion of socio-economic and cultural impacts in EIA reports
- Involvement of adjacent coastal States
- Inclusion of Strategic Environmental Assessments (SEAs)



## **IV. Capacity-building and technology transfer (CB&TT)**

**IOC-UNESCO International guidelines already exist; the BBNJ agreement should catalyse CB&TT**

### **There is some convergence on:**

- The importance of CB&TT
- Including a general obligation on the promotion of cooperation for CB&TT
- CB&TT should be needs-based and country-driven

### **Further discussion needed on:**

- Voluntary or mandatory?
- Categorisation of States and inclusion of preferential treatment?
- Areas in which technology will be transferred (only MGRs or broader?)
- Form of Clearing House mechanism
- Establishment of a funding mechanism



## IGC 3 – August 2019

> IGC President Lee will prepare a draft treaty text by June/July 2019

- How to bridge **fundamentally different views**?
- Can **parallel meetings** and **small, informal group meetings** further progress?
- Will the conference be concluded **within the deadline**?
- How can **small delegations** participate in such a format?



# The DOALOS Voluntary Trust Fund

**- - - DEADLINE 28 JUNE 2019 - - -**

**Possibility to obtain funding for representatives from developing countries, especially from LDCs, LLDCs and SIDSs**

- For more information: <https://www.un.org/bbnj/content/trustfundbbnj>

Application should to be sent by Governments through their Permanent Missions to the UN

- By email to: [doalos@un.org](mailto:doalos@un.org)
- Delivered to:

Office of Legal Affairs, Division for Ocean Affairs and the Law of the Sea  
United Nations Headquarters;  
Room No. DC2-0450  
New York, NY 10017





# Thank you!



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INTERNATIONAL  
CLIMATE INITIATIVE (IKI)

## PROG

Partnership for Regional  
Ocean Governance

**Dr. Carole Durussel**

Co-Lead, STRONG High Seas

Email: [carole.durussel@iass-potsdam.de](mailto:carole.durussel@iass-potsdam.de)

Institute for Advanced Sustainability Studies e.V.

Berliner Strasse 130

D – 14467 Potsdam

Web: [www.iass-potsdam.de](http://www.iass-potsdam.de) & [www.prog-ocean.org/](http://www.prog-ocean.org/)



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IDDRI



International Ocean Institute  
African Region





# **STRONG High Seas Project: State of Play**

Ben Boteler  
Institute for Advanced Sustainability  
Studies (IASS)

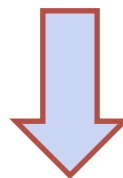
10 June 2019  
Cape Town , South Africa



## **STRONG High Seas:**

### **Strengthening Regional Ocean Governance for the High Seas**

- 5-year project (June 2017 – May 2022)
- Funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) through the International Climate Initiative (IKI)
- Objective: To **strengthen regional ocean governance** for the **conservation and sustainable use of biodiversity**



- To develop **integrated and ecosystem-based approaches**
  - within our two focal regions
  - between marine regions
  - between the regional and global level

Supported by:

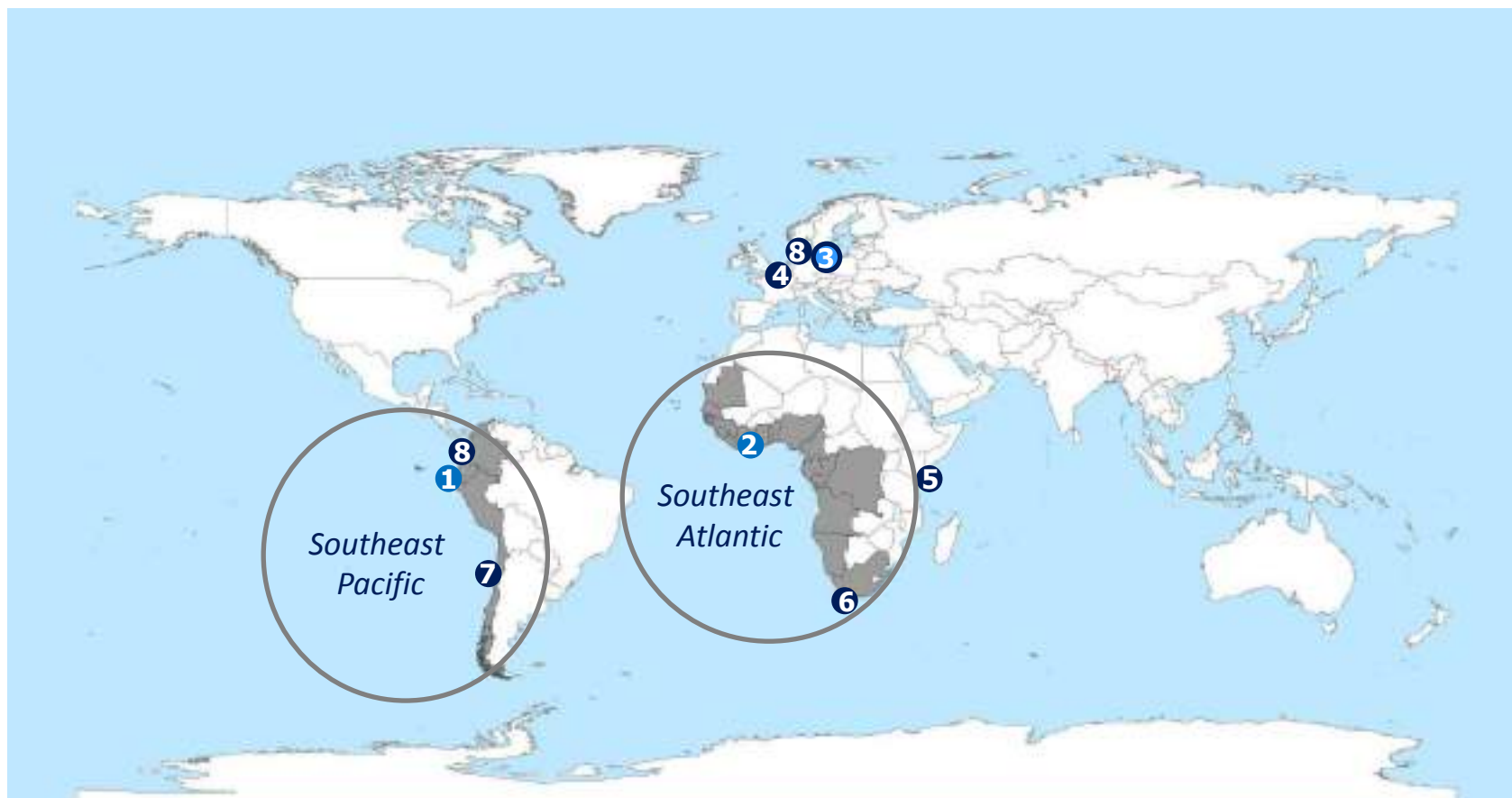


Federal Ministry  
for the Environment, Nature Conservation  
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based on a decision of the German Bundestag



# Partners of the STRONG High Seas Project



Credit: ESRI (2008): World countries 2008. ESRI Data & Maps

1



3



5



7



2



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4



6



International Ocean Institute  
African Region

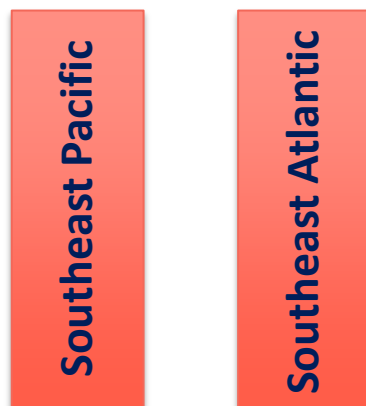
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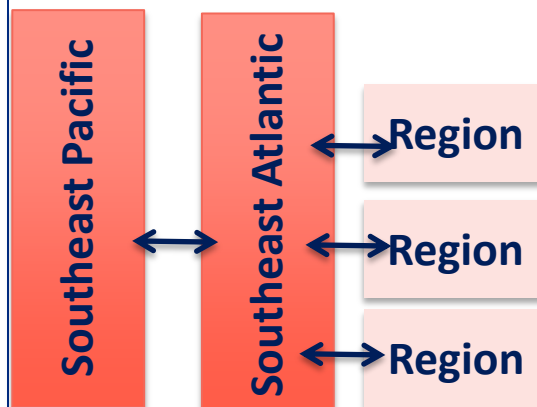
# Project Components

## Component I



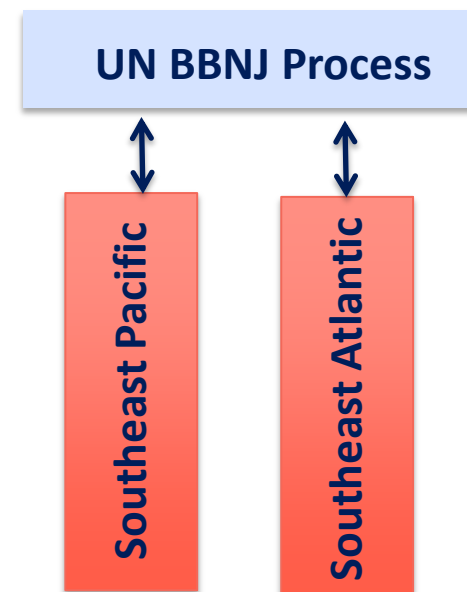
Focus on strengthening  
ocean governance in the  
focal regions

## Component II



Focus on strengthening  
dialogue between  
marine regions

## Component III



Linking regional and  
global governance



# Project activities

**Engagement in  
Policy**

**Communication and  
Outreach**

**Capacity Building**

**Stakeholder  
Platform**

**Dialogue Workshops**

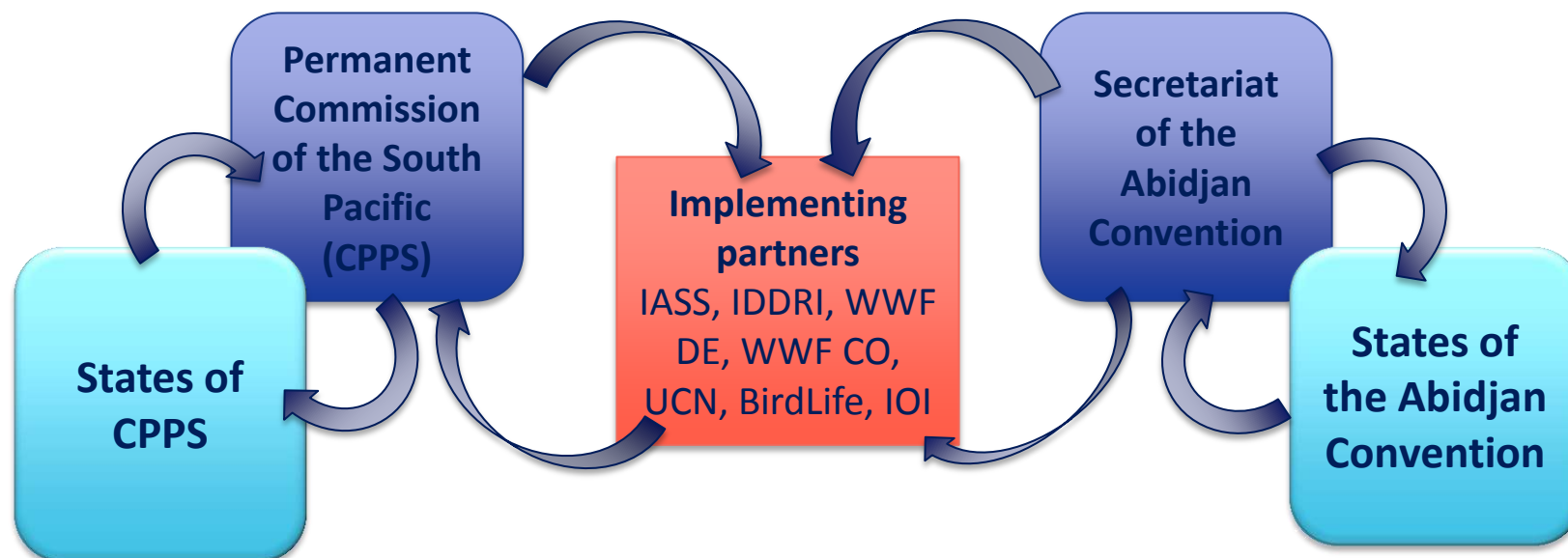
**Interregional  
Workshops**

**Technical Workshops**

**Scientific  
Assessments**



# Collaborative approach

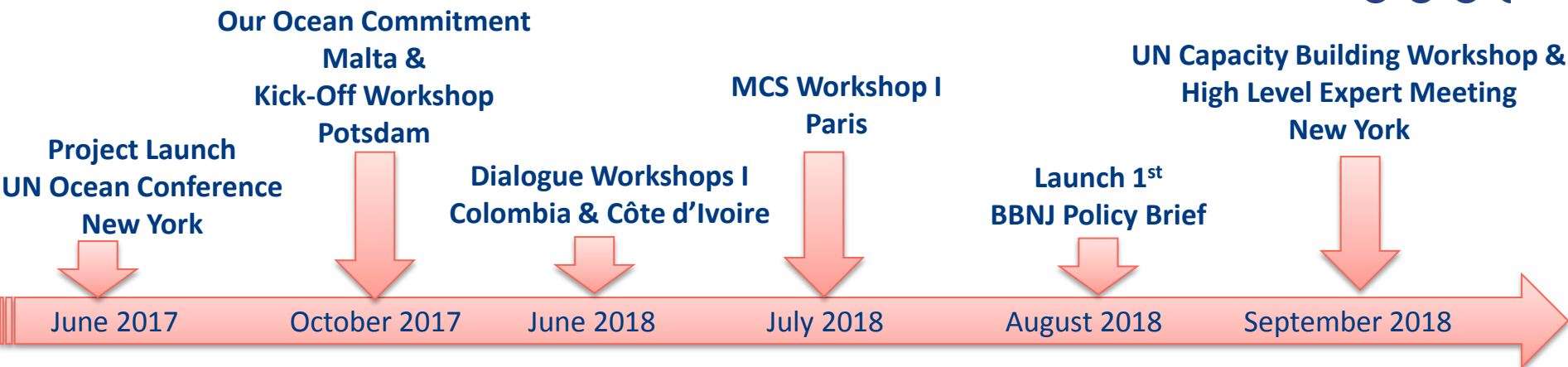


## Collaboration with the regions

- Identification of topics for in-depth assessment
- Co-design of regional specific scientific assessments (project outputs)
- Data and information exchange
- Review and evaluation of project relevant outputs
- Co-development of joint workshops and trainings
- Ongoing exchange (stakeholder platform)

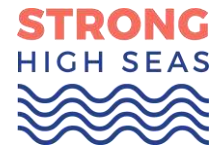


# 2017-2018 Project Update





# Progress under Component I: *Strengthening Ocean Governance in the Southeast Pacific & Southeast Atlantic*



## Scientific Assessments

- Assessment of the **legal & institutional framework**
- Assessment of the **ecological characteristics**
- Assessment of **technological tools** relevant for the **monitoring, control and surveillance** of human activities in ABNJ





# Progress under Component I: *Strengthening Ocean Governance in the Southeast Pacific & Southeast Atlantic*



## Stakeholder Engagement

- Assessment of **regional capacity needs**
- Identification of a **relevant stakeholder engagement platform** for the regions
- Organisation of first **Dialogue Workshops**





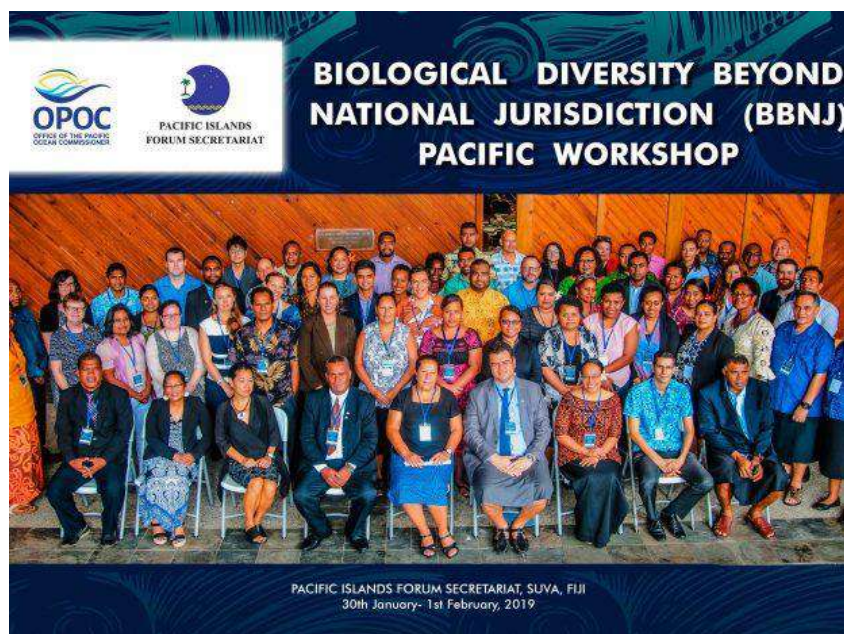
# Progress under Component II: *Strengthening Dialogue between Marine Regions*

## Scientific Assessment

- **Lessons learnt** from other regions in ocean governance

## Stakeholder Engagement

- Strengthening dialogue with the **Southwest Pacific region**





# Progress under Component III:

## *Linking Regional and Global Governance*



### Policy Engagement

- **Policy Brief Options** to underpin global ocean governance **through regional and sectoral governance**

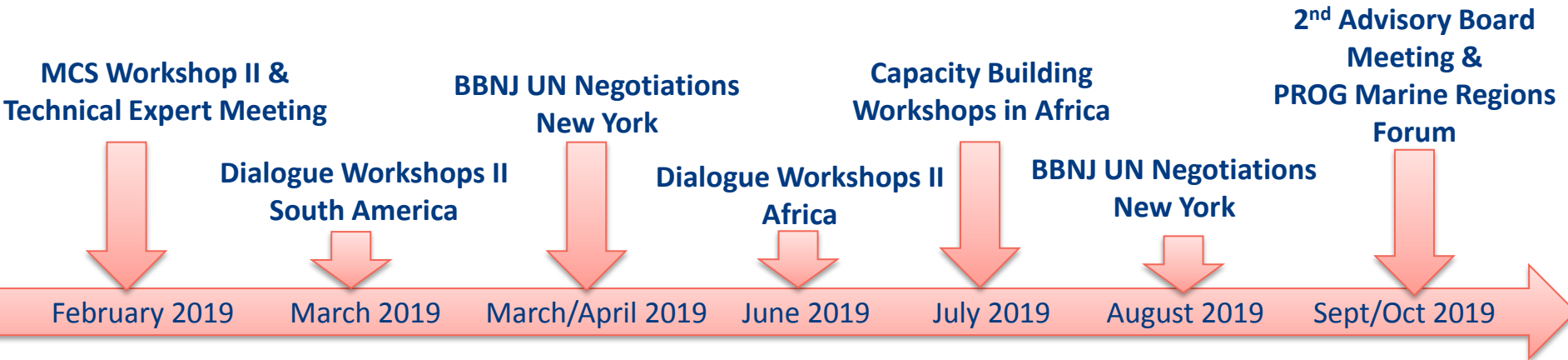
### Stakeholder Engagement

- Assessment of **capacity needs** for BBNJ negotiations
- Organisation of first **Capacity Building Workshop** at the BBNJ negotiations
- Organisation of two **Expert Meetings** at the BBNJ negotiations





# 2019 Planning



## Scientific Assessments & publications

- Ecological baselines report
- Report on monitoring, control and surveillance (MCS)
- 2nd BBNJ Policy Brief

## Other ongoing processes for 2019

- Capacity building & development of a stakeholder platform
- Policy engagement and outreach
- Linking to the Noumea Convention & Nairobi Convention



# This Joint Dialogue Workshop

## Workshop Objectives

- Present and characterise the **state of play for ocean governance** in the Atlantic Pacific;
- Present, discuss and review the **scientific work** done under the STRONG High Seas project;
- Identify opportunities for the development of **long-term strategies and approaches for stakeholder engagement and capacity development** in the Southeast Atlantic region;
- Exchange and discuss **initiatives in other marine regions** relevant to the conservation and sustainable use of marine biodiversity in ABNJ; and
- Discuss **issues relevant to the BBNJ negotiations**.



# Thank you!



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INTERNATIONAL  
CLIMATE INITIATIVE (IKI)

## PROG

Partnership for Regional  
Ocean Governance

## Ben Boteler

Co-Lead, STRONG High Seas

Email: [ben.boteler@iass-potsdam.de](mailto:ben.boteler@iass-potsdam.de)

Institute for Advanced Sustainability Studies e.V.

Berliner Strasse 130

D – 14467 Potsdam

Web: [www.iass-potsdam.de](http://www.iass-potsdam.de) & [www.prog-ocean.org/](http://www.prog-ocean.org/)



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International Ocean Institute  
African Region







Food and Agriculture  
Organization of the  
United Nations



# ABNJ Deep Seas Project Update

*Sustainable fisheries management and biodiversity conservation of deep-sea living marine resources and ecosystems in the Areas Beyond National Jurisdiction*

**Dr Nina Bhola**

**Senior Programme Officer** UN Environment World Conservation Monitoring Centre



# Overview

- \* **Summary of the objectives of the ABNJ Deep Seas Project**
- \* **Overview of recent progress**
- \* **Review of how the project supports WIO Member States to engage in ABNJ matters (including BBNJ process)**





# ABNJ Deep Seas Project – Four components



**Component 1:** Improved application of policy and legal frameworks



**Component 2:** Reducing adverse impacts on VMEs and components of EBSAs



**Component 3:** Improved planning and adaptive management for ABNJ deep-sea fisheries



**Component 4:** Development and testing of a methodology for area-based planning



## Objectives of Component 4

- Develop a draft area-based planning methodology suitable for use in areas beyond national jurisdiction
  - Review applicability of area-based planning tools to ABNJ
  - Gather experiences and good practices from other regions
  - Understand the relevant governance frameworks
- Build capacity in the pilot regions for area-based planning in ABNJ
  - Support a planning process that incorporates ABNJ
  - Test area-based planning methodology
  - Provide policy-relevant advice





# Capacity and Knowledge Sharing

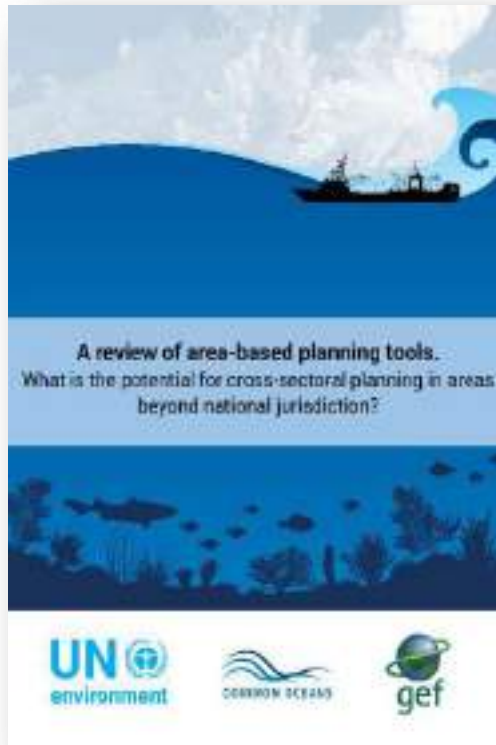
## Capacity assessment



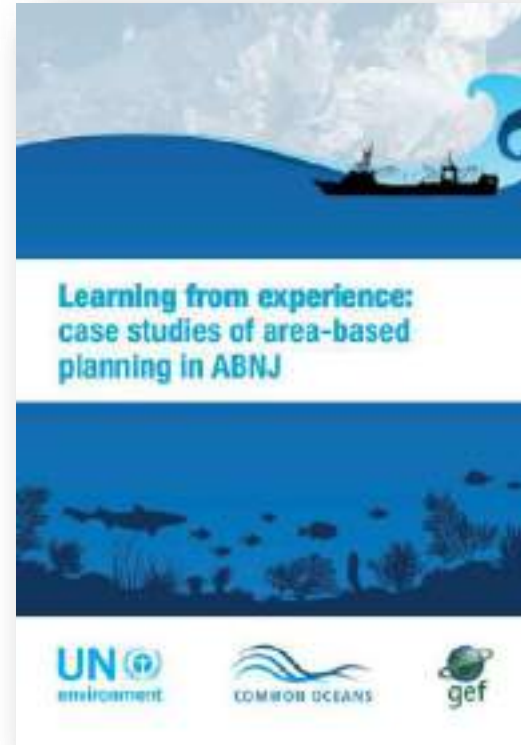


# Knowledge Sharing

## Area-based planning tools

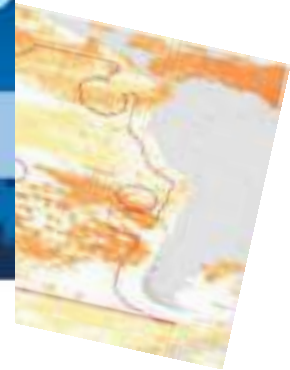


## Case Studies





# Data and Tools





# Webinars

- Area Based Planning Tools in ABNJ
- Data to support area-based planning in ABNJ

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2 videos of area based planning tools.  
What is the potential for cross-sectoral planning in areas beyond national jurisdiction?

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UN Environment World Conservation Monitoring Centre

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1 Webinar: Area Based Planning Tools in Areas Beyond National Jurisdiction  
UN Environment World Conservation Monitoring Centre  
24:45

2 Herramientas de planificación espacial en áreas fuera de la jurisdicción nacional  
UN Environment World Conservation Monitoring Centre  
32:17

3 Webinar: Data to support area based planning in Areas Beyond National Jurisdiction  
UN Environment World Conservation Monitoring Centre  
25:17

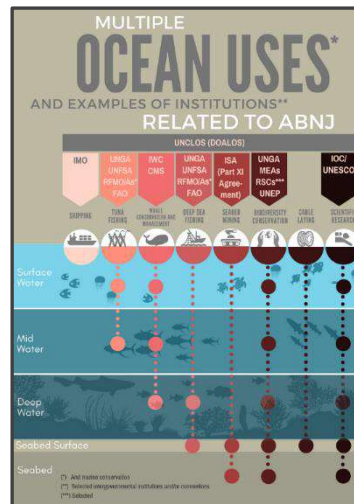
4 Datos para respaldar la planificación espacial en áreas fuera de la jurisdicción nacional  
UN Environment World Conservation Monitoring Centre  
34:54





# Governance Frameworks

## Institutional Arrangements





# Approach towards developing a Marine Spatial Planning process for ABNJ



Tool box addressing different aspects of planning



Synthesis materials highlighting the need for and benefits of ABP in ABNJ – targeted at decision-makers and politicians



Creation of marine spatial planning methodology





# Outcomes of the project

- \* **Improve understanding of the characteristics of ABNJ and activities occurring in the region**
  - \* *Identifying the need for— and potential benefits of— planning*
- \* **Development of area-based planning knowledge**
  - \* *Support technical knowledge through outputs to help engagement with BBNJ*
- \* **Develop capacity for engagement in area-based planning processes**
  - \* *Explore what planning in ABNJ could look like – development of a marine spatial planning methodology*
- \* **Support the development of regional resources**
  - \* *BBNJ working group*
  - \* *Regional metadata inventories*
  - \* *Regional connectivity reports*







**Thank you for all of your support**

<http://www.commonoceans.org/>





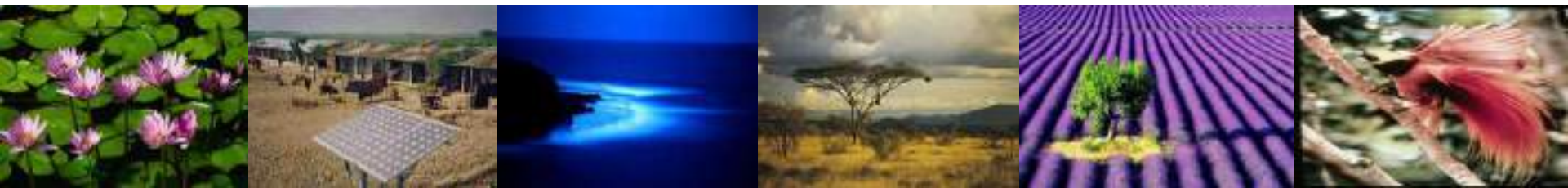
## **STRONG High Seas - Dialogue Workshop 2**

### ***Opportunities for Strengthening Ocean Governance in the Southeast Atlantic***

### ***Overview from Southeast Atlantic region perspectives with regard to ABNJ.***

***10-14 June 2019, Cape Town, South Africa***

*Abou Bamba*





# OUTLINE

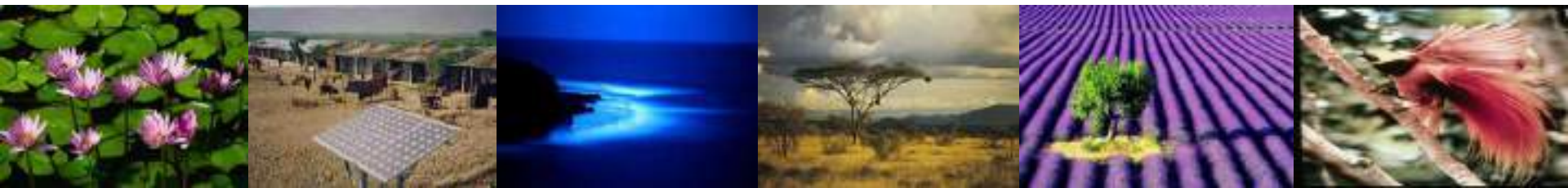
1. National and/or regional interests in ABNJ
2. Issues (environmental, social and economic) that affect those interests
3. National and regional initiatives put in place to address those issues
4. Factors that constrain the effectiveness of those initiatives
5. Ideas and perspectives since COP11 decision # 10 and on how to improve the situation in the region
6. Lessons drawn from coastal management and governance, and in the management of resources in the EEZs, which would be useful to apply in the management and governance of ABNJ in the region





# 1. Regional interests in ABNJ

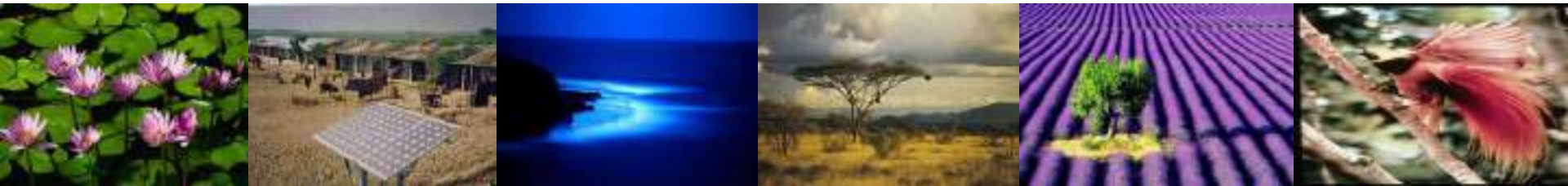
- **Fishing**
- **Shipping**
- **Deep sea mining**
- **Telecommunications**
- **Marine genetic resources**
- **Carbon sequestration/storage**
- **Offshore oil and gas**
- **Acquaculture / Sea farming**
- **Security**





## 2. Issues (environmental, social and economic) that affect those interests

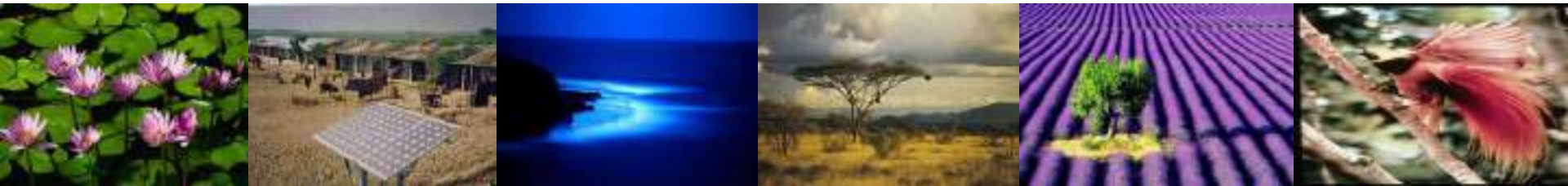
- **Information, knowledge and capacity**
- **No control over the resources**
- **Competition with developed nations**
- **Poverty is still at an unacceptable level**
- **Threats to marine biodiversity**





### 3. Regional initiatives put in place to address those issues

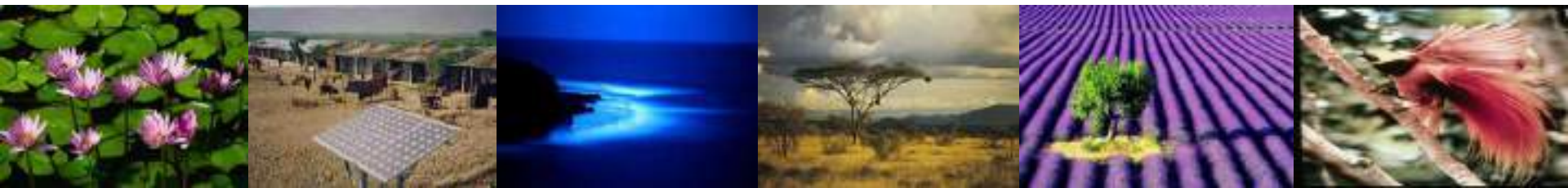
- **Decision - CP. 11/10. Conservation and Sustainable use of the Marine Biodiversity of the Areas Located beyond National Jurisdictions**
- **Africa Group statement at the 8th Ad-Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (i.e: common heritage of mankind principle + technical capabilities + transfer of marine technology**
- **STRONG, ABNJ Deep Seas projects**





## 4. Factors that constrain the effectiveness of those initiatives

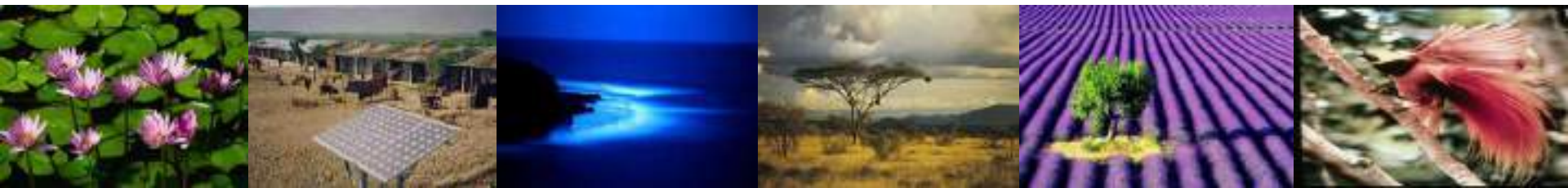
- No coherent regional framework
- Lack of capacities
- Lack of financial means
- No ocean governance mechanisms





## 5. Ideas to improve the situation in the region

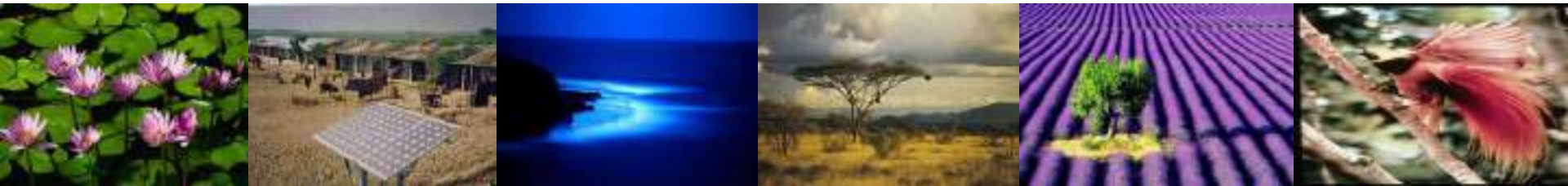
- Establish comprehensive regional ocean governance mechanism
- Capacity building and transfer of maritime technology
- Learning from regions which have an « experience » on the subject (e.g: OSPAR)
- Focusing on the socio-economic aspects





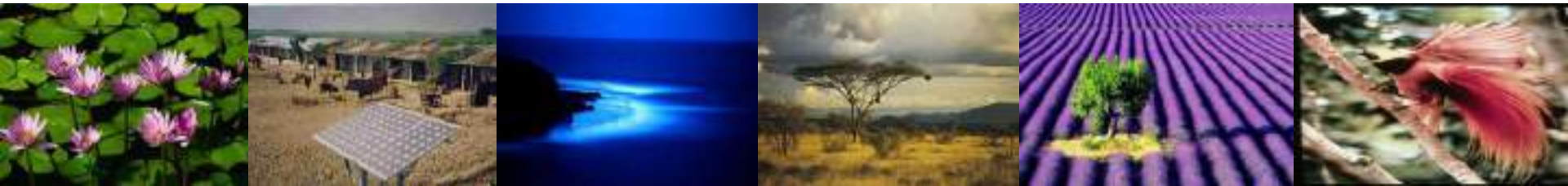
## 6. Lessons drawn from the management of resources in the EEZs, which would be useful to apply in the management and governance of ABNJ in your region

- **There is no regional approach or mechanism for EEZ management**
- **National maritime boundaries delineation is an issue**
- **EEZ seems far away**
- **ABNJ is even further**





# **Abidjan Convention (ABC) Working Group on (ABNJ).**





## Abidjan Convention (ABC) Working Group on (ABNJ).

- **Background**

- **Decision CP. 11.10**

- **Creation**

- *study all aspects of the conservation and sustainable use*

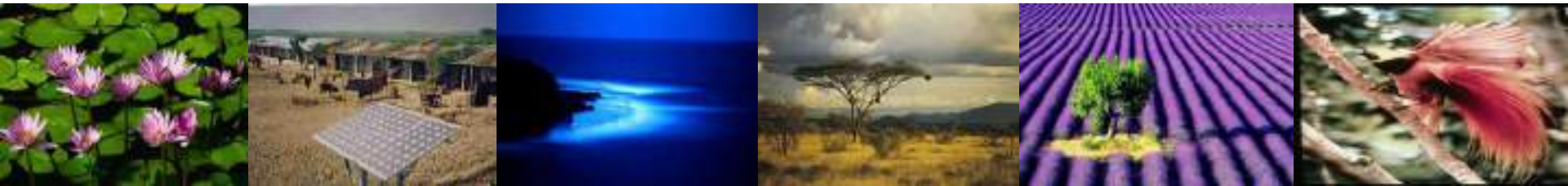
- **Partnership**

- **Scoping workshop**

- **Preparation of ToR**

- **Approval by the COP**

- **Reference documents ( AIMS 2050, AU Agenda 2063)**





## Abidjan Convention (ABC) Working Group on (ABNJ).

- **Terms of Reference**

- *Members / Composition*

Parties, Non-Parties, Technical Cooperation Partners, etc

- *Tasks (5)*

(i) issues to be studied, (ii) studies, (iii) capacity building, (iv) technical reports, (v) recommendations to COP

- *Financial Resources*



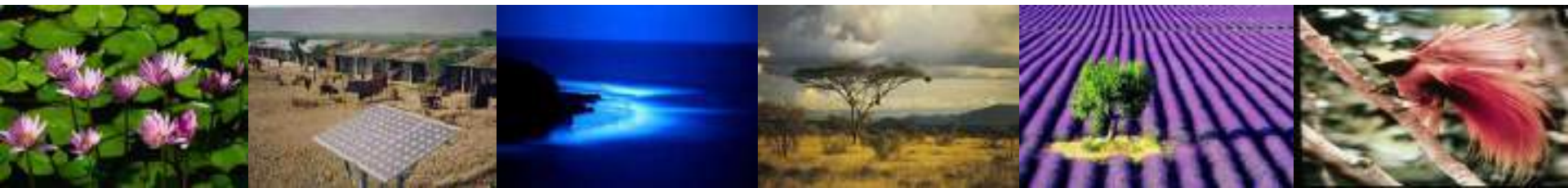


## Abidjan Convention Working Group on (ABNJ). (C'd)

### • Programme of Work

#### – Basic Principles

- Post 2015 agenda
- Ecosystem based approach
- Regional approach
- Involvement of all stakeholders



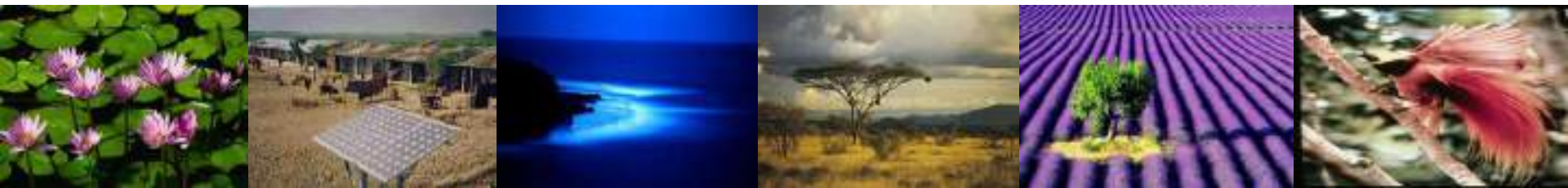


# Abidjan Convention Working Group on (ABNJ). (C'd)



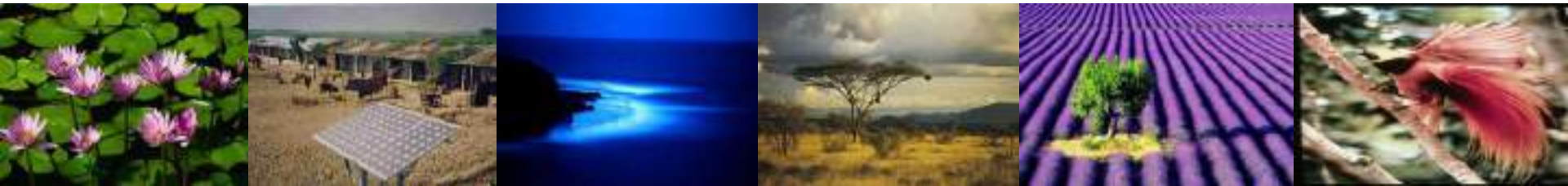
- **Elements of the Programme of Work**

- *Programme Element 1 : Relationship between the upcoming legal instrument with other instruments and frameworks*
- *Programme Element 2 : Marine genetic resources, including questions on the sharing of benefits`*
- *Programme Element 3: Measures such as area-based management tools, including marine protected areas*





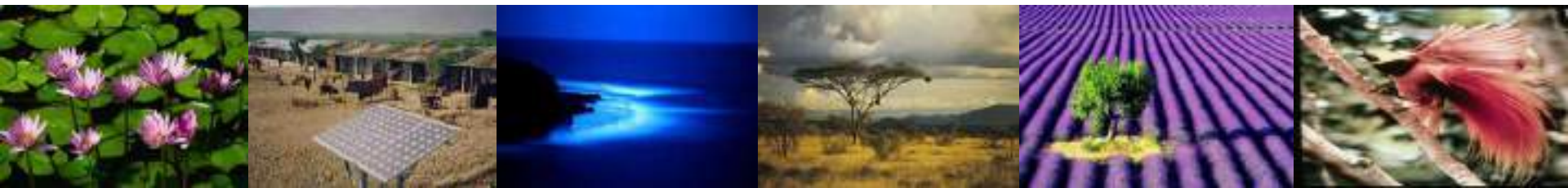
- *Programme Element 4: Environmental impact assessments (EIA)*
- *Programme Element 5 : Capacity-building and transfer of marine technology*
- *Programme Element 6: Institutional arrangements, responsibility, dispute settlement and final clauses*





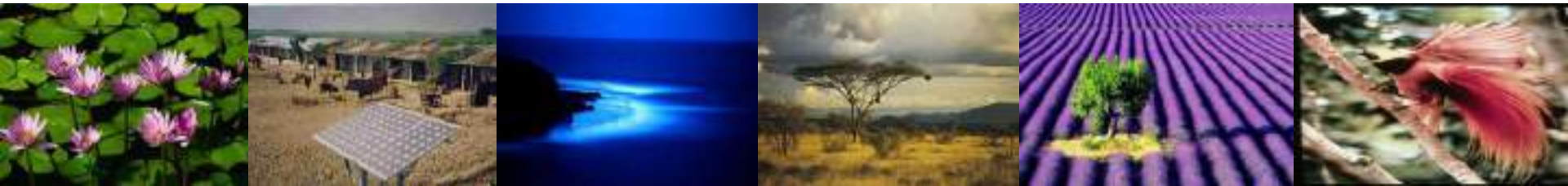
# African Position Paper

- Extension of the working group
- Crucial to have an African Position paper with the regional Conventions such as the Nairobi and the Barcelona conventions
- Collective meeting in Cape Town June 12th





THANK YOU!







# Areas Beyond National Jurisdiction in the Western Indian Ocean Region

**Dixon Waruinge**  
**Head,**  
**Nairobi Convention Secretariat**  
**United Nations Environment Programme**





# THE NAIROBI CONVENTION

The Nairobi Convention for the **Management and the Development of the Coastal and Marine** is a Legal framework and platform for regional collaboration between member states, intergovernmental organisations, NGOs and the private sector in the Western Indian Ocean



## MANDATE IN ABNJ

**Decision CP.9/10. 2:** ... cooperate with existing regional institutions on ocean governance and the **conservation of marine biodiversity in adjacent areas beyond national jurisdiction** ... to promote blue economy pathways in the Western Indian Ocean region

**Decision CP.9/10. 3:** ...in collaboration with partners, to prepare a report on the feasibility, options and **scenarios for the establishment of marine protected areas in areas beyond national jurisdiction** ...

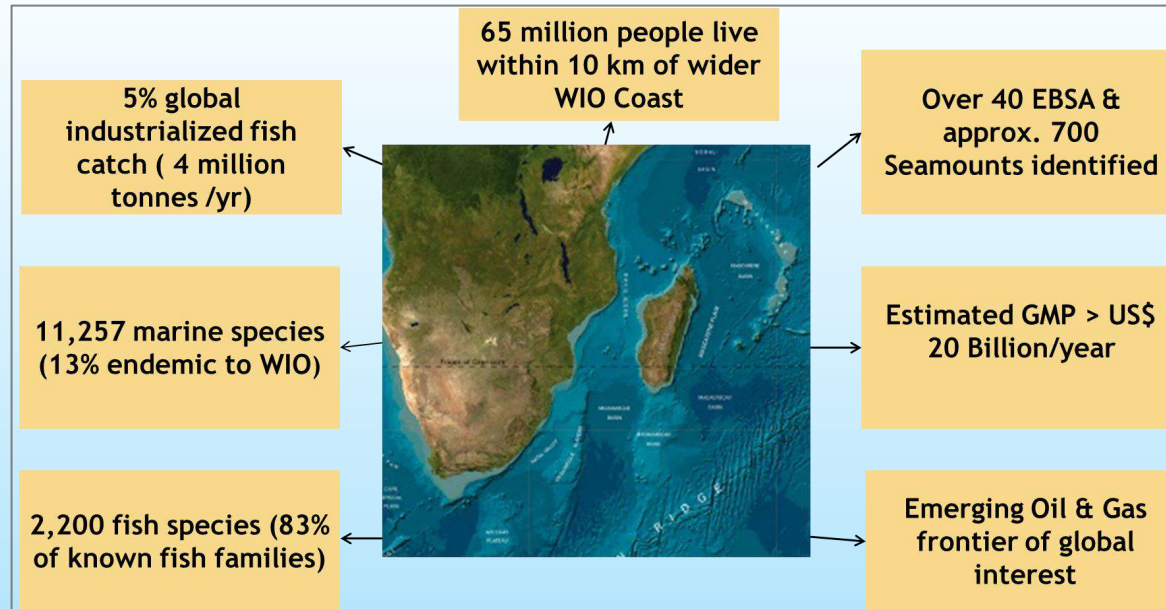






# THE WESTERN INDIAN OCEAN (WIO)

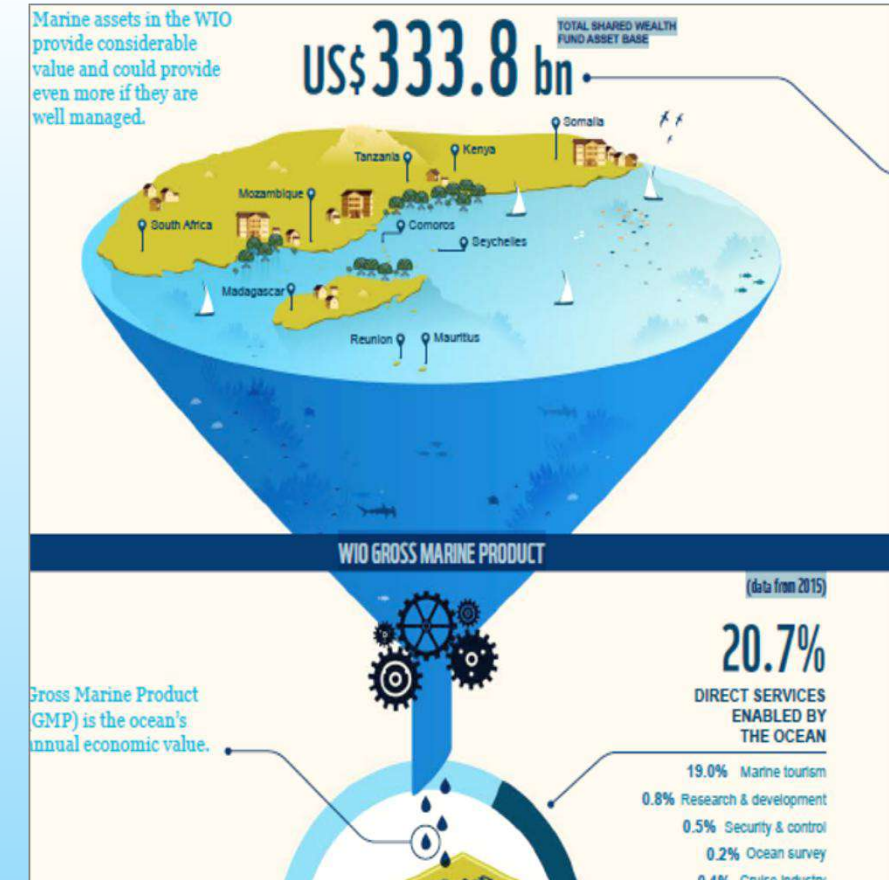
## Why the WIO Matters



Increasing emphasis on the sustainable use of ocean and coastal resources for blue economy growth



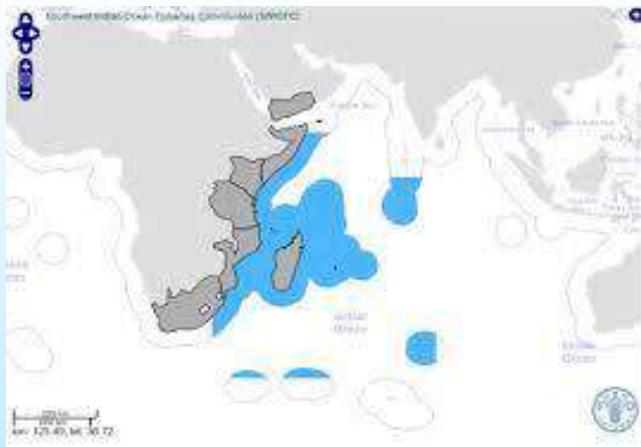
GROSS MARINE PRODUCT – 4<sup>TH</sup> IN WIO REGION



Economic value of the goods and services estimated at over US \$20 billion per year with an asset base of US\$ 333.8 billion



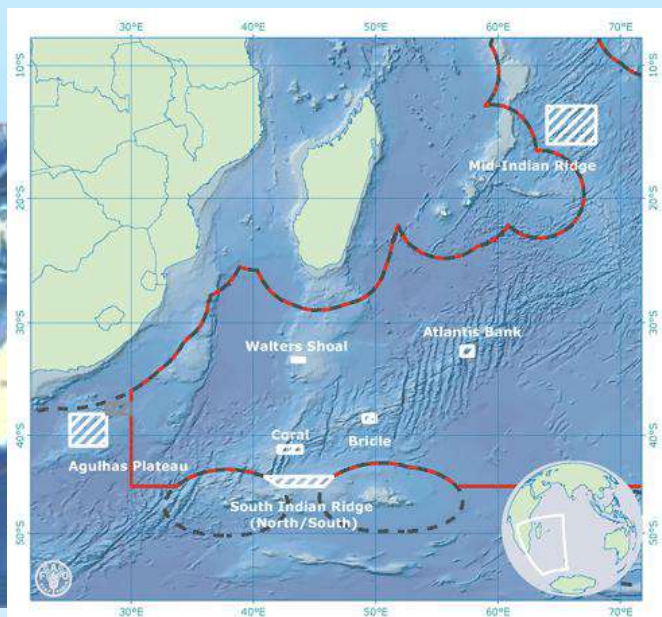
# GOVERNANCE INSTITUTIONS



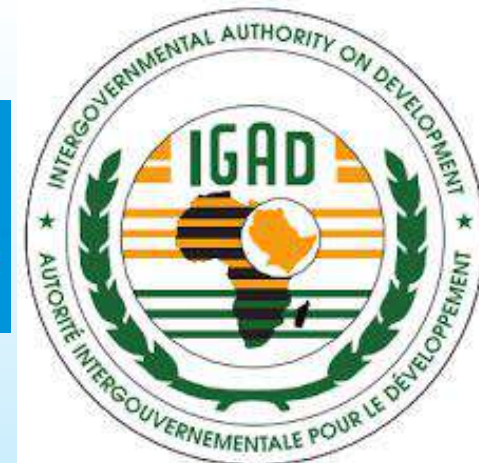
SWIOFC



SIOFA

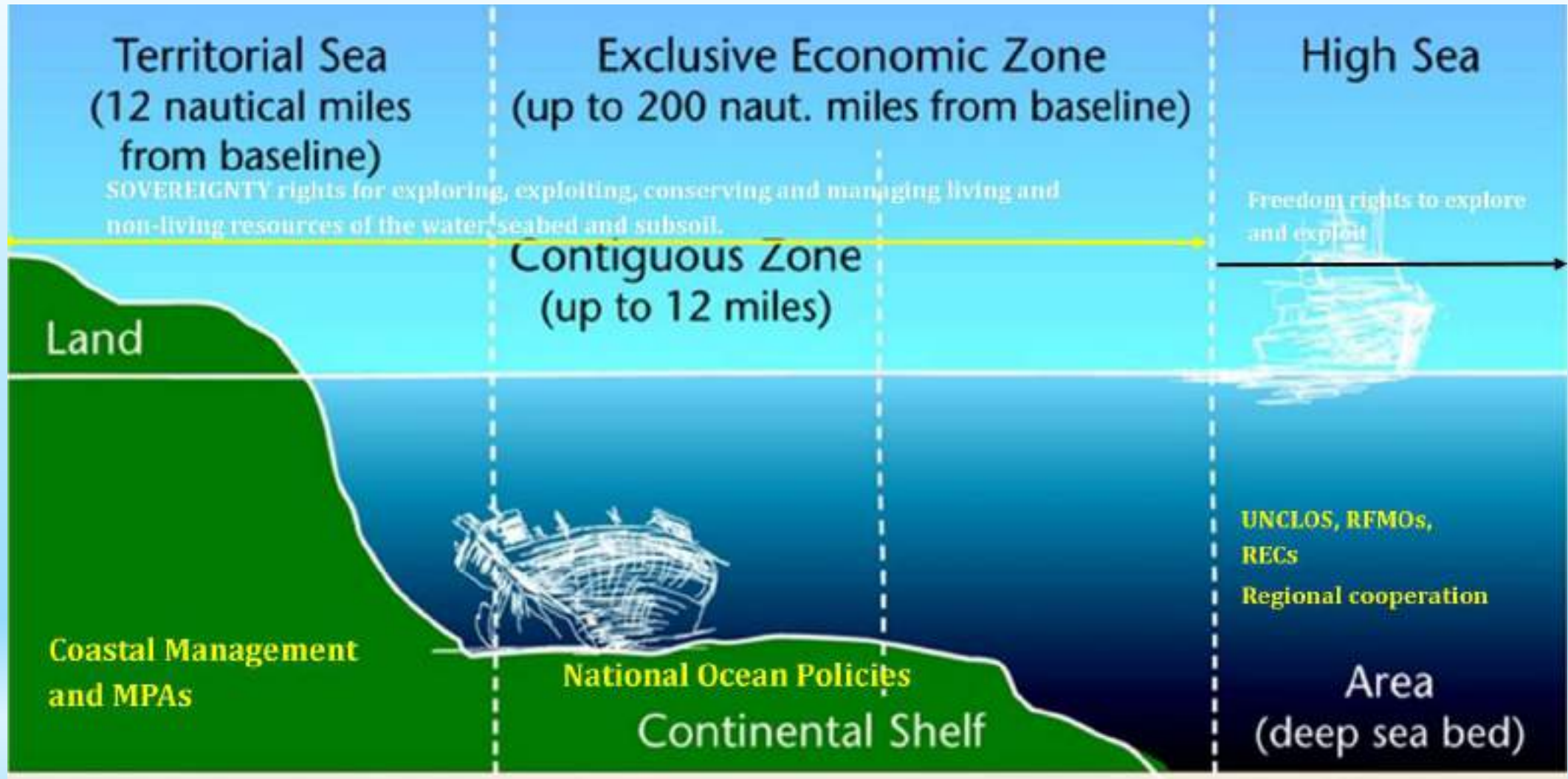


SIODFA





# THE DUALISM: SOVEREIGN RIGHTS + FREEDOM OF ACCESS = CHALLENGES FOR ABNJ GOVERNANCE





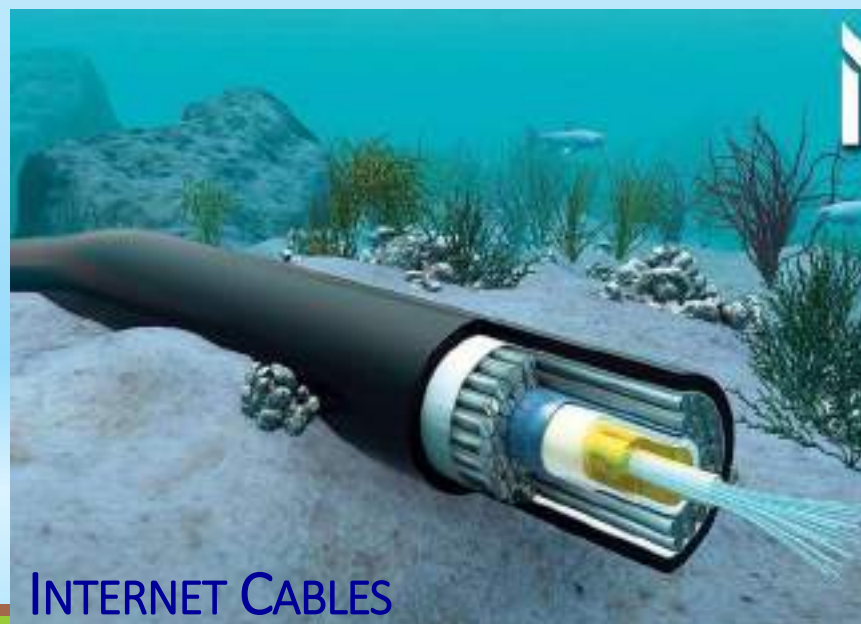
# IMPORTANCE OF ABNJ



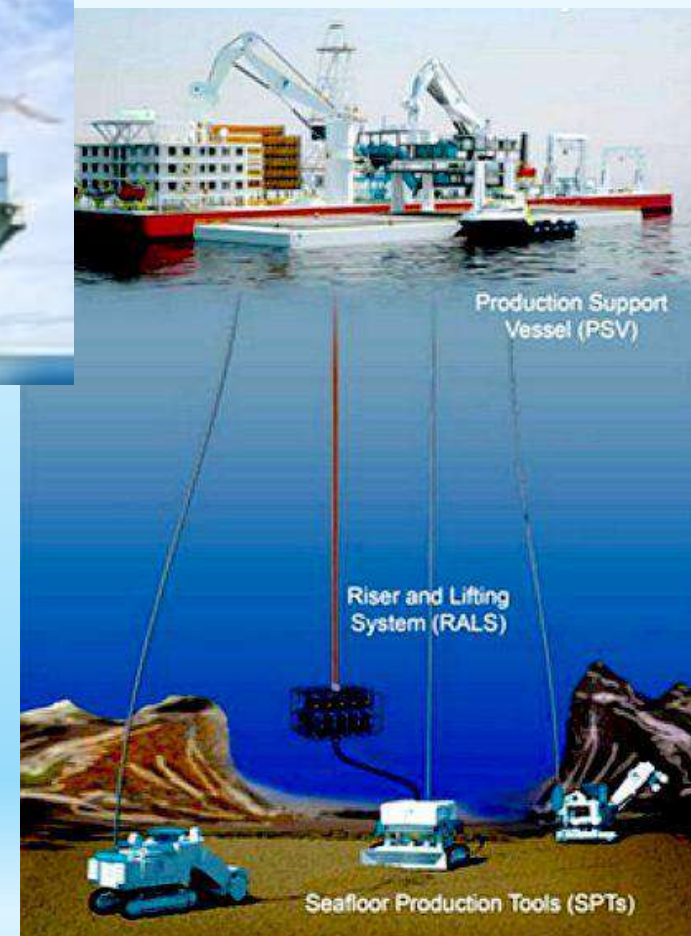
DEEP SEA FISHING



SHIPPING



INTERNET CABLES



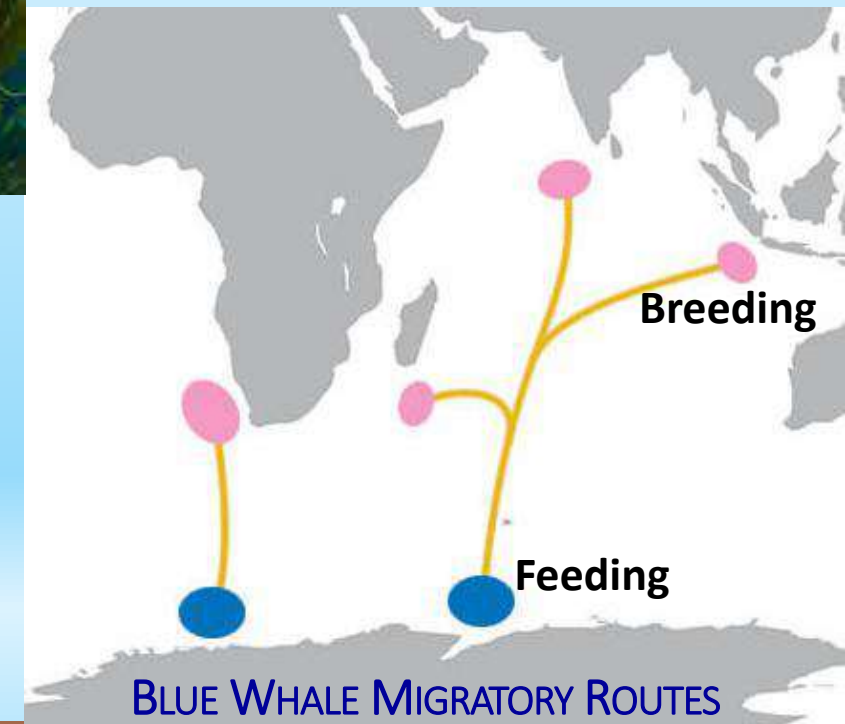
DEEP SEA MINING



# BIODIVERSITY IN ABNJ

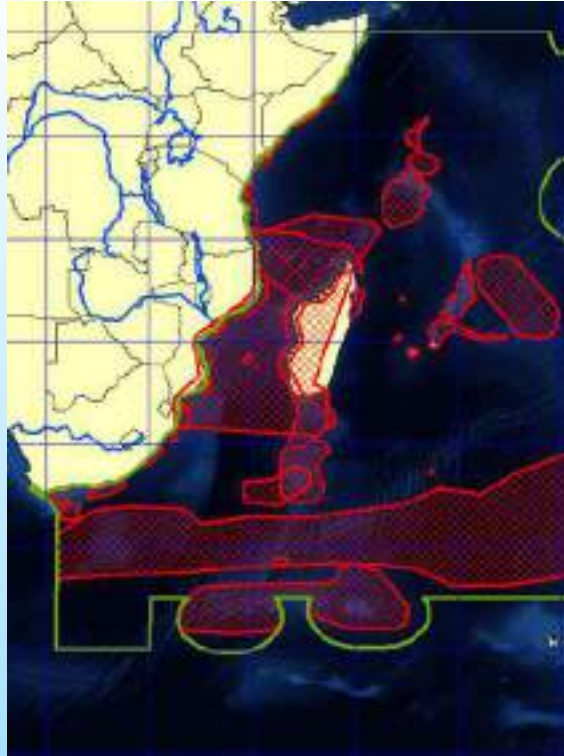


DEEP SEA CORAL REEF

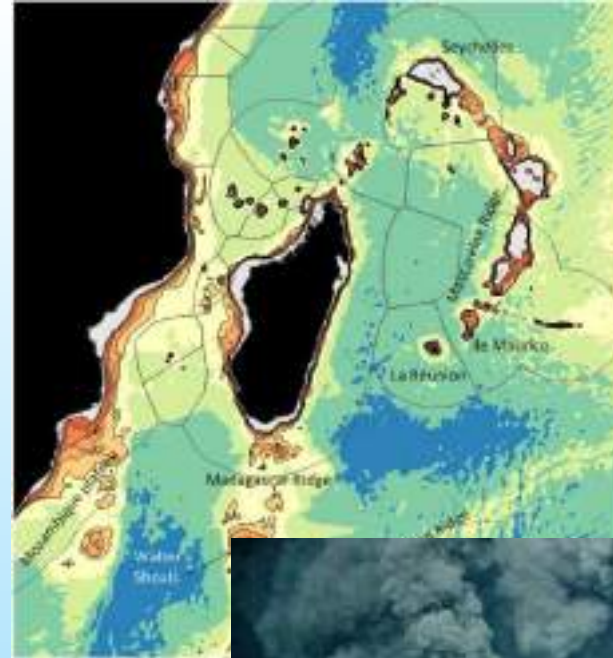




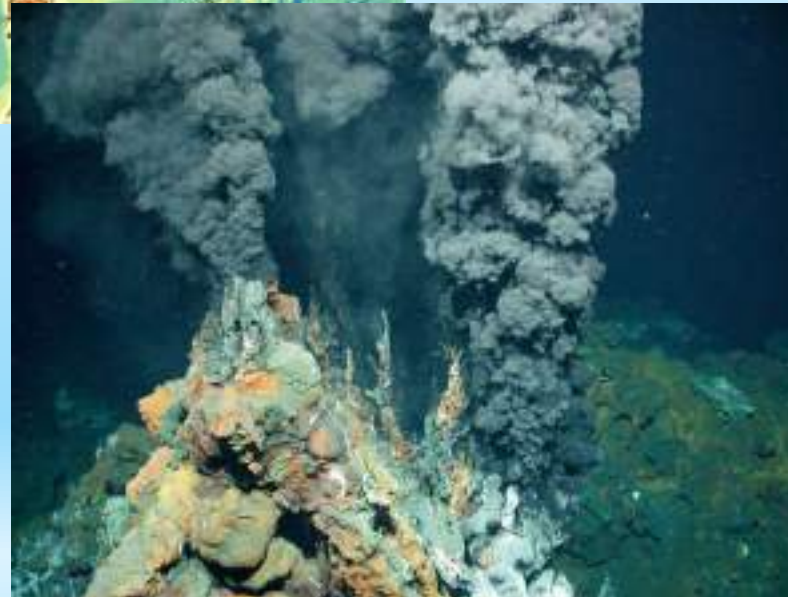
# BIODIVERSITY HOTSPOTS



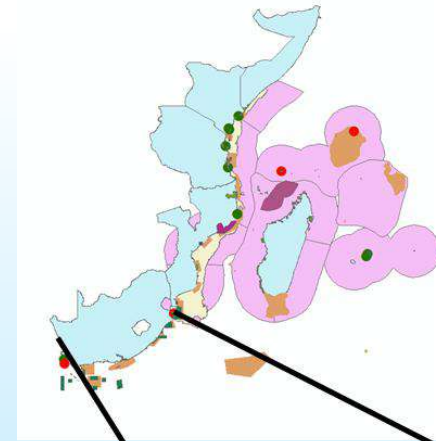
EBSA IDENTIFIED FOR WIO REGION



APPROXIMATELY 700  
SEAMOUNTS IN WIO  
REGION



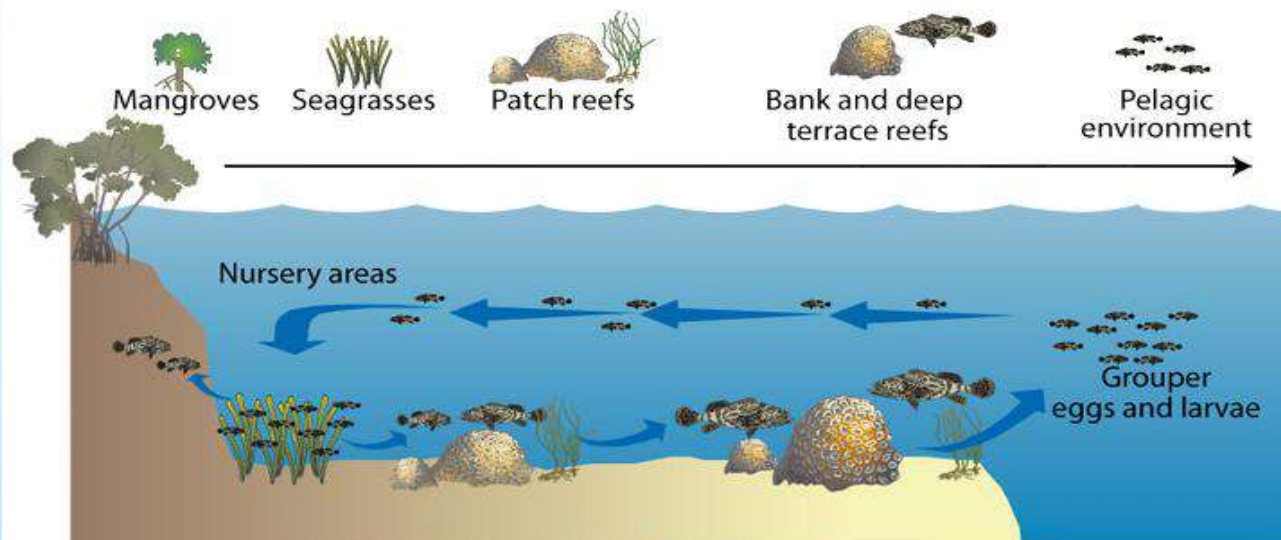
HYDROTHERMAL VENTS



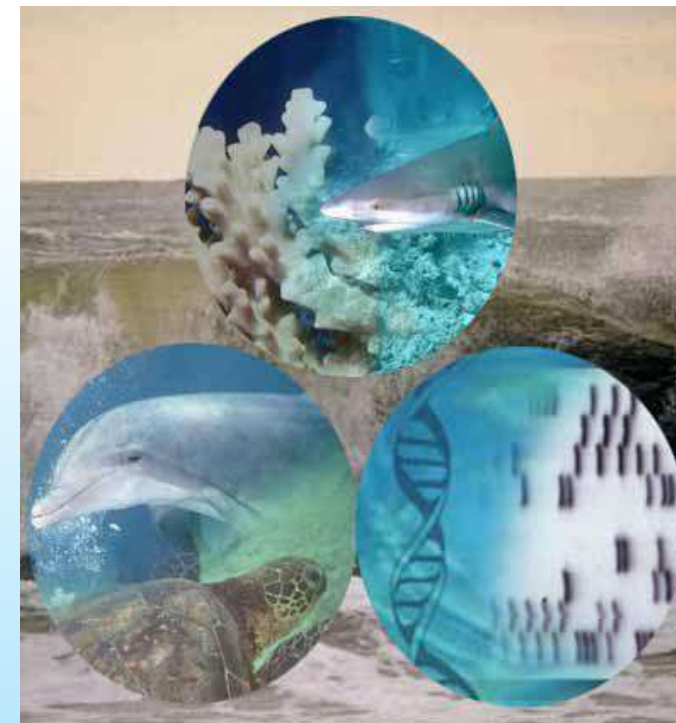
NEW MPA OPPORTUNITIES



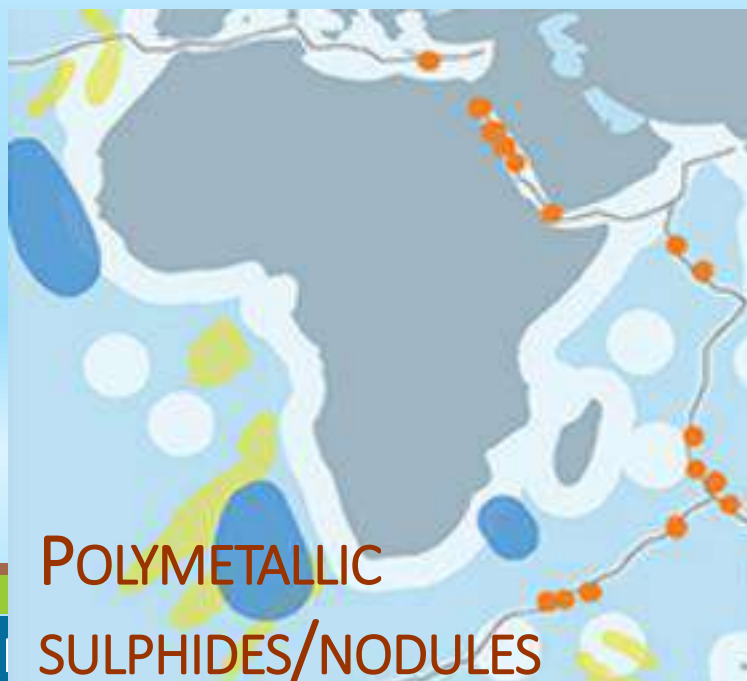
# OPPORTUNITIES



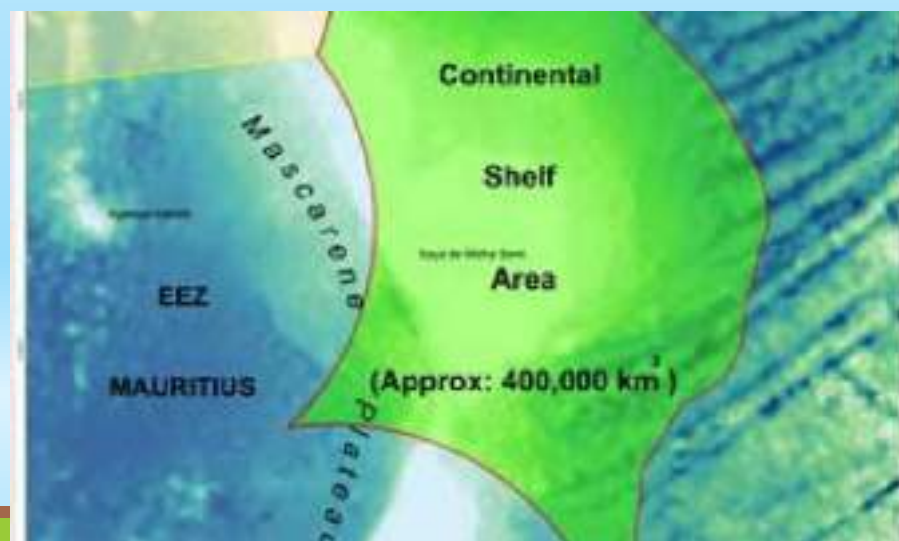
## CONNECTIVITY – SO FAR YET SO CLOSE



## MARINE GENETIC RESOURCES



## POLYMETALLIC SULPHIDES/NODULES



Mauritius Seychelles - ocean economy (Seabed Exploration, Fishing, Shipping, Renewable energy, Ocean knowledge)



# CHALLENGES IN ABNJ



1. Lack of awareness - ABNJ are “**out of sight, out of mind**” to most of the public

- harness public concern for marine living resources, minerals, precious metals, as well as marine genetic resources

2. Institutional **governance gaps exist** in regulating multi-sectoral and emerging issues



**Seabed Mining - Destruction of Habitats**



# CHALLENGES IN ABNJ



**Global Warming - Coral bleaching**



**Ship strikes**



**Ocean Noise**



**Oil spills**

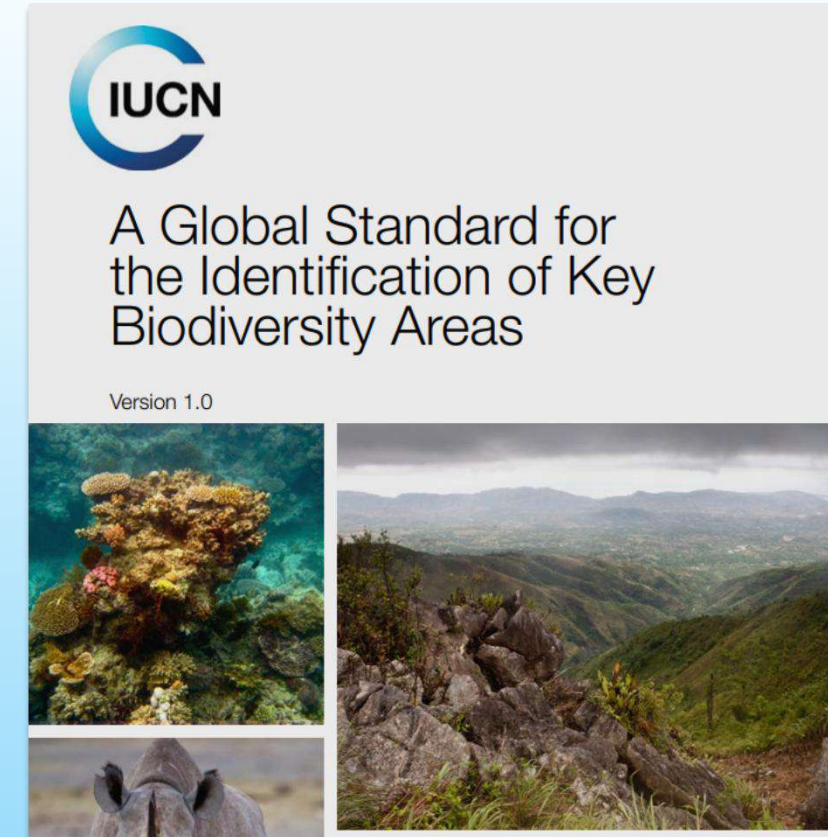
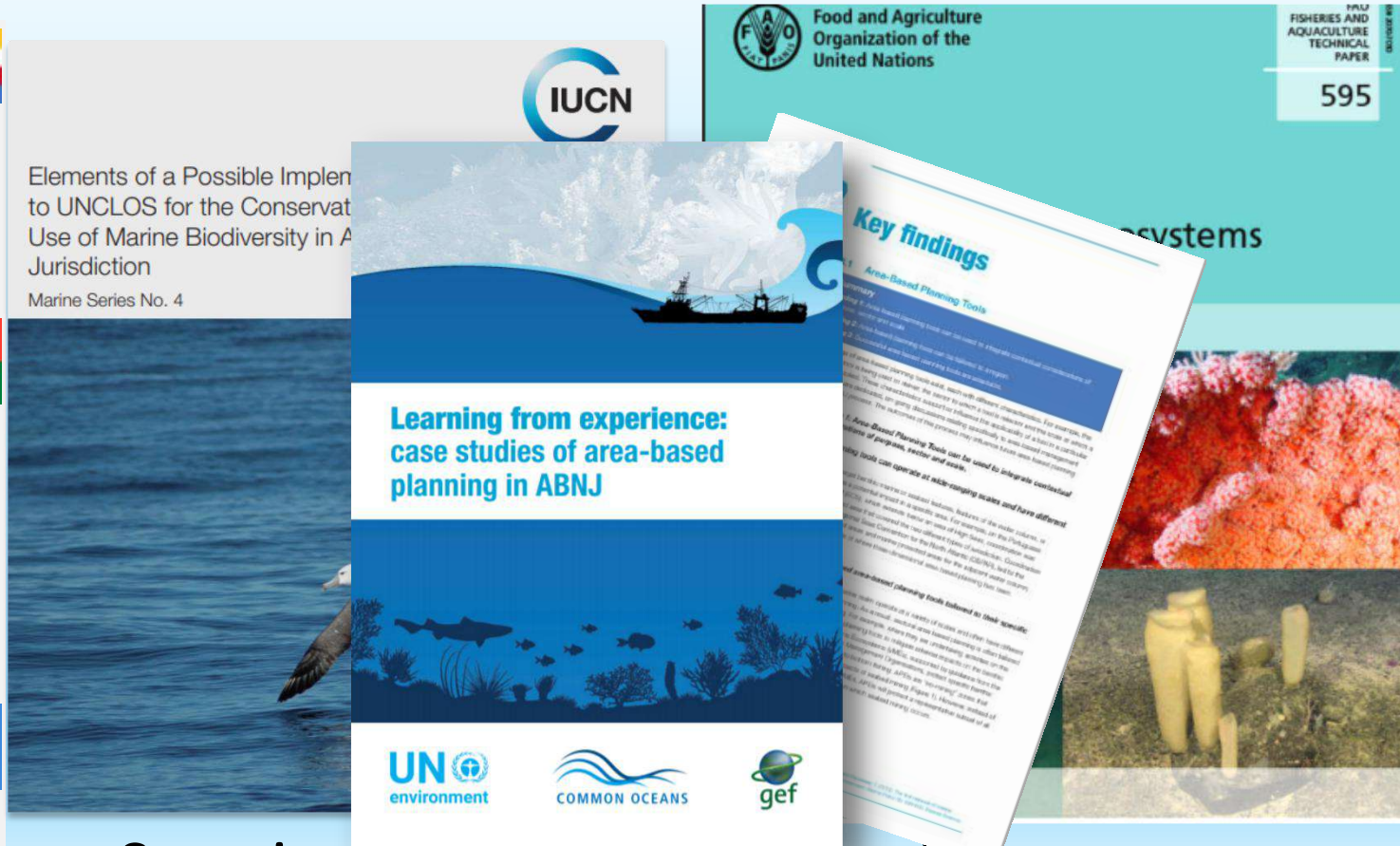


**Ocean acidification  
- shelled organisms**



# AREA BASED PLANNING IN ABNJ

## Targeted Area-based Planning Tools



- Sustainable use of Biodiversity
- Key Biodiversity Areas
- Vulnerable Marine Ecosystems



# ABNJ DEEP SEAS PROJECT: COMPONENT 4

## OBJECTIVES

1. Review applicability of area based planning tools to ABNJ
2. Gather experiences from regional ABNJ area-based planning
3. Develop and test area-based planning tools in pilot regions

AREA BASED PLANNING TOOLS MEETING ORGANIZED BY NAIROBI CONVENTION AND UNEP-WCMC  
SEPTEMBER 2016, SEYCHELLES

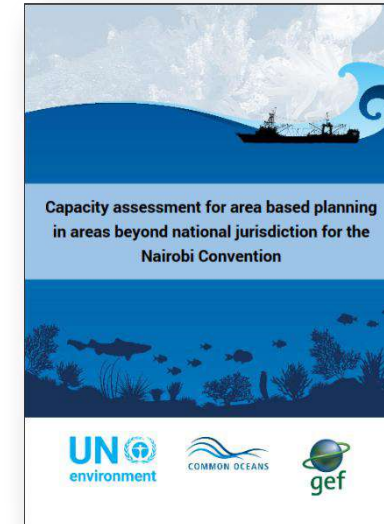
## Outcomes:

- ❖ Countries recognized need for integrated management of areas within and those beyond national jurisdiction (EEZ & ABNJ) due to issues of interconnectivity and migratory species
- ❖ Countries called upon Nairobi Convention to support ABNJ management through:
  1. Capacity building
  2. Awareness creation



# Capacity and Knowledge Sharing

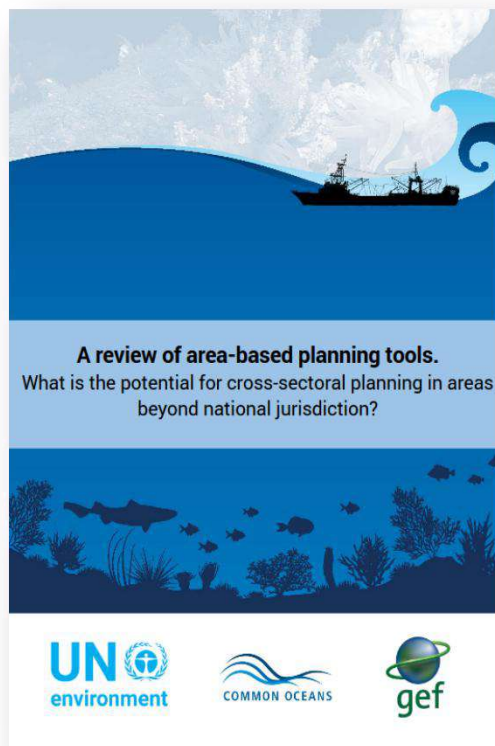
## Capacity assessment



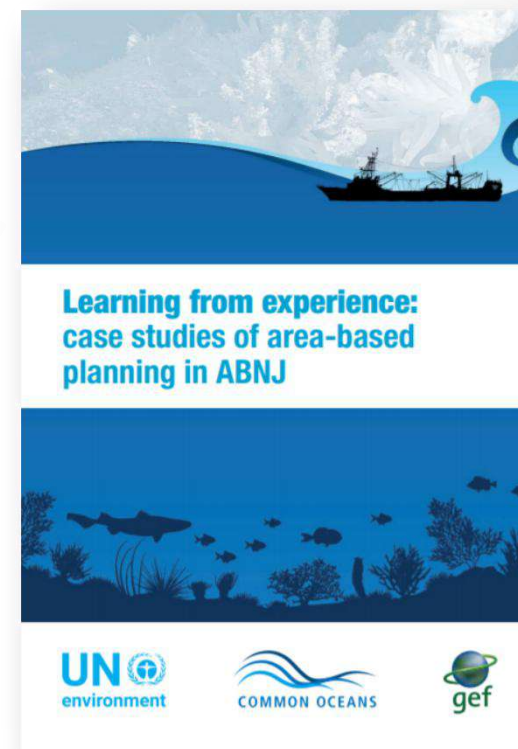


# Knowledge Sharing

## Area-based planning tools



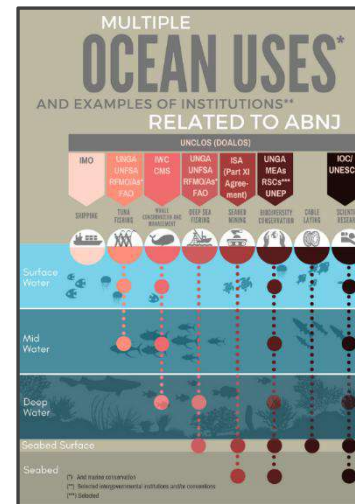
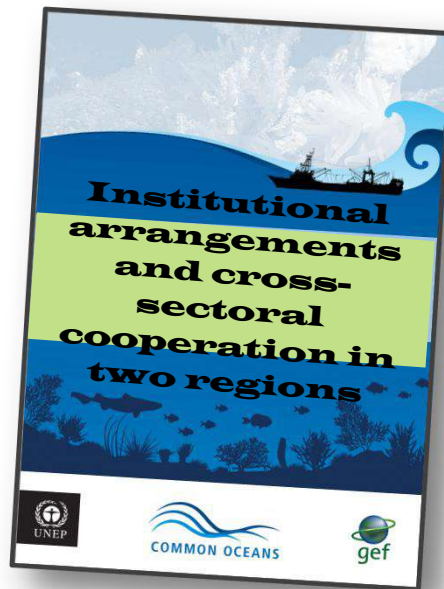
## Case Studies





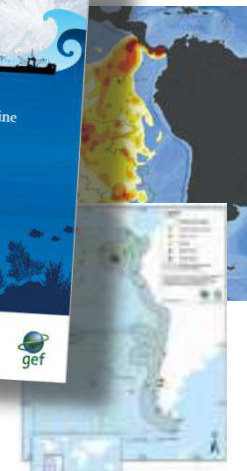
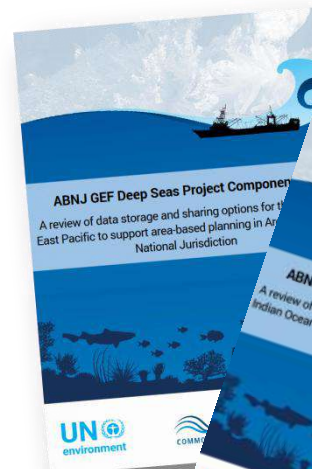
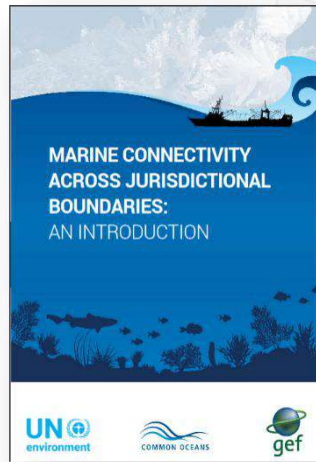
# Governance Frameworks

## Institutional Arrangements





# Data and Tools





# Webinars

- Area Based Planning Tools in ABNJ
- Data to support area-based planning in ABNJ





# Approach towards developing a Marine Spatial Planning process for ABNJ



Tool box addressing different aspects of planning



Synthesis materials highlighting the need for and benefits of ABP in ABNJ – targeted at decision-makers and politicians

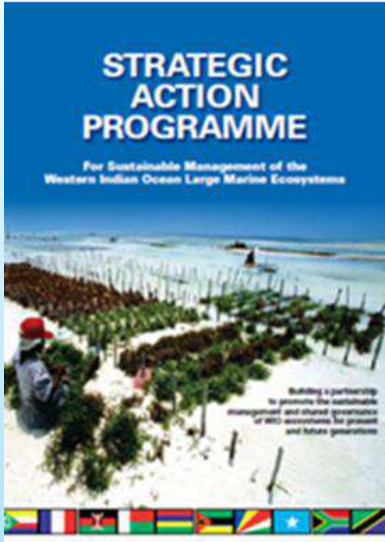


Creation of marine spatial planning methodology



# PROJECTS BACKGROUND AND LINKAGES

## SAPPHIRE Project



WIO LME SAPPHIRE Project Document

United Nations Development Programme  
Country: Regional - Governments of Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa, Tanzania

Empowered lives.  
Resilient nations.

Project title: The Western Indian Ocean Large Marine Ecosystems Strategic Action Programme Policy Harmonisation and Institutional Reforms (WIO LME SAPPHIRE)		
Countries: Regional - Governments of Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa, Tanzania	Implementing Partner: UNDP (Mauritius CO)	Management Arrangements: Direct Implementation through Mauritius Country Office with the Nairobi Convention Secretariat (UNEP) as a Responsible Party

Promote **policy harmonization** in the WIO region to achieve effective long-term ecosystem management in the WIO Large Marine Ecosystems

**Component 4:** Support demonstration of best lessons and practices in strengthening *partnerships for management of areas beyond national jurisdiction* ....





# WHAT WE PLAN TO DO IN ABNJ

## AFRICAN UNION AGENDA 2063; GOAL 6; BLUE/OCEAN ECONOMY

Africa's Blue/ocean economy, major contributor to continental growth and transformation through:

- Sustainable exploitation of marine resources and energy
- Streamlining of port operations and aquatic transport

# Enhancing application of management tools MSP, EBM, ICZM etc

# Ocean Governance Strategy for WIO region





# WHAT WE PLAN TO DO IN OCEAN GOVERNANCE

- 5<sup>TH</sup> JULY – Ocean Governance Session  
–WIOMSA symposium
- August/September - Regional Ocean  
Governance Workshop
- # September - Marine Regional Forum –IASS
- # 2020 Ocean Conference







**Nairobi Convention Secretariat**

**UN Environment**

**Phone: +254 20 762 2025/1250**

**Email: [NairobiConvention@unep.org](mailto:NairobiConvention@unep.org)**

**<http://www.unep.org/NairobiConvention/>**

**Twitter: [@NCSecretariat](https://twitter.com/NCSecretariat)**





Empowered lives.  
Resilient nations.



**Demonstrating Innovative Ocean Governance Mechanisms and Delivering Best Practices and Lessons for Extended Continental Shelf Management within the Western Indian Ocean Large Marine Ecosystems.**

**(Short title: UNDP-Joint Management Area [JMA] Demonstration Project)**

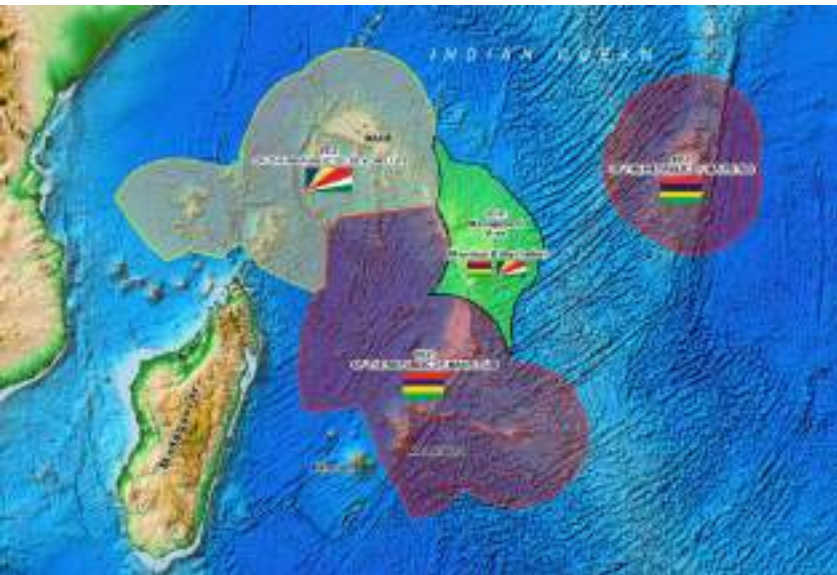
**Allen Cedras International Project Manager**



# Background

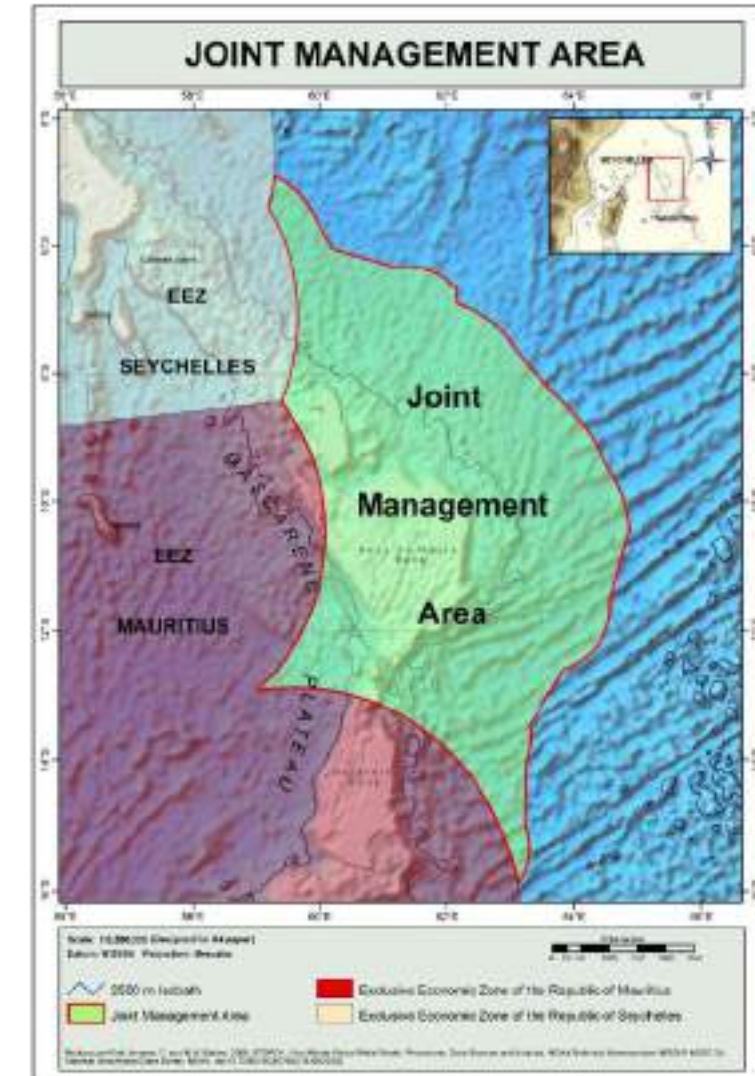
## Extended Continental Shelf (ECS) - Joint submission

- **29 July 2008** – Agreement between the Government of the Republic of Mauritius and the Government of the Republic of Seychelles on the **Delimitation of the Exclusive Economic Zone** between the Two States
- **1 December 2008** – Extended Continental Shelf Joint Submission made by Mauritius and Seychelles concerning the Mascarene Plateau Region to the Commission on the Limits of the Continental Shelf, in accordance with **Article 76**, paragraph 8, of the *United Nations Convention on the Law of the Sea*
- **30 March 2011** - the Commission adopted by consensus the “**Recommendations of the Commission on the Limits of the Continental Shelf in regard to the joint submission made by Mauritius and Seychelles concerning the Mascarene Plateau region on 1 December 2008**”.



### UN Recommendation 2011

Joint jurisdiction over seabed and subsoil for an area of **396,000 sq. kilometers**





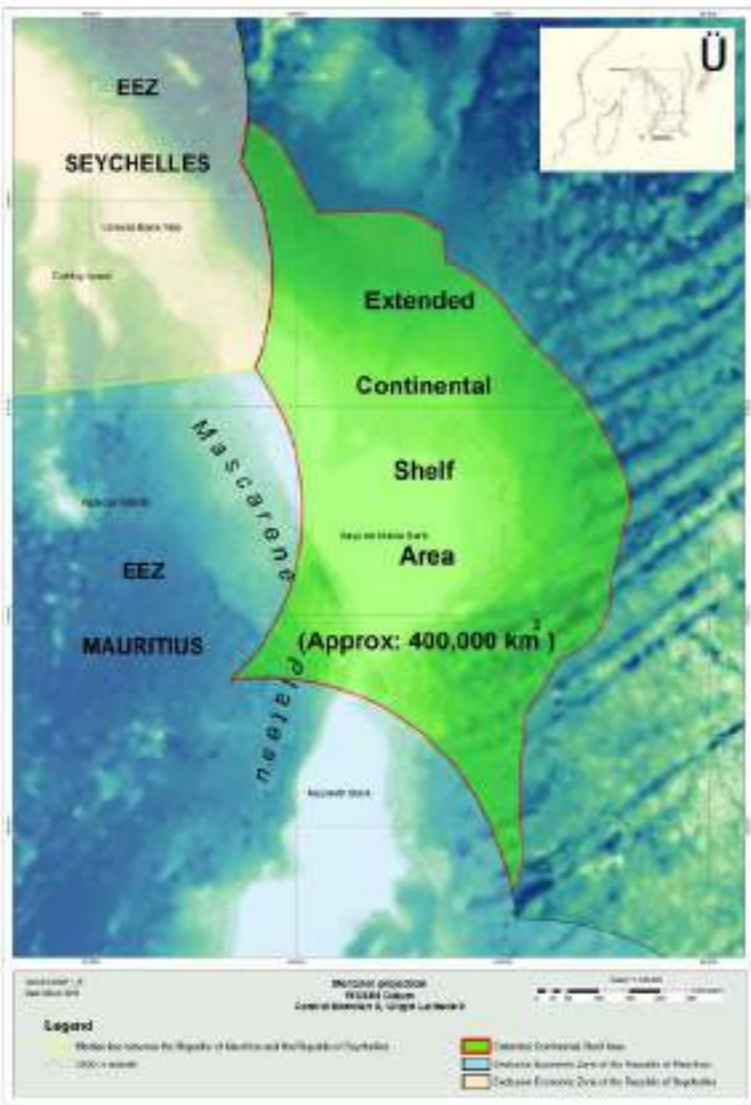
# UNDP-JMA and SAPPHIRE Project Linkage:

**Component 4:** Deliverable 4.2, Delivering **best practices and lessons** through innovative ocean governance demonstration( particularly strengthening partnerships for management ABNJ)

## Joint Management Area(JMA) Demonstration project – **Mauritius & Seychelles**







**Project ID: 00094557**

**Output ID: 00087614**

**Business Unit: MUS10**

**PIMS number: 5262**

**Implementation Modality: NIM**

### Project Funding:

The project is worth 2.2 M USD in GEF grant financing, will be executed over 4 years from 2018 to 2021.

**Dr. Rezah Badal: National Project Director: E-mail: [mrbadal@govmu.org](mailto:mrbadal@govmu.org)**

**Allen Cedras: International Project Manager: [allen.cedras@undp.org](mailto:allen.cedras@undp.org)**

**Ms. Ridheema Jhowry: Project Assistant: [ridheema.jhowry@undp.org](mailto:ridheema.jhowry@undp.org)**



- **Countries:** Mauritius and Seychelles
- **Focal SDG:** SDG 14 Life Below Water
- **Focal Area:** International Waters (IW), GEF-5
- **Strategic Programmes:** **IW Objective 2:** Catalyse multistate cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems (LMEs) while considering climatic variability and change.
- **IW Objective 3:** Support foundational capacity building, portfolio learning, and targeted research needs for ecosystem-based joint management of trans-boundary water systems.
- **IW Objective 4:** Provides support for first pilot efforts at preventing degradation of valuable ocean areas beyond national jurisdictions It aims to promote effective management of marine areas beyond national jurisdiction.
- **Implementing Agency:** United Nations Development Programme (UNDP)
- **Executing Agency:** Government of Mauritius, Ministry of Defence and Rodrigues through the **Department for Continental Shelf Maritime Zones Administration and Exploration.** (on behalf of the Joint Commission for the JMA)



# UNDP JMA Demonstration Project Goal and Objectives

- The UNDP-JMA Demonstration Project has the overall objective to identify and demonstrate new management approaches and techniques concerning databases management for the Mascarene Plateau.
- The UNDP-JMA Demonstration Project will assist Seychelles and Mauritius in the development and demonstration of new management approaches bridging the gap between science and policy in the extended continental shelf areas which can provide lessons and management techniques that can be replicated both within the Western Indian Ocean as well as other similar maritime zones globally.
- The UNDP-JMA Demonstration Project shall also attempt at identifying the data gap in terms of the underlying living and non-living resources in the joint zone.

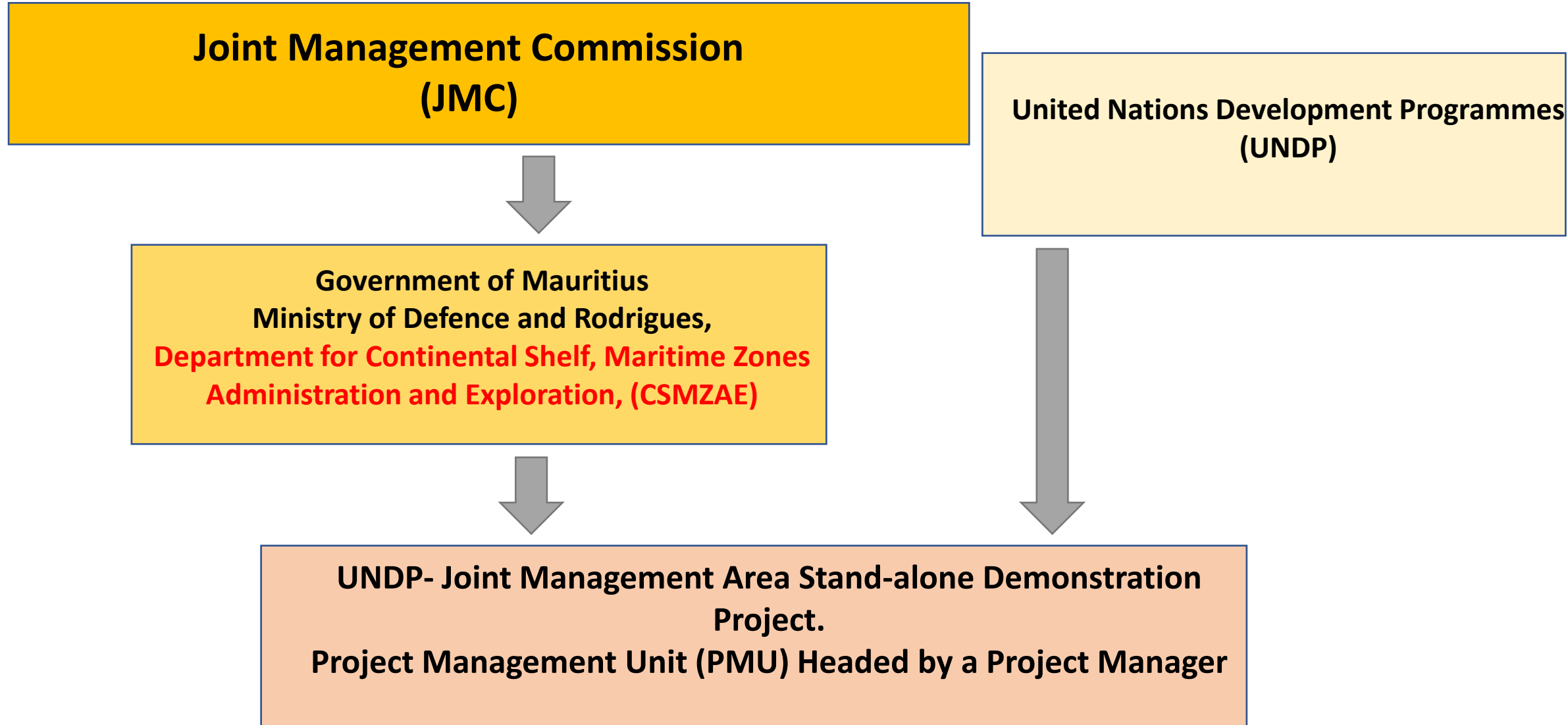


**The JMA Demonstration Project aims at achieving its goals and objectives through the delivery of four components as follows:**

1. Building Technical and Management Capacity in support of Marine Spatial Planning (MSP) and effective management of the Joint Management Area.
2. Development of a data and information system along with a Programme of data capture and gap-filling as a foundation for an adaptive management strategy.
3. Adoption and implementation of a Marine Spatial Planning approach with the objective of improving and implementing effective decision-making for activities within the Joint Management Area.
4. Monitoring, Evaluation, Adaptive Feedback and Sustainability using UNDP and GEF tracking tool for both annual progress and terminal evaluation.



# Project Implementation Arrangement





## **The Project Steering Committee permanent members.**

### **Permanent Members:**

- Representative(s) of Mauritius delegation to the Joint Commission
- Representative(s) of Seychelles delegation to the Joint Commission
- Representatives of UNDP (both UNDP Mauritius/Seychelles and UNDP-GEF)
- The JMA Demonstration Project Manager (Act as an ex-officio and Secretariat to the PSC).
- A Co-Chair of the Joint Commission and the UNDP Resident Representative will jointly chair the Steering Committee meeting.

PSC permanent members may invite others either as an Observer (with no voting rights) or a full permanent member as deemed necessary/desired at any time during the project implementation.



## Focal activities and Consultancies

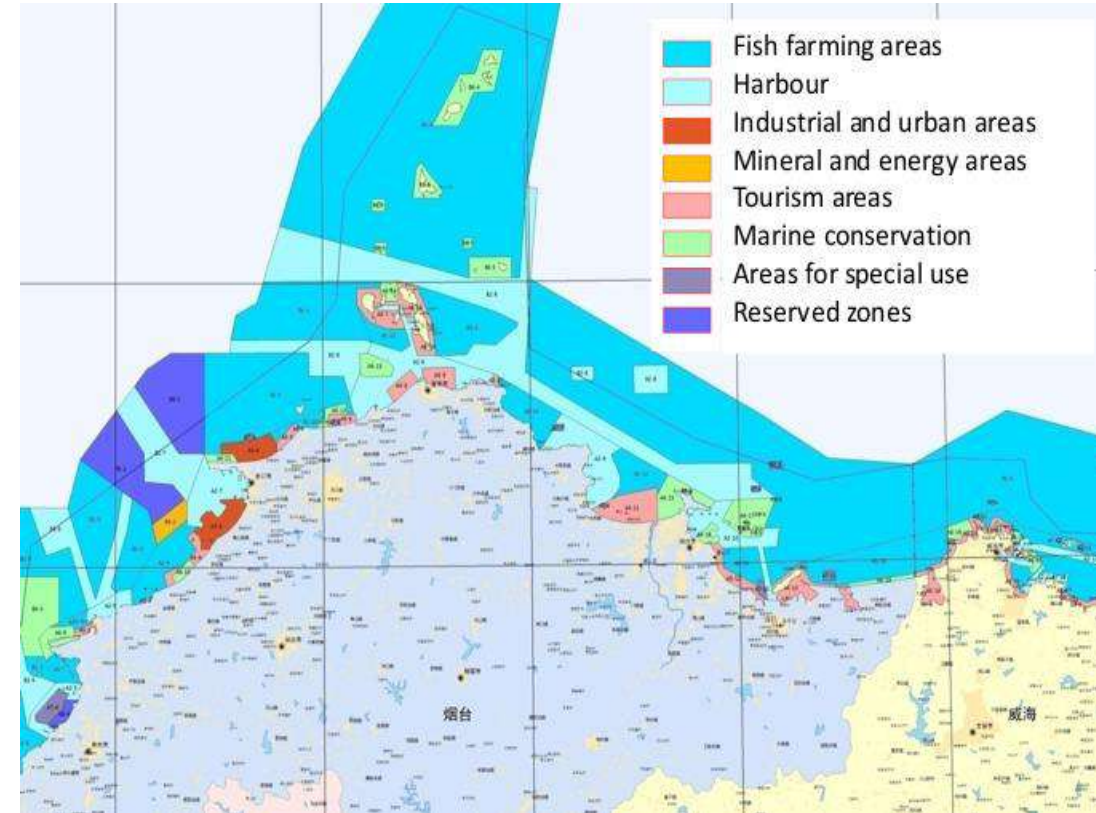
Focused activities	Timeframe	Consultancies	Timeframe
<b>1. MSP Framework</b>  <b>2.Data Management System:</b> <b>A. Data system architecture and design</b> <b>B. Recommended hardware and software</b> <b>C. Data repatriation and data Capture and monitoring system</b> <b>3.Associated capacity Building activities.</b>	2018 to 2021	<b>Marine Spatial Planning Process: MSP Specialist</b>	2019, 2020, 2021
	2019, 2020	<b>Monitoring, Control and Surveillance (MCS) Specialist</b>	2019
	2019,2020	<b>Communication Consultant</b>	2019, 2020, 2021
	2020,2021	<b>IT Specialist (GIS and Data Management)</b>	2019, 2020
	2018-2021	<b>High Seas Governance Specialist</b>	2020.
		<b>Legal Guidance on Ocean Governance: Short Term, 2020</b>	



# JMA-Marine Spatial Planning overview

UNDP-JMA Demonstration Project is to establish a comprehensive marine plan to address key challenges in the Joint Management Area .

This multi-use design of the JMA MSP Initiative will serve as the basis for guiding the implementation and achievement of strategies and decisions of the Joint Commission





# Objectives for JMA Marine Spatial Planning

- Provide a framework for the identification, selection, establishment and management of:
  - Critical areas for the exploration for and development of living and non-living marine resources;
  - Environmentally important and sensitive areas; and
  - Areas of multiple use and potential future user conflict.
- Preserve and protect the marine resources and ecological structures of the JMA, including those that support ecosystem function of the wider western Indian Ocean region;
- Ensure the sustainability of the economic uses of the JMA by promoting sustainable management of industry and minimization and mitigation of threats.



## Objectives for JMA Marine Spatial Planning cont'

- Promotes appropriate use of the space by ensuring that decisions in relation to the allocation of resources in the JMA are environmentally, socially, culturally and economically balanced;
- Reduce and resolve spatial and temporal conflicts among current and future human activities and between human activities and nature;
- Integrate ecosystem-based management with the management requirements of oceans-based industries;
- Identify data and sources of data relevant to the JMA which will enable a better knowledge of the JMA's seabed and sub-soil.



# Data Management system to support MSP Process

- Identify data and data sources relevant to the JMA and recommend a strategy for the repatriation of such data;
- Develop a proposal for a hardware data system architecture and its related design together with recommendations for appropriate hardware and software including data management policy to support MSP process and JMA needs;
- Draft protocols for storage, access, and dissemination of data.



# Monitoring, Control, and Surveillance

- Identify options for monitoring, control, and surveillance of human activities in the JMA,
- Potential risks to human activities that may pose a threat to the resources and environment of the JMA, and provides appropriate tools, options, and/or scenarios to mitigate such risks.
- Identify possible monitoring, control and surveillance methods to track the activities identified under (1) above to develop a comprehensive maritime domain picture of the JMA.
- Conduct a capacity gap analysis in monitoring control and surveillance management, to support the JMA management process (Seychelles and Mauritius), including a review of International Best Practices and deliver a workshop to stakeholders;
- Identify, and make recommendations on, appropriate MCS tools (both hardware and software) to support the implementation of a management framework for the JMA (E.g. satellite tracking, in-situ monitoring devices, etc).
- Identify available MCS data, data priorities, and projects to fill data gaps



**Thank you**



# Seychelles and it's Maritime Spaces

From Exclusive Economic Zones  
to Extended Continental Shelves  
to Areas Beyond National Jurisdiction

*Prepared by Francesca Adrienne  
Director General, Maritime Boundary Management  
Department of Blue Economy*



# Who Owns the Ocean?

- ▶ *The United Nations Convention on the Law of the Sea (UNCLOS 1982)* which **Seychelles ratified in 1991**, says that a country may claim an area extending 12 nautical miles from its coast as its own **territorial sea**. Additionally it can exploit 200 nautical miles of the water column beyond its coast as its **exclusive economic zone**. The same applies to the first 200 nautical miles of the sea floor, the continental shelf. The resources found there can be exploited by that country alone. If the country can scientifically prove that it has an **extended continental shelf** – must continuously geologically connected to the mainland – it also has the sole rights to the resources there as well, but only on the sea floor and not the water column above....the **high seas**
- ▶ Within the economic zones, national laws apply governing the exploitation of resources and can environmentally protect some areas where it is needed.



- ▶ this *constitution of the ocean* is intended to peacefully adjudicate the interests of all states and it is intended to guarantee that the environment is protected and that developing nations also have their share of the riches
- ▶ but there are loopholes: pirates can be detained by anyone who catches them, but not polluters, illegal fishing fleets, terrorists, weapons dealers, drug smugglers, or human trackers. They can only be pursued by the countries from which they originate. It is often more than unclear who the responsible international organisations are

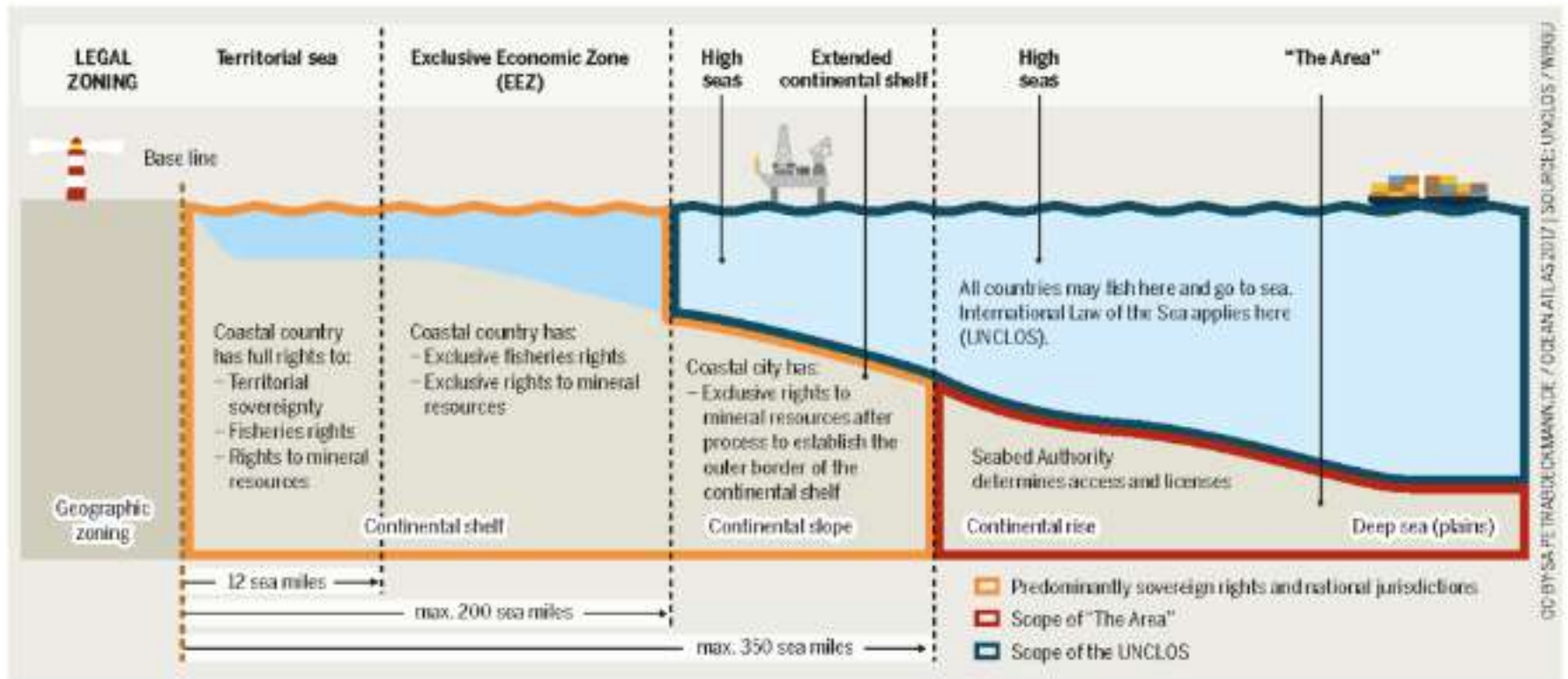
Territorially speaking, the high seas or “**the area**” belongs to no one – and so when it comes to exploitation, **they belong to everyone** and is based on the concept of

***“the shared heritage of humanity”***



- ▶ The high seas cover two thirds of the ocean and are home to **90% of marine life**, but this vast expanse of water and seabed that lies beyond the national jurisdiction of any one country has no comprehensive protection.
- ▶ **UNCLOS** guarantees countries the freedom to fish, travel and lay cables in the high seas. It also defines the responsibilities of the use of the ocean, establishing guidelines for businesses, environmental protection, and the management of natural resources.
- ▶ Under UNCLOS, almost **20 international organisations** manage human activities on the high seas, but they are restricted in their scope.
- ▶ Overlapping interests, complicated jurisdictional issues, and gaps in authority have made protection of the high seas nearly impossible to manage.
- ▶ At the same time, the growing threat from human activities, including pollution, overfishing, mining, geoengineering, and climate change
- ▶ This has made the need for an **international agreement** to protect these waters even more critical than ever.





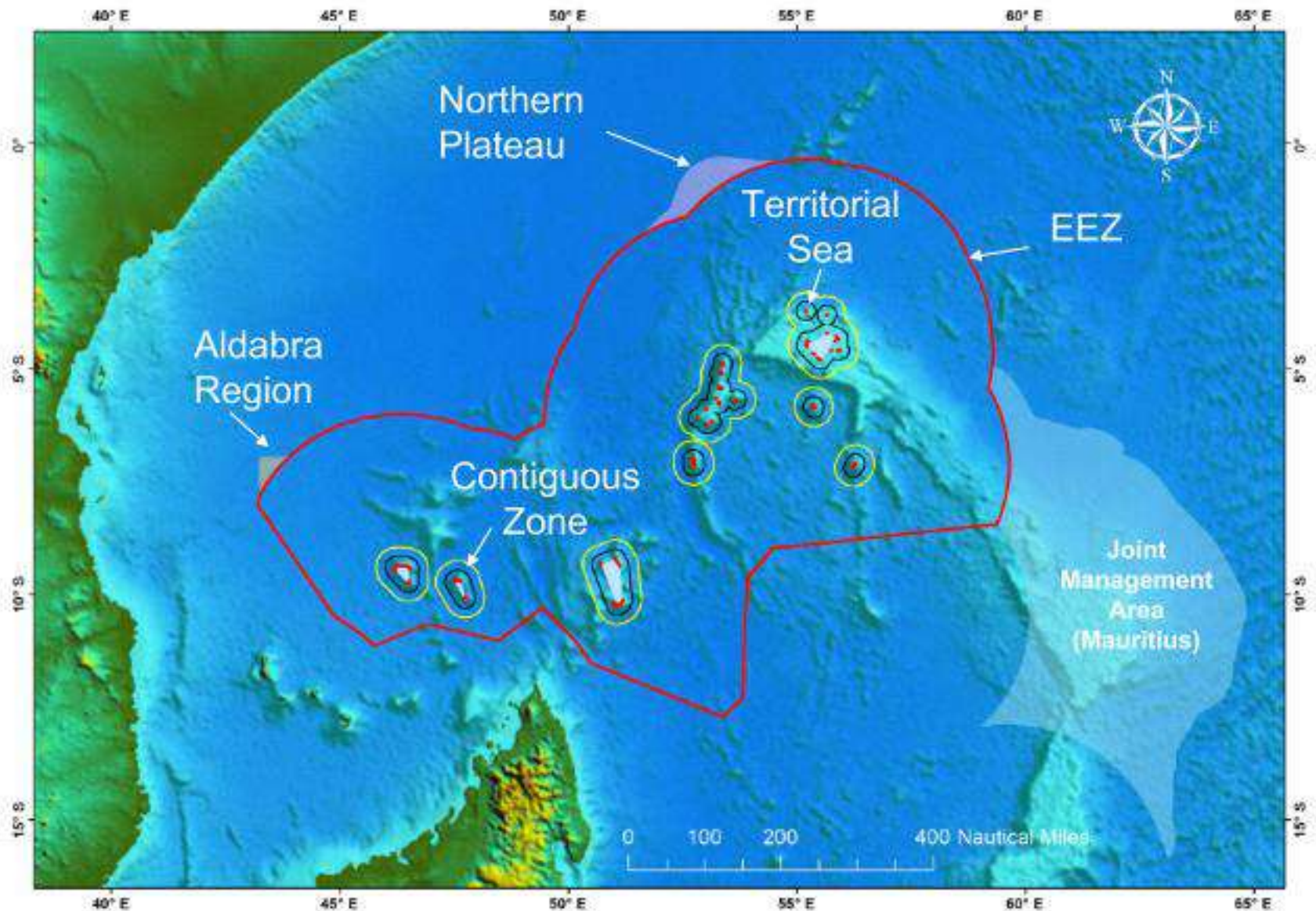
***Seafloor in "the area" is administered by the International Seabed Authority***

***RFMOs organizes the cultivation of the fish stocks in the area  
as well as the trans-territorial fish stocks in the EEZs***

***UNCLOS applies to the areas beyond national jurisdiction (ABNJ) where all countries can fish***



# Seychelles Maritime Zones



*Joint Management Area of 396,000 sqkm – first and only JMA over the ECS in the world, treaty was signed in 2012*



## ...a little bit more about Seychelles



**116 islands**

**Population of 94,000**

**3 main inhabited islands**

**Land area is 454 sqkm**

**EEZ 1.4 Million sqkm**

**Large Oceanic State**

**GDP 15,410 USD**

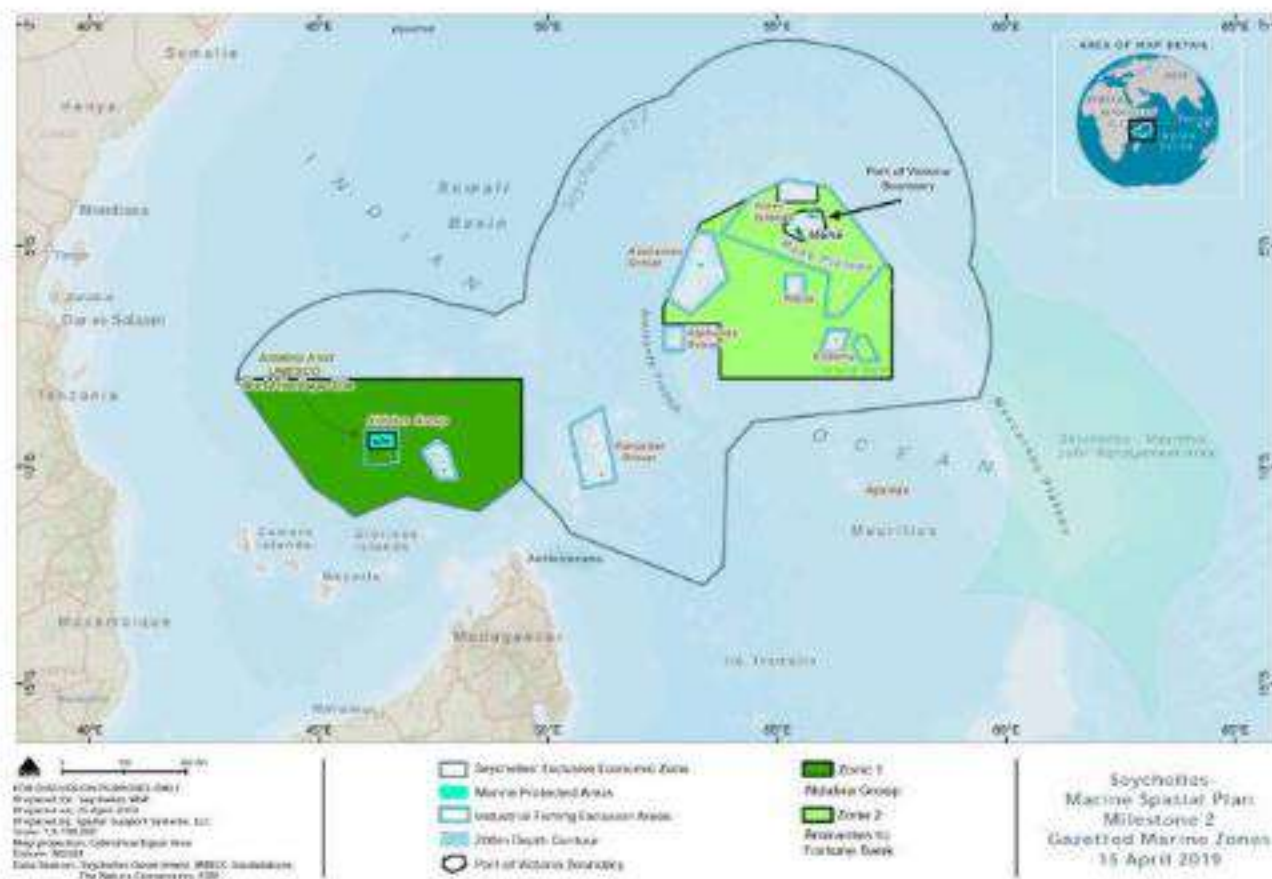
Seychelles has benefitted from its ocean resources for over 200 years with the development of **fisheries**, the reliance on **international and domestic shipping supporting trade**, our position as a global leader in **marine conservation** and in the **tourism industry**.

Over the years the interest in the ocean has grown in response to challenges, constraints, threats - over and non-regulated fishing affecting stock assessment & biodiversity, marine pollution, maritime security, climate change.

An integrated approach to ocean based sustainable development which brings together ***Economy, Environment and Society***, consistent with the **Sustainable Development Agenda 2030 (SDG's)**, the **Convention on Biological Diversity (CBD)** and the **Paris Agreement on Climate Change (2015)** – **BLUE ECONOMY**



# Seychelles Marine Spatial Plan



A government led process, initiated in 2012, facilitated by The Nature Conservancy (TNC) in partnership with UNDP GEF PCU. The goal was to protect 30% of the EEZ, including a 15% no take zone (only 0.04% before that). The Debt-for-Climate-Change-Adaptation swap in 2016 raised funding, which has been redirected to fund sustainable projects.



## **Phase 1**

Initiated 2014

Completed 2017

Legalised in Feb 2018

Milestone 1 - 15% coarse zoning with all territorial seas demarcated as medium sustainable use

## **Phase 2**

Initiated Feb 2018 - also legalised the marine protected areas of Aldabra and Amirantes group

Ongoing till 2020

January 2019 - 26% of the EEZ has been mapped and defined

Milestone 2 and 3 - the other 15%

Refining the zoning design

Implementation Plan

Formalising the funding and costs



# Environmental activities within EEZ

## Aldabra Cleanup - from Feb 20 to March 2019

12 volunteers for 5 weeks

25 tonnes of plastic including 50,000 pairs offlip flop

## Ban on Plastic

Jan 2017 - ban on the importation of all single use plastic bags, styrofoam containers and plastic cutlery by commercial entities

July 2017 - the ban on the use of plastic bags, and cutlery

## Ban on Plastic Straws

Jan 2019 - ban on the importation of plastic straws except for juice boxes

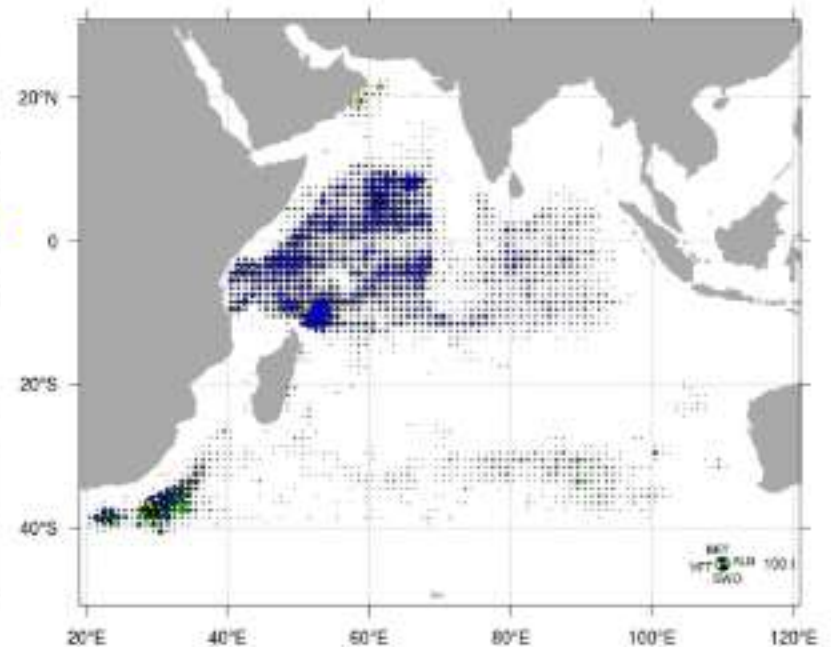
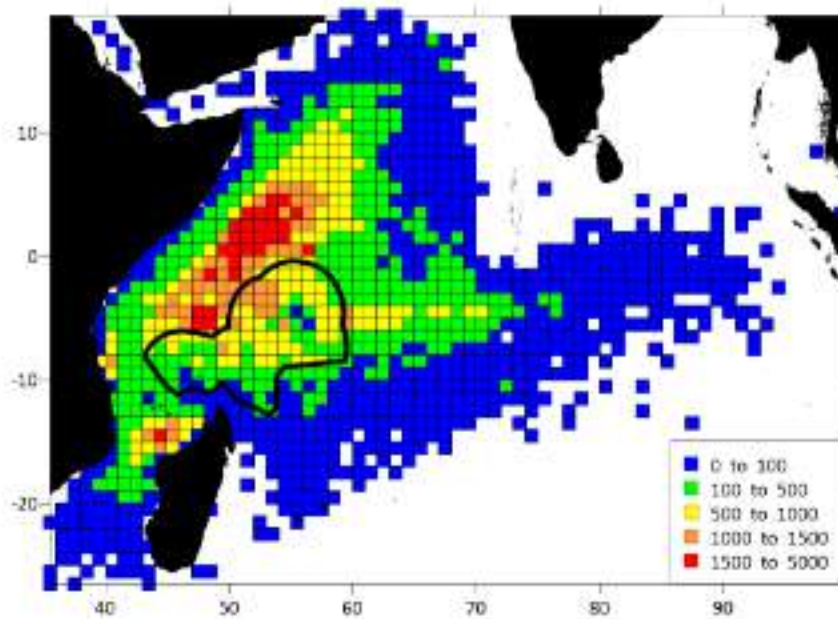
July 2019 - ban on the use of plastic straws by any commercial entity and will be protected by environmental laws that are being put in place

## **Ongoing awareness programmes - community action**



# Migration of tuna in the Indian Ocean

Research in fish especially tuna which is one of the key economic pillar, knowing their migratory patterns in the Seychelles waters and the larger Indian Ocean...





# Sharing the benefits and responsibilities

The goal of the BBNJ is so that nations can share equally in the benefits and resources offered by the high seas, and can work together to ensure sustainable development of the marine environment.

- ▶ The four key issues up for discussions and negotiations:
  - ▶ *to minimise impacts with environmental impact assessments*
  - ▶ *to establish a system for sharing the benefits of marine genetic resources*
  - ▶ *to build capacity and transfer technology for developing nations*
  - ▶ *to establish regional conservation mechanisms such as MPAs to protect vulnerable areas*
- ▶ this binding agreement on protecting the high seas is being seen as the most important piece of marine legislation since UNCLOS came into effect in 1994.



## The negotiations so far...

- ▶ Most of the developed countries did not want to commit on binding elements particularly for EIAs and sharing of benefits
- ▶ There are still some parties are arguing that High Seas belongs to no one and everyone and wanted to maintain the UNCLOS status quo
- ▶ Coastal states and particularly SIDS insisted on maintaining the concept of adjacent countries in getting benefits from sustainable use of the resources adjacent to their EEZ

...where to from here

working on building a better future  
for our shared heritage of humanity

**OCEAN**



**PRESENTATION AT THE JOINT WORKSHOP ON  
IMPROVING OCEAN PLANNING AND GOVERNANCE  
FOR THE ABNJ AND BBNJ IN THE SE ATLANTIC AND  
WEST INDIAN OCEAN, 10-14, JUNE 2019,  
CAPETOWN, SOUTH AFRICA**

**NIGERIA**



# NATIONAL POLICIES AND STRATEGIES

Do you have a national ocean policy / strategy in place? No.

Country policy/legislation on ABNJ – No.

Marine Spatial Planning – No.




# NATIONAL POLICIES AND STRATEGIES

**INTEGRATED COASTAL (AREA) MANAGEMENT PLAN (ICAMP)** – Developed.

OVERALL GOAL – to improve the livelihood of coastal communities through contribution to the successful management of the GOGLME project.



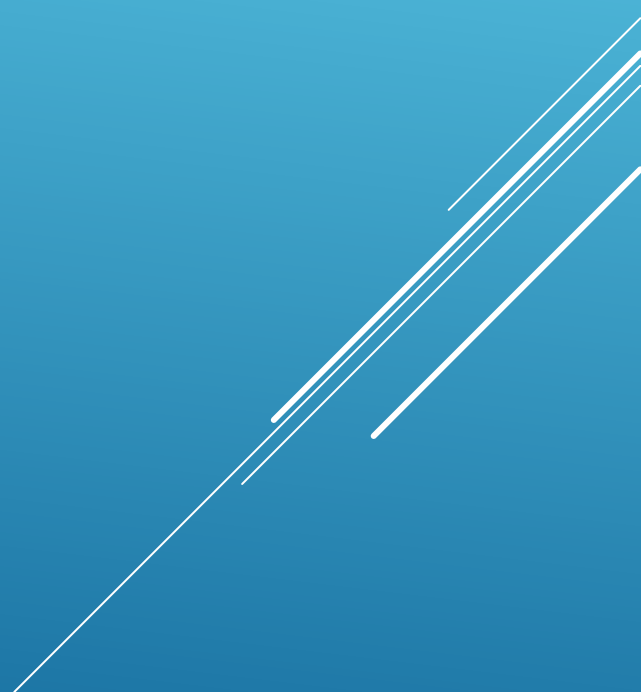
## ICAMP STRATEGIES:

- ▶ preparation of ecological master plan to guide the use of coastal areas for diverse purposes and to limit land use and biodiversity loss
  - ▶ facilitation of management structures for the protection and stabilization of damaged areas by appropriate methods
  - ▶ promotion of sustainable agriculture, soil and water conservation techniques
  - ▶ enforcement of compliance with the National Environmental Protection Regulations
  - ▶ environmental assessment, monitoring and audit programmes will be operated routinely.
- 



# FISHERIES — Yes,

Federal Ministry of Agriculture & Rural Development had developed a National Fisheries Management Plan





**BIODIVERSITY CONSERVATION** – Yes.

## **National Biodiversity Strategy and Action Plan (NBSAP)**

### **NBSAP Objectives:**

- ▶ To **address** underlying **causes of Biodiversity loss** by **mainstreaming Biodiversity** across government, society and economic sectors
- ▶ To **reduce** the **direct pressures** on biodiversity and **promote sustainable use**
- ▶ To **improve the status** of biodiversity by **safeguarding** the ecosystems, species and genetic diversity
- ▶ To **enhance the benefits** to all from biodiversity and ecosystem services
- ▶ To **enhance implementation** through **participatory** planning, knowledge management and capacity building



# WHAT IS THE ROLE OF REGIONAL COORDINATION IN THIS STRATEGY?

No direct roles assigned to the Region as the focus is mainly for **national action and regular**. However, these link to broader global agendas e.g ICAMP – LME management; NBSAP; Global Biodiversity conservation and management of the CBD; Fisheries Management Plans; Global Fisheries Management.

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**Does your country have an Inter-Ministerial Coordinating structure at which cross-sectoral issues are discussed - Yes**


However,

**In preparation for the BBNJ negotiation sessions – was this discussed nationally? No.**



**Has your country taken a formal decision to be actively involved in the discussions on ABNJ and do you have a strategy in this regard?**

Nigeria made a formal submission to the UN Boundaries Commission through our representative, Prof. Awosika, to extend our EEZ to 350 Nautical miles – unable to confirm current status.

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## What are the main challenges within the BBNJ negotiations for your country and the region?

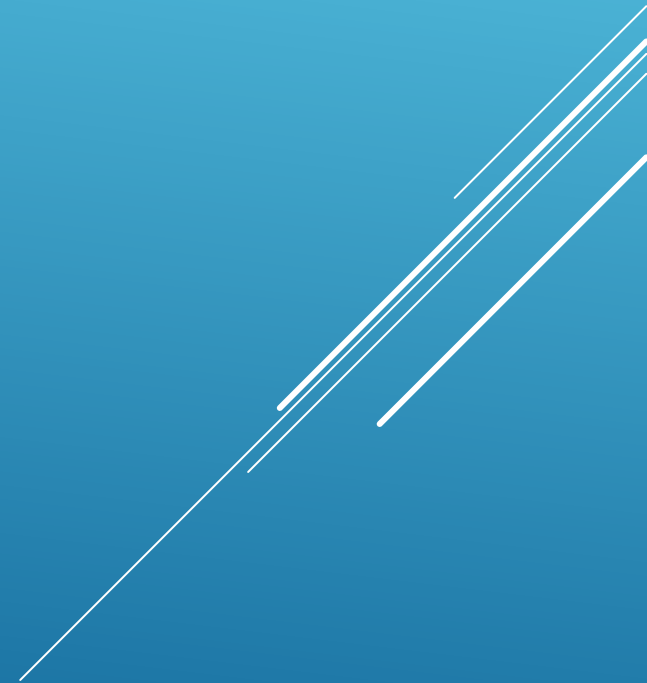
### Nigeria –

- Lack of national consultation and coordination (No National Ocean Platforms; governance and policies)
- poor national institutional capacities
- poor or unavailable data and information to base and influence negotiations
- poor access to updated research and status of ABNJ alongside BBNJ
- lack of funds to ensure relevant negotiators participate actively for the 4 thematic areas MGR, ABMTs, EIAs, Capacity Building and Technology Transfer



## How could the new BBNJ agreement help to better bridge cross-sectoral cooperation both within your country and further within your region?

- Facilitate/encourage the governments to formulate an oceans policy and governance structure. Currently, sectoral approach in policy, laws, regulations and even perspectives.
- Encourage more effective participation at the regional level to ensure policy and implementation coherence at all levels.





## ADDITIONALLY..... IUCN'S RECOMMENDATIONS TO THE BBNJ CONFERENCE, SEPTEMBER, 2018

- ▶ **Facilitation of developing countries' access to and research** on marine genetic resources: improves and enhances scientific and technical advances for both developing and developed countries.
- ▶ A **long-term strategic plan with science-based global priorities**: can **support connectivity, climate change resilience, and conservation of key ecosystems**.
- ▶ **Establishment of a mechanism or body** to aid in global, regional, and national **facilitation of communication, cooperation and coordination** by relevant stakeholders in capacity building: effectively address the current issue of fragmented initiatives.
- ▶ A **Scientific and Technical Body**: effectively and independently guide, advise, and evaluate and provide assistance during ABNJ/BBNJ processes.



## What has the region to 'offer' to the negotiations of a global BBNJ treaty in terms of - lessons learned and - experience in ocean governance?

- Wealth of internationally recognised individual **experts** in ABNJ and BBNJ
- Need for **integrated approach** in developing laws, strategies
- Need to have comprehensive laws regulating access to bioresources and **benefit sharing to States** which include the **immediate communities** to ensure intergenerational equity
- Strategic and Action plans - active **participation** of both private and public institutions (consider including the Navy) which have the capacity and resources to design and implement the action plan



**On which ocean governance issue(s) do you foresee the need for increased knowledge, data and capacity?**

**Increased Knowledge** – generally, the need to increase understanding of the biodiversity on the continental shelf, the concept, research information on ecosystem status,

**Data-** All Areas

**Capacity** - ABMTs e.g Marine Spatial Planning (MSP), Marine based EIAs, marine biotechnology, deep sea mining, ocean resilience to climate change, operationalising the blue economy.



**Additionally**..... IOI enumerated six governance challenges:

- ▶ Land-Sea Interactions
  - ▶ Area-Based Management
  - ▶ Seabed Resource Management
  - ▶ Nutrition Security and Food Systems
  - ▶ Ocean, Climate Change, and Acidification
  - ▶ Fisheries Governance
- 
- ❖ All areas need attention: distribute according to funding and expertise availability



## **What support would you hope that the new agreement could deliver for the protection of BBNJ in the South-East Atlantic and Western Indian Ocean?**

### **FAO'S 2018 POLICY BRIEF ON BBNJ CAPACITY BUILDING:**

- skills that might be required to support the international agreement, including skills relating to marine scientific research, area-based management, environmental and impact assessment (including strategic impact assessment addressing cumulative and cross sectoral impacts), development of marine genetic resources, and development of national and regional policies and actions
- support in the conducting of a national capacity needs assessment , in regards to a new international agreement according to their own national priorities, capabilities, and responsibilities




**Further..... Joanna Mossop** , 2017 in BBNJ publications:

- ❖ Creation of a **legally workable framework**, internationally and legally, **equitable sharing of benefits** from exploitation of living organisms gotten from ABNJ seabeds with the international community as required by UNCLOS' Common Heritage of Mankind principle.
- ❖ high seas are regulated by sectoral regimes which are poorly or not coordinated. Need to focus on effective delivery of the environmental protection mechanisms (ABMTs, EIAs).
- ❖ operationalising obligations created by the ILBI and existing institutions;
- ❖ legal separation of responsibility where States having sovereign rights over the resources of the continental shelf, while the resources found in the water column are beyond national jurisdiction.



## How can the STRONG High Seas and Deep Seas projects strengthen the presence of Abidjan Convention and Nairobi Convention States in the BBNJ negotiations?

- engenders collaboration and synergy between the 2 Regional Seas that can cascade into similar national level collaborations on oceans issues
  - facilitates holistic approach to tackling ocean issues
  - enable access to data and research works; prepare negotiating teams by providing technical support.
- 
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Thank you.

Merci beaucoup.

*Halima Bawa-Bwari*

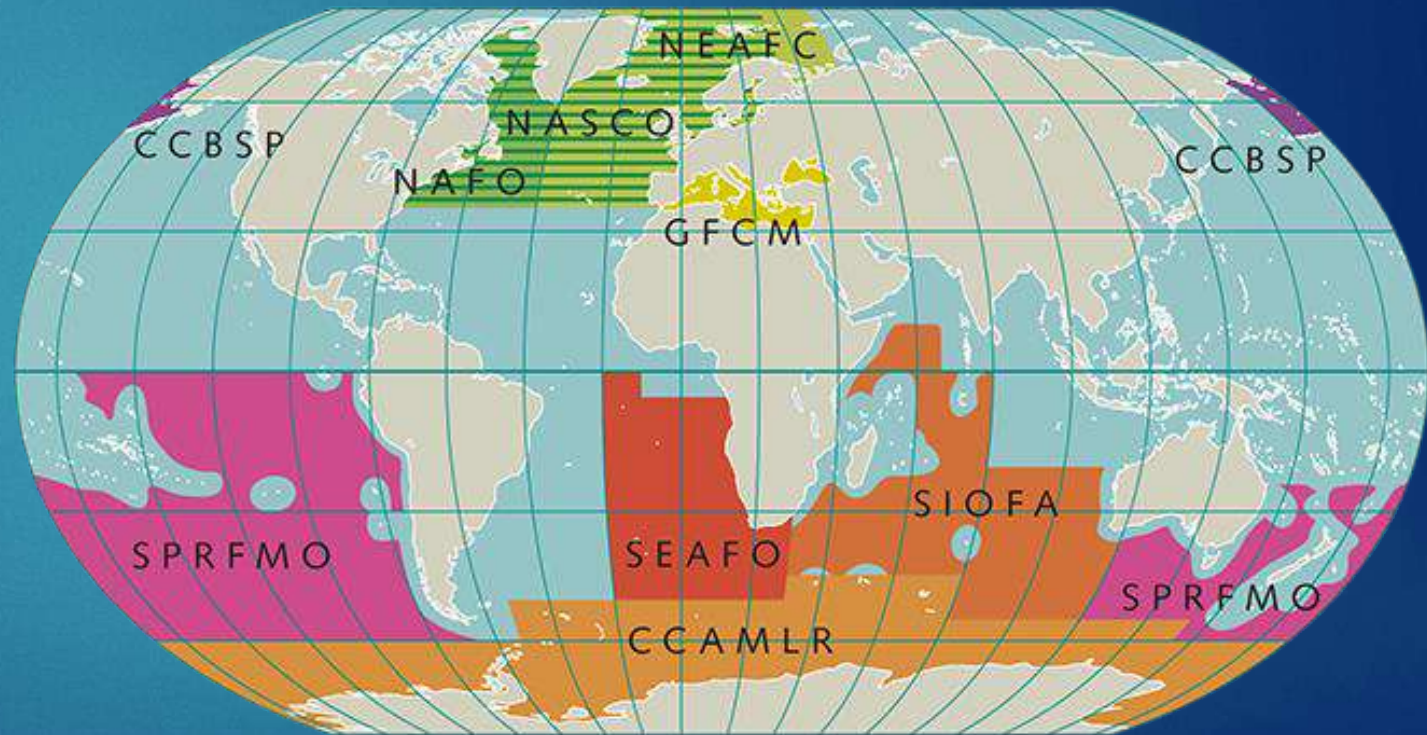
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# South East Atlantic Fisheries Organisation




- ▶ SEAFO's CA lies in the Southeast Atlantic ocean beyond the EEZ's of the coastal states of Angola, Namibia, South Africa and United Kingdom (in respect of St. Helena and its dependencies of Accession Islands and Tristan da Cunha).
- ▶ It is a very large water mass covering approximately 15 million hectares.
- ▶ It is demarcated by the line beginning at the outer limit of Angolan EEZ at 6 degree S extending due west to 10 W degree, then north along 10 W up to the equator, then west to 20W, then due south all the way to 50 S degree, then due east to 30 E degree, then due north to the east coast of South Africa





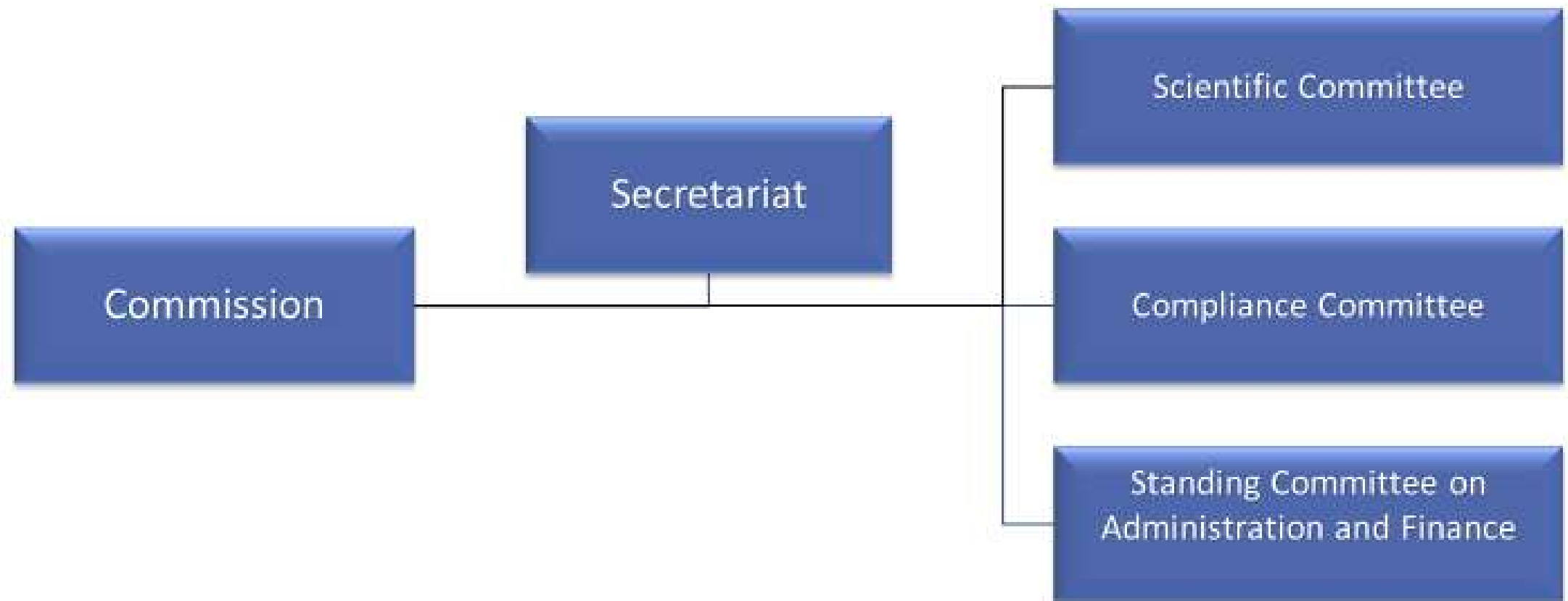
# Parties to the Convention



Contracting Parties	
	<b>Angola</b> <i>Acceded: 07 March 2006</i>
	<b>European Union</b> <i>Acceded: 08 August 2002</i>
	<b>Japan</b> <i>Acceded: 10 January 2010</i>
	<b>Rep. of Korea</b> <i>Acceded: 10 March 2011</i>
	<b>Namibia</b> <i>Acceded: 26 February 2002</i>
	<b>Norway</b> <i>Acceded: 12 February 2002</i>
	<b>South Africa</b> <i>Acceded: 18 June 2008</i>



# OVERVIEW OF SEAFO





# SEAFO mandate and objectives



- ▶ SEAFO is mandated to conserve and manage fishery resources that include, fish, molluscs, crustaceans, and some sedentary species on the high seas in the Southeast Atlantic with the exclusion of tunas.
- ▶ Its objective is to ensure long-term conservation and sustainable use of these resources through the adoption of conservation and management measures, applying the precautionary approach and ecosystem-based management.



# GLOBAL INSTRUMENTS GUIDING MANAGEMENT OF RESOURCES IN SEAFO CA



- ▶ 1982 UNITED NATIONS CONVENTION ON THE LAW OF THE SEA (UNCLOS)
  - ▶ The United Nations Fish Stocks Agreement (2001)
  - ▶ The FAO Port State Measures Agreement (PSMA) (2016)
  - ▶ The FAO Compliance Agreement (1993- 2003)
- as well as soft law instruments, such as:
- ▶ The FAO Code of Conduct for Responsible Fisheries (1995)
  - ▶ The International Plan of Action on IUU Fishing (2001)
  - ▶ The International Guidelines for the Management of Deep-Sea Fisheries in the High Seas (2008)



# SEAFO management strategies



- ▶ SEAFO sets annual TACs for four deep-sea species and one deep-sea crab stock that also include bycatch regulations in one mixed fishery.
- ▶ A global TAC is allocated between parties, and a fishery is closed when the agreed total catch level is reached.
- ▶ Direct fishing on deep-sea sharks and the use of gillnets are prohibited.
- ▶ Measures to reduce incidental catch of seabirds have been established for longline and trawl fisheries based on the International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries .



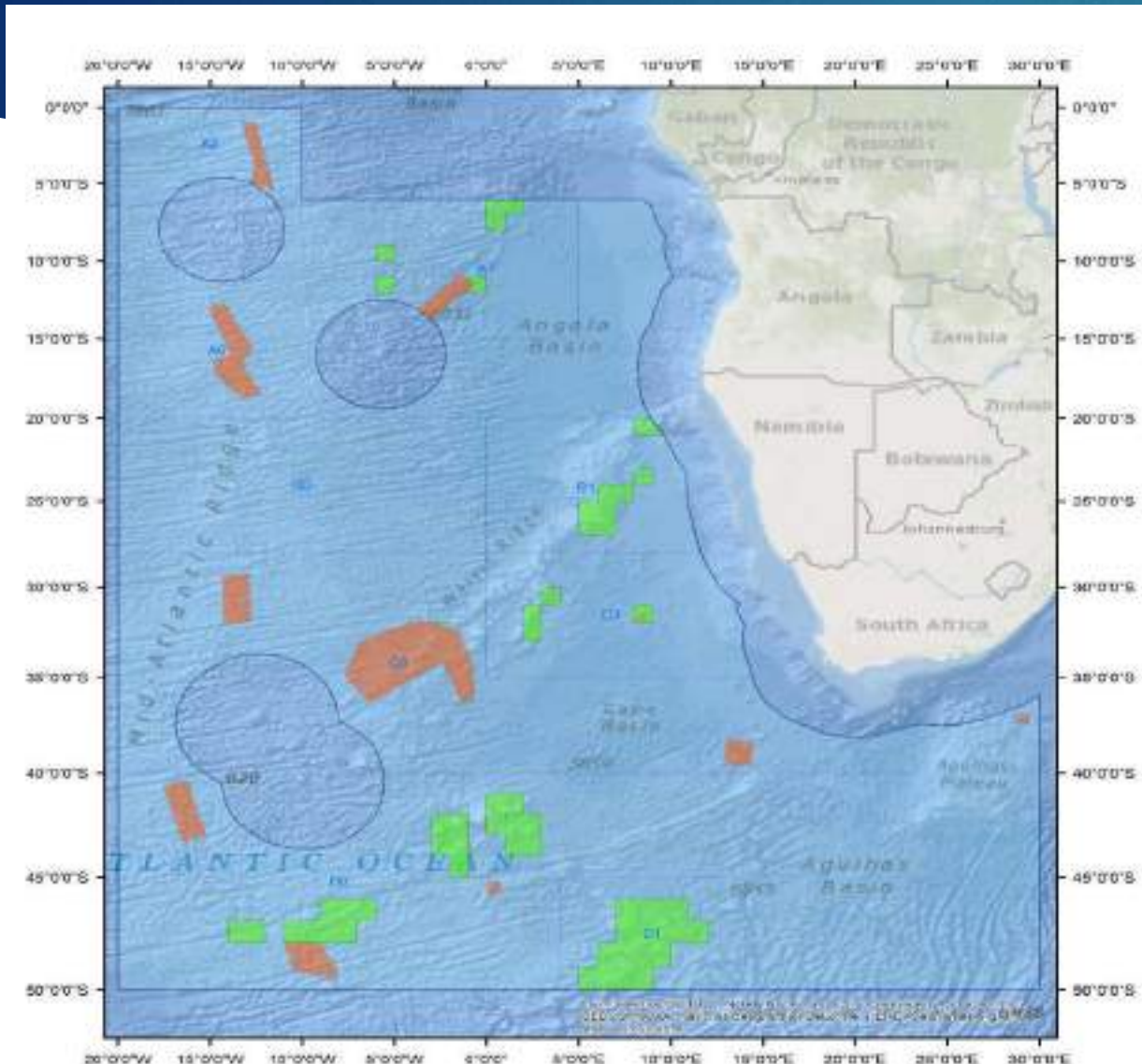
# SEAFO management Strategies



- ▶ A system to minimize the risk of “ghost fishing” by obliging parties to ensure that their vessels attempt to retrieve any lost gear, and if unsuccessful, notification requirements (gear type, position, etc.) is in place.
- ▶ Measures are adopted based on the best available scientific information and the application of the precautionary approach.
- ▶ SEAFO can adopt legally binding measures related to fishing in the Convention Area.
- ▶ A series of measures in order to protect VMEs from significant adverse impacts through deep-sea fishing are in place.



# SEAFO management strategies



- ▶ Areas that may or do contain benthic organisms have been identified and are closed to fishing (Red areas)
- ▶ A system of area management, defining “existing fishing areas” to be those areas where VMS data and/or other available data indicate that bottom fishing activities have been conducted, while “new fishing areas” are all other areas that are not defined as existing fishing areas has been established.
- ▶ Fishing in “new fishing areas” can only be undertaken as exploratory fishing.
- ▶ Parties must submit an assessment of the known and anticipated impacts that the fishing activity may have on VMEs in order to participate in exploratory fishing



# SEAFO management strategies



- ▶ Such exploratory fishing has to be approved by the SEAFO Commission after which a special authorization/licence is granted to the vessel by its flag state.
- ▶ Commercial deep-sea fishing can therefore only take place within an area defined as existing fishing area.
- ▶ However, within such an area, approval for an exploratory fishery is needed if there are significant changes in the conduct and technology of the deep-sea fishing.
- ▶ Thus, contracting parties shall establish national legislation prohibiting their vessels to fish outside such fishing areas.



# SEAFO strategies to protect VMEs



- ▶ To protect unidentified VMEs from significant adverse impacts, SEAFO has also established encounter protocols.
- ▶ An encounter is considered to occur when the bycatch of VME indicator species (live corals and sponges) is above threshold levels.
- ▶ The threshold values are different for trawls, longlines and pots.
- ▶ If the bycatch is above threshold levels, the vessel is required to cease fishing and move away at least 2 nautical miles from the end point of the trawl tow in the direction least likely to result in further encounters.
- ▶ If another gear is being used, then the “move-on” rule is 1 nautical mile from the most likely position of the encounter. The



# SEAFO MCS



- ▶ SEAFO has established a system of observation, inspection, compliance and enforcement that puts a series of obligations on those fishing for deep-sea species in the CA.
- ▶ These include general control measures, such as authorizations to fish, vessel requirements (e.g. marking of vessels, documents to be carried on board), marking of fishing gear and product labelling.
- ▶ There are requirements on logbook recording, mandatory implementation of VMS and communication concerning entry and exit to and from the CA, and catch reports every five days.
- ▶ In addition, parties have to ensure that all their vessels operating in the SEAFO area carry scientific observers.
- ▶ Transshipment operations at sea is prohibited.



# SEAFO MCS measures



- ▶ The system also contains details concerning monitoring of transhipments in port describing duties of contracting parties, both as flag states of any donor or receiving vessel.
- ▶ Furthermore, the scheme contains a chapter on port state control, corresponding with the **FAO PSMA** measures.
- ▶ Contracting parties must also adopt national legislation concerning obligations of masters on their vessels during inspection procedures in foreign ports.



- ▶ The system contains a specific chapter on measures to promote compliance, which in essence deals with vessels identified to have been involved in IUU fishing.
- ▶ They are listed (SEAFO IUU Vessel List), and the system subsequently obliges contracting parties to take a number of follow-up actions against those listed vessels.
- ▶ Actions requiring domestic implementation include the prohibition of port entry, refusal of granting nationality, and prohibition against chartering such vessels.



# Guidelines for fisheries research and basic marine science activity in the SEAFO Convention Area



- ▶ The primary purpose of these guidelines is to facilitate that high-quality science is conducted freely and to the benefit of all while ensuring that the activity is conducted in a manner which does not cause significant adverse impacts (SAI) on the marine ecosystems and organisms, including fisheries resources.
- ▶ The party is requested to submit to the Executive Secretary of SEAFO, preferably no later than 6 months of the intended period of sea-going activity, a letter of intent explaining the activity being planned.
- ▶ The ES provides guidance on any management measures that may be relevant to the intended research activity, as well forms and routines for submitting reports and/or data.
- ▶ Upon receiving the response from SEAFO, the party is requested to submit, no later than one month prior to the sea-going activity, a more detailed plan outlining methods to be used, areas to be sampled, sampling intensity, samples generated, and data to be gathered.
- ▶ The plan should also provide information on what measures will be implemented to mitigate anticipated negative impacts on fisheries resources and biodiversity, in particular VMEs.
- ▶ Upon receipt the letter of intent and detailed plan is forwarded to all SEAFO Contracting



# Capacity building initiatives

- ▶ Scientific observer and Port Inspector training are conducted in cooperation with ABNJ deep seas project
- ▶ Developing countries were trained on international instruments relevant to deep-sea fisheries and associated biodiversity during the first DEEP-FLIP training workshop which was held in October 2019 in Thailand, with selected countries from the SIOFA and SEAFO regions - ABNJ deep seas project
- ▶ A MCS workshop for SIOFA and SEAFO was conducted for members to identify gaps in their MCS frameworks and develop plans of actions to address the gaps - ABNJ deep seas project



- ▶ RFMO's are regarded as appropriate mechanisms for cooperation in managing high seas fish stocks, which include deep-sea species.
- ▶ RFMO's provide a platform for **nations with a 'real interest' in the ABNJ to share in the responsibility for proper management and conservation of ABNJ**, shifting the focus from 'no-one' to 'everyone'. RFMO/As are also important mechanisms through which other fisheries instruments are implemented.



- ▶ The role of RFMO/A's is significantly strengthened by UNFSA.
- ▶ NPFC, SEAFO, SIOFA and SPRFMO's have been established after the adoption of UNFSA, using the agreement as a template for negotiating the treaties
- ▶ Since the adoption of UNFSA, all RFMO/As have used the agreement as a basis and inspiration for the development and subsequent adoption of conservation and management measures.
- ▶ Most pre-UNFSA RFMO/As have revised and/or amended their founding treaties in order to bring themselves in line with modern management principles.



# Cooperation with other RFMO's and other organisations



- ▶ The Commission embraces cooperation with other RFMO's
- ▶ to strengthen global high seas fishery governance
- ▶ sharing of information, such as IUU fishing activities
- ▶ SEAFO attends annual meetings of CCAMLR, ICCAT, NAFO, NAMMCO and NEAFC
- ▶ Has close working relationship with other agencies, including FAO
- ▶ SEAFO have MoU's with ACCAP and CCAMLR and is in the process to sign a MoU with ICCAT



# The role of RFMOs in a future Biodiversity beyond National Jurisdiction (BBNJ) agreement



- ▶ RFMO/As are tasked with collecting fisheries statistics, assessing resources, making conservation and management decisions, and monitoring activities.
- ▶ The eight deep-sea RFMOs cover 77% of the ABNJ area, and regulate a large majority of the catches of deep sea species in these areas.
- ▶ Many RFMOs are adopting the Ecosystem Approach to Fisheries, recognizing the need to manage fisheries more holistically.
- ▶ Ecosystem issues are addressed through the adoption of actions to mitigate the impact on non-target species, or the ecosystem habitat and structure.
- ▶ In deep-sea RFMOs, protocols have been adopted to cease fishing if there is a Vulnerable Marine Ecosystem is encountered.



# The role of RFMOs in a future Biodiversity beyond National Jurisdiction (BBNJ) agreement



- ▶ For the tuna RFMOs, ecosystem considerations include stricter controls to reduce or eliminate bycatch, and mitigate the impact of fishing gear lost at sea through the use of biodegradable materials.
- ▶ As a result, the state of many of these resources is recovering (in the case of the slow-growing and vulnerable bluefin tuna) or close to recovered (e.g. yellowfin and bigeye tunas in the Indian and Pacific Ocean) to what it was a few years ago.



# The role of RFMOs in a future Biodiversity beyond National Jurisdiction (BBNJ) agreement



- ▶ In spite of this shared responsibility, there is no specific mechanisms to coordinate efforts to address biodiversity concerns among the various users of the ABNJ.
- ▶ There are challenges in ensuring sufficient knowledge sharing and coordinated action to ensure that impacts on biodiversity, coming from any user, are monitored and mitigated.
- ▶ The role of RFMO's need to be recognized and strengthened by bridging the gaps the BBNJ Agreement.
- ▶ Will improve biodiversity conservation, promote sustainable utilization and assist in combating IUU.

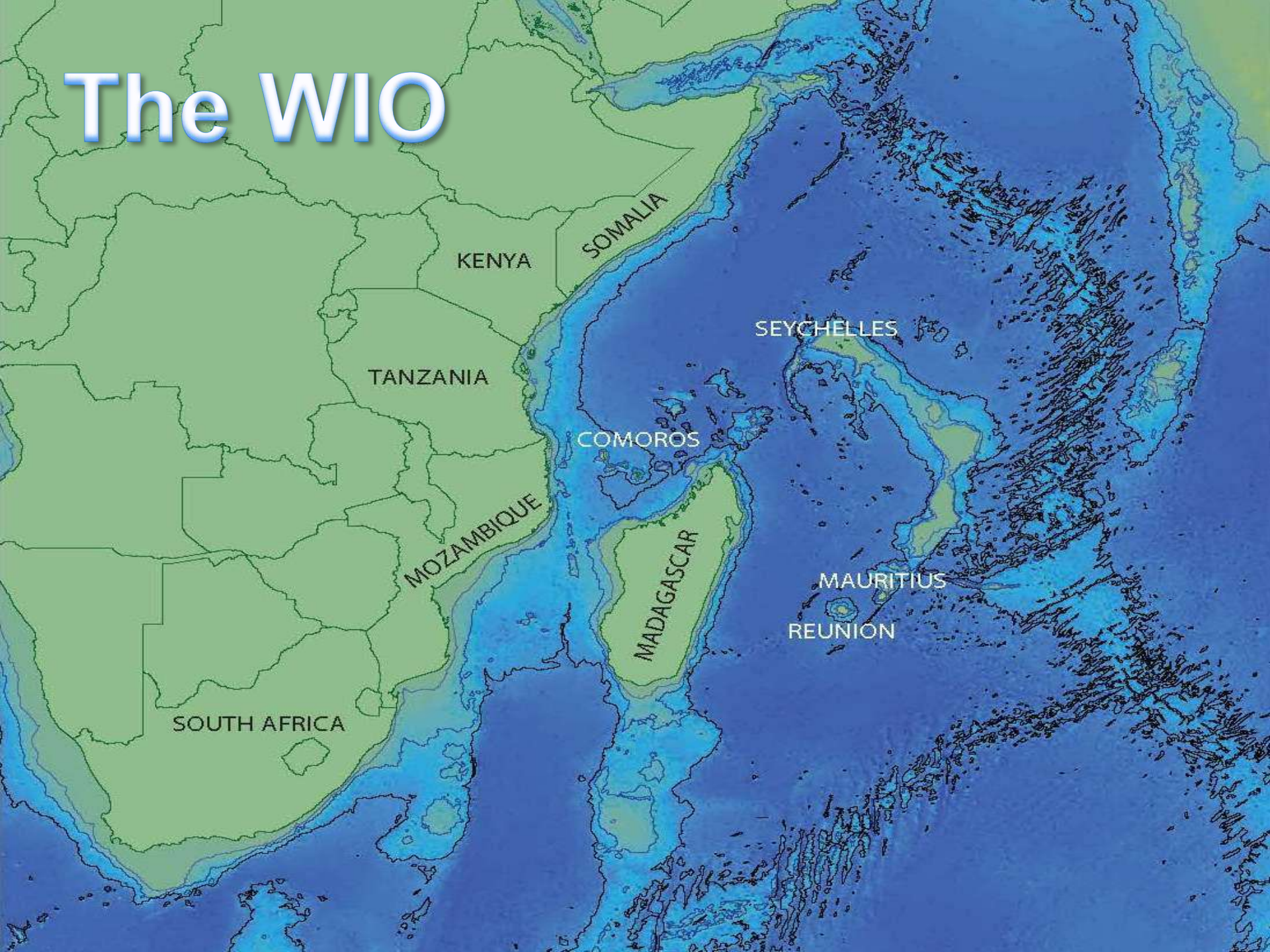


# **WIOMSA's Perspective**

**Julius Francis**  
**WIOMSA**



# The WIO



KENYA

SOMALIA

TANZANIA

SEYCHELLES

COMOROS

MOZAMBIQUE

MADAGASCAR

MAURITIUS

REUNION

SOUTH AFRICA



# 1. WIOMSA in brief...

- Forum for addressing the regional issues efficiently;
- Means for generating knowledge whilst building capacity;
- The basis for developing collaborations & partnerships;
- Mechanisms to promote the relationship between science and management and improving decision-making processes
- Opportunities for upscaling and enhancing outcomes and impacts
- Mobilizing more resources for the region



# WIOMSA and ABNJ...

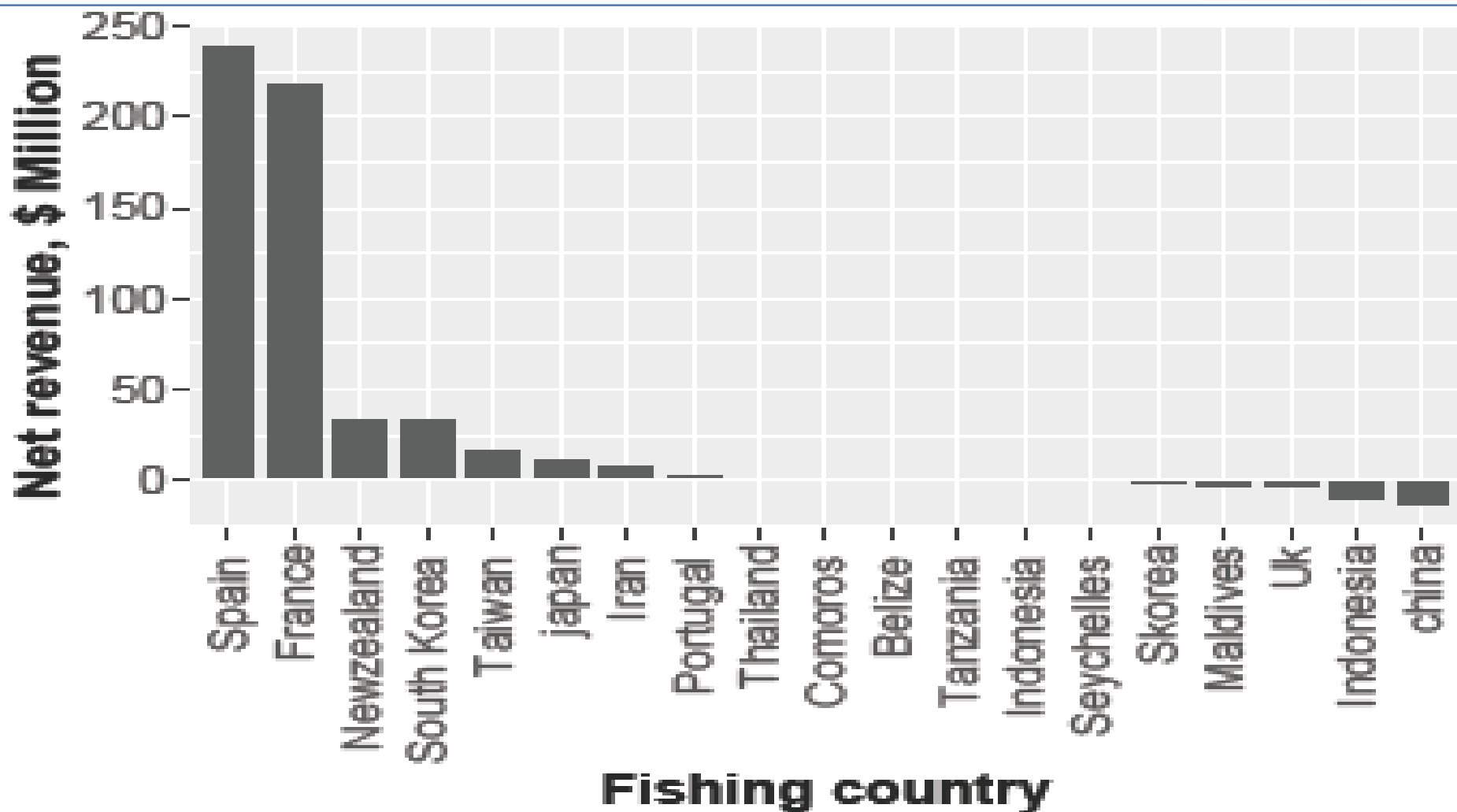
## ■ Functional Connectivity as a Basis for Aligning Marine Spatial Conservation Priorities Across Maritime Jurisdictions

- Identification of areas suitable for inclusion in the high seas MPA in the Western Indian Ocean region.
- Assessed connectivity patterns among existing MPAs, coral reefs and seamounts at large spatial scales to identify the gaps and opportunities for maintaining functional connectivity.
- Illustrate how regional scale prioritisation across maritime zones of Exclusive Economic Zones (EEZ) and ABNJ can be applied using area-based tools.



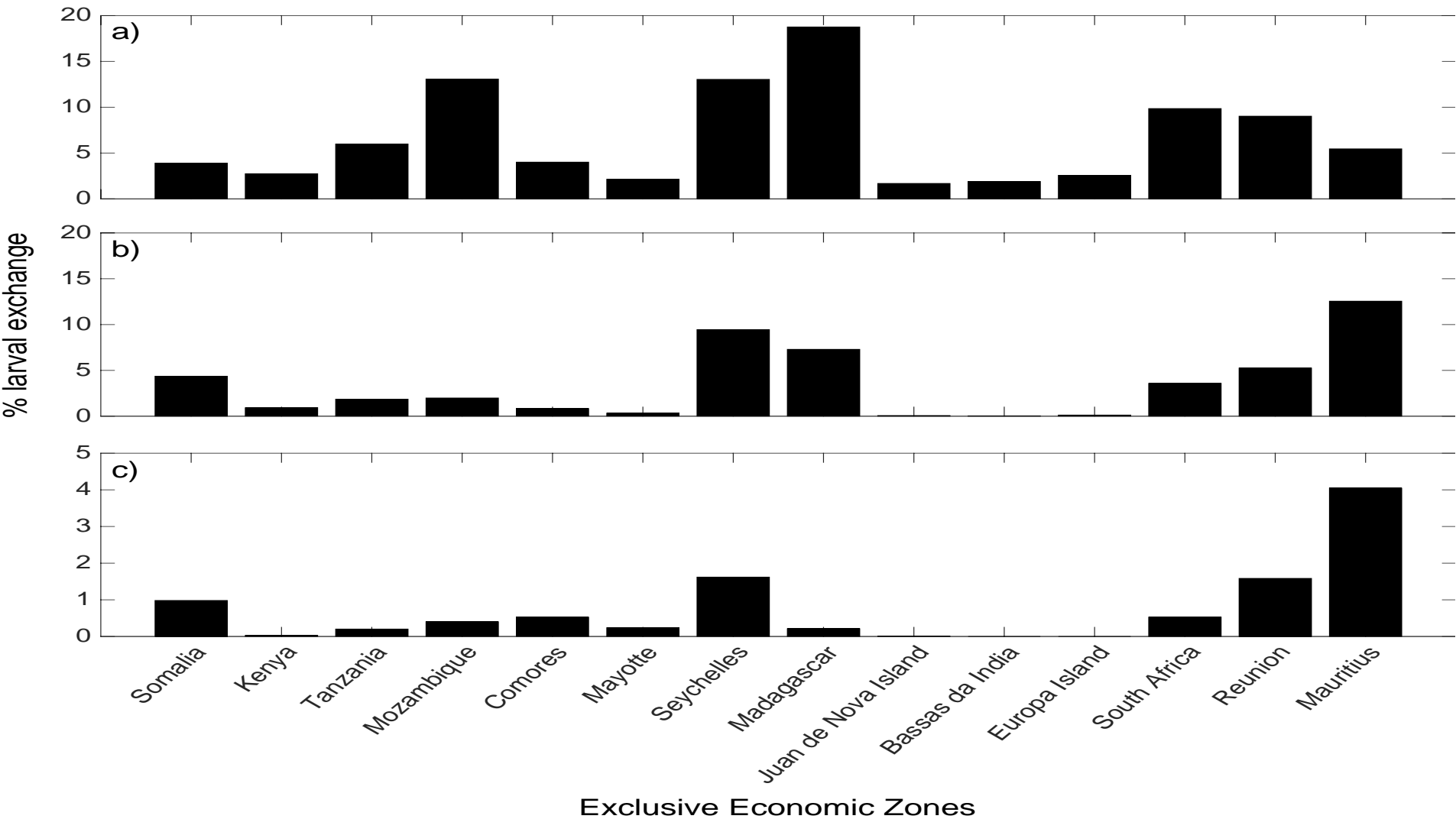
# The economics of fishing in the WIO

## ABNJ





# Proportion of larvae by different area

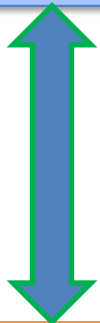




## Science to policy/user interface

### Science to Policy/User Interface

- Processes
- Deliverables



Science and other  
knowledge systems

**FARI**



Policy and decision-  
making processes/actions

**COP**





- To encourage historical data rescue activities on seamounts of the SWIO in order to set up a knowledge base on the marine natural heritage, its potential and its vulnerability.
- To examine the issue of extending geographical competence beyond national jurisdiction because of different types of connectivity (economic, ecological...) between seamounts located in international waters and coastal zones
- To account for new measures from RFMOs, in particular the recent classification (29/06/2018) by the SIOFA of 5 seamounts located in international waters (Walters shoal, Coral, Middle of What, Atlantis Bank, Fools Flat) as Protected Areas, with ban of trawl fishing and mandatory boarding of observers for all other gears, pending a final management plan by SIOFA in 2019.
- To support the States to engage any form of network protection –partial or total- of marine regional natural heritage that is partially documented by the LMEs, the EBSA process, or the oceanographic cruises, but which remains with any legal protection.



- To capitalize on opportunities provided in the UN binding international instrument on the governance of the oceans, currently under development, in order to enable convergence of the WIO on the 5 authorized themes: i) spatial management and MPAs in international waters; ii) marine technology transfer; iii) sharing advantages of the genetic diversity; iv) combating IUU fishing and v) environmental impact assessments.



# Some thoughts...

- Are there lessons to learn from the UNCLOS experience?
- Are key actors on the table?
  - FAO and RFMOs?
  - AU?
- Is existing data optimally used?
- How to link up with other similar processes?
- What is the appropriate framework for these dialogues at regional level? What is regional ocean governance in the context of ABNJ?





**1-6 July 2019 in Mauritius**

**Thank you for your  
attention!!**





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des Nations Unies  
pour l'éducation  
la science et la culture

Organización  
de las Naciones Unidas  
para la Educación  
la Ciencia y la Cultura

Организация  
Объединенных Наций по  
вопросам образования  
науки и культуры

• Intergovernmental  
Oceanographic  
Commission

• Commission  
océanographique  
intergouvernementale

• Comisión  
Oceanográfica  
Intergubernamental

• Межправительственная  
океанографическая  
комиссия

# IOC's Sub Commission for Africa and the Adjacent Island States (IOCAFRICA)

**Mika Odido**  
**IOC Coordinator in Africa**





United Nations  
Educational, Scientific and  
Cultural Organization



Intergovernmental  
Oceanographic  
Commission

Established in 1960  
150 Member States

UN focal point for ocean science, ocean  
observations and services, data and  
information exchange and capacity building

## IOC VISION

Strong *scientific understanding* and *systematic observations* of the changing world ocean climate and ecosystems shall *underpin sustainable development and global governance* for a healthy ocean, and global, regional and national management of risks and opportunities from the ocean.





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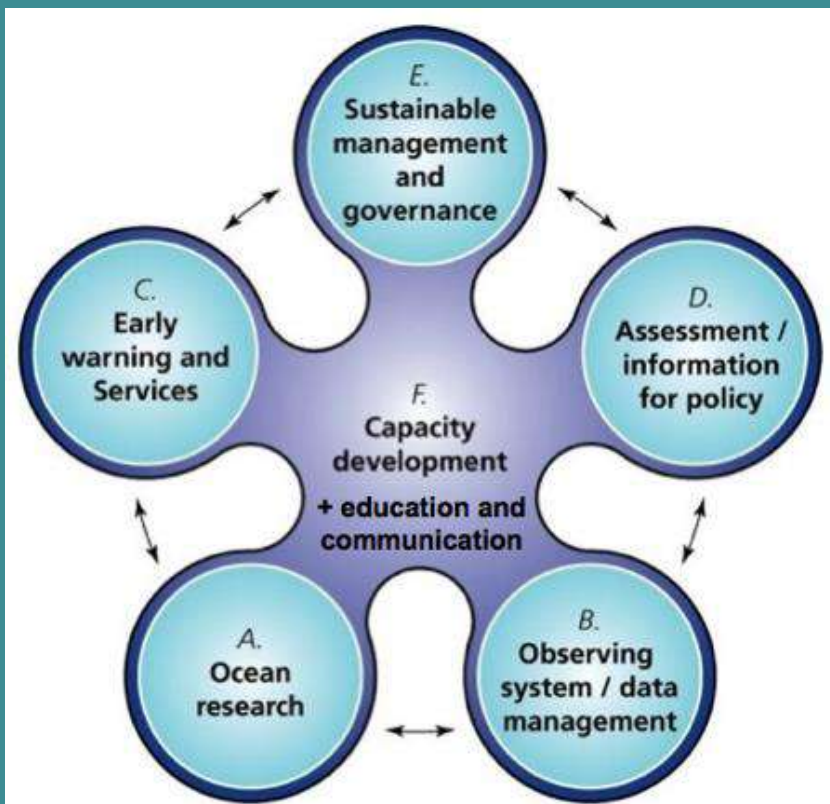
Intergovernmental  
Oceanographic  
Commission



Sustainable  
Development  
Goals

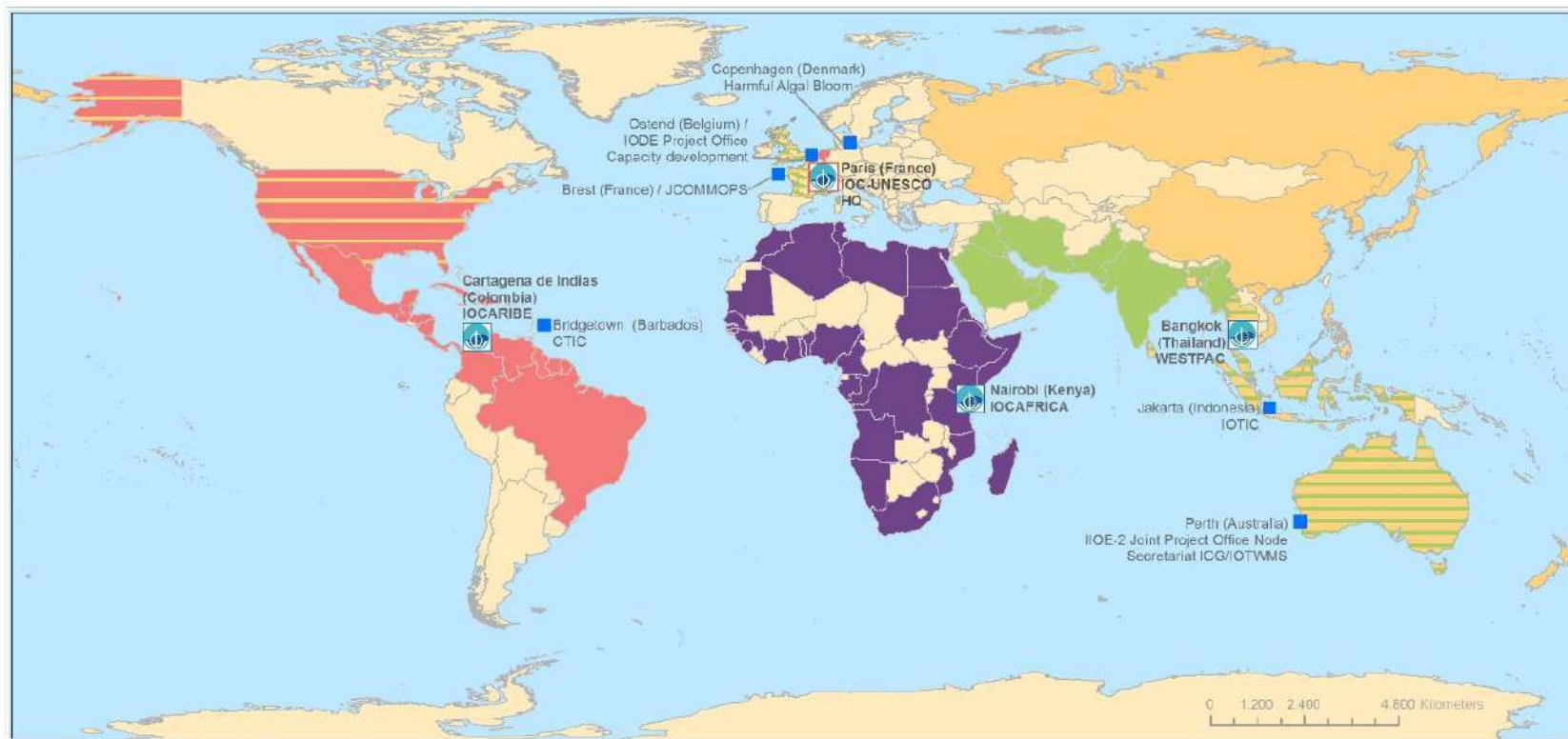
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Ocean***

# IOC: Secretariat, Planning & Activities





## Intergovernmental Oceanographic Commission of UNESCO IOC Sub-commissions, Programme and Project Offices



IOC-UNESCO/MPR, 2016

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the IOC-UNESCO.

-  ICAFRICA Member States
-  IOCARIBE Member States
-  IOCINDIO Member States
-  WESTPAC Member States
-  IOC-UNESCO Secretariat
-  IOC Sub-Commissions
-  IOC Programme and Project Offices





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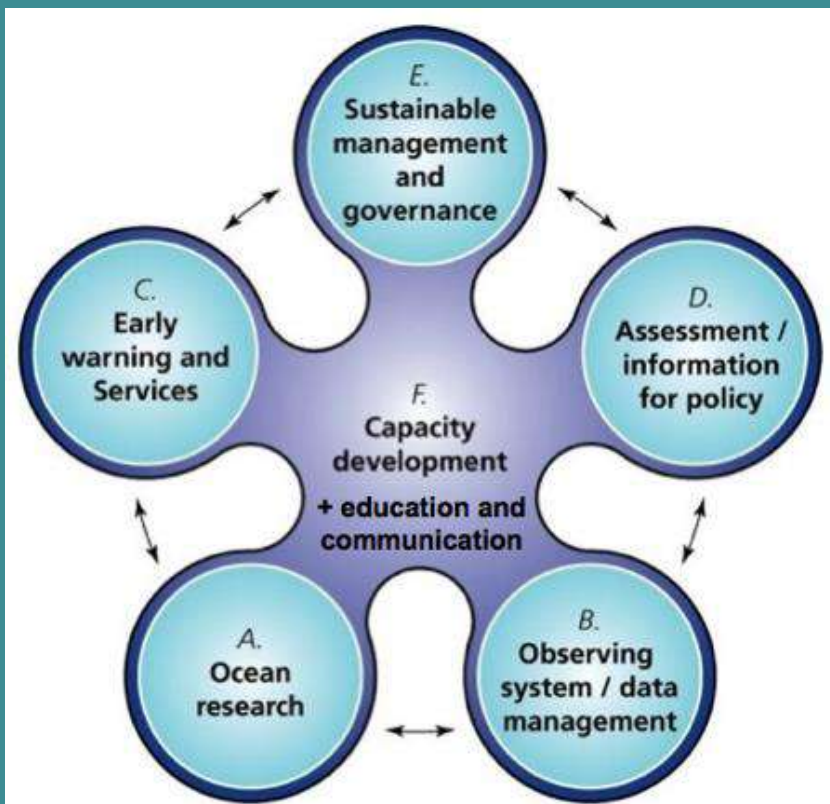
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# IOC: Secretariat, Planning & Activities





# Function A: Ocean Research

*(Ocean science is a shortcut to sustainable development)*

## Portfolio:

- Developing science content of the Decade
- Developing networks + cooperation (ICSU, SCOR, Future Earth, WCRP), ...
- Ocean Acidification (with IAEA), GOAON
- Blue Carbon Initiative (with UICN, CI, a number of Governments)
- Ocean Oxygen (GO2NE)
- Phytoplankton Trends (TrendsPO)
- Marine Ecological Time Series (IGMETS)
- Ocean and climate – a major theme
- Plastics and microplastics – e.g. via GESAMP
- Harmful Algal Blooms (desalination), with SCOR
- Global Ocean Science Report
- Active regional work, especially in WESTPAC



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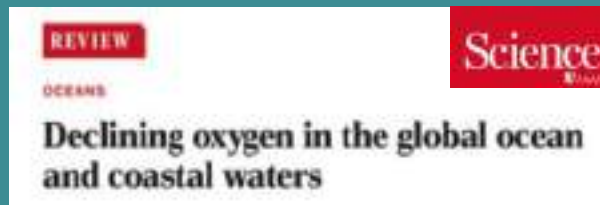
# Some Highlights of Function A: Ocean Research

- Ocean Acidification



**Development of the methodology  
for indicator 14.3.1**

- Ocean Oxygen



- Global Ocean Science Report – 2  
(portal, indicator of SDG Target 14.a, release 2020)



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# Function B: Observing System

*(One cannot manage what one cannot measure)*



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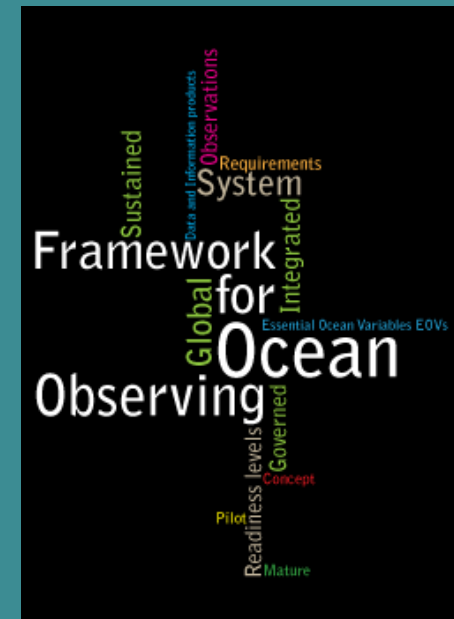
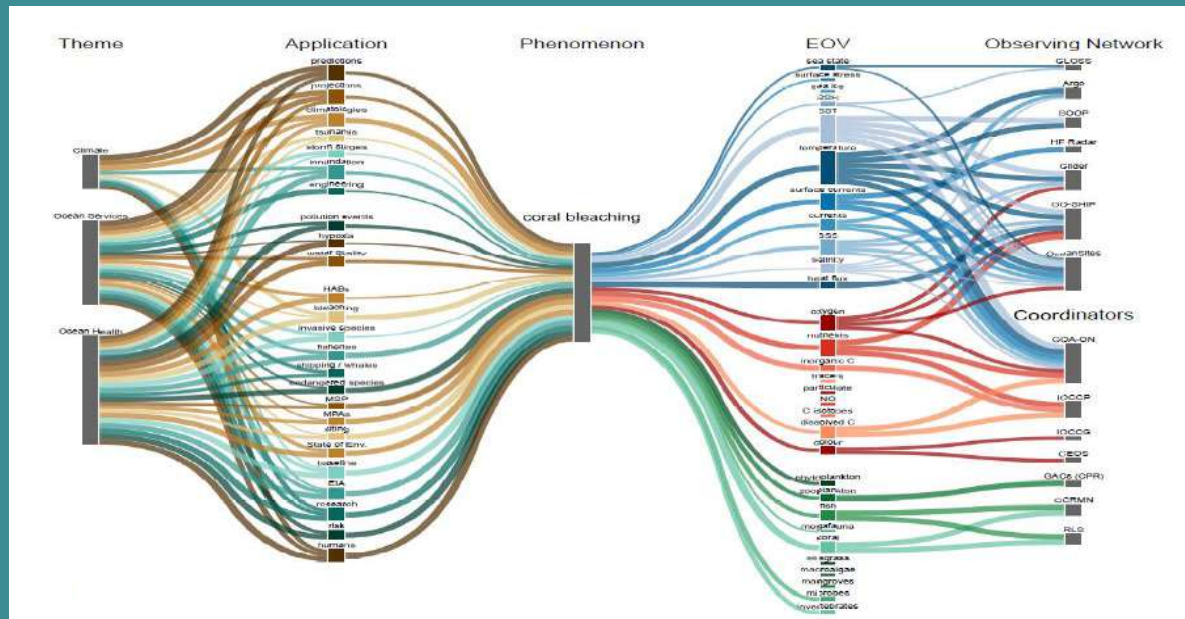
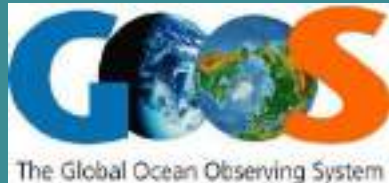


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# Global Ocean Observing System

- GOOS Strategy for 2030



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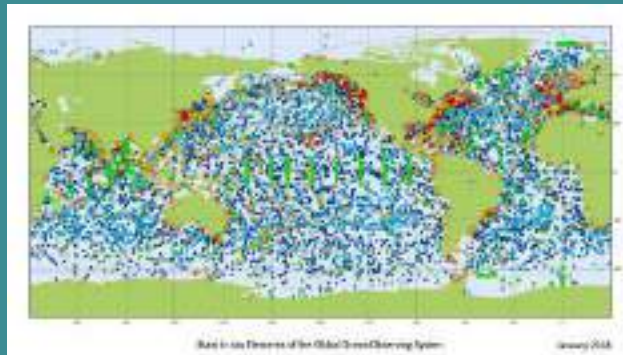


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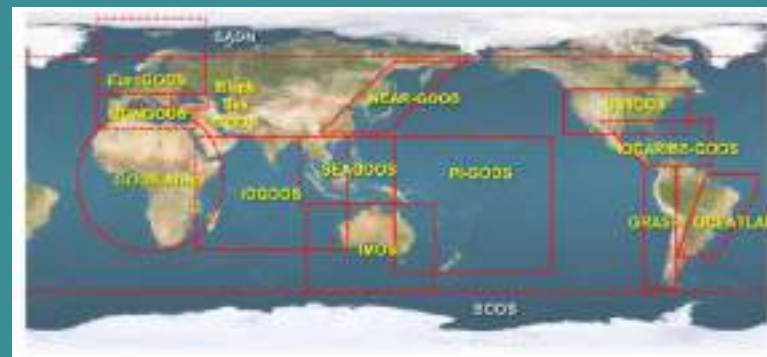


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**OOPC - GOOS Physics and Climate Panel**  
**IOCCP - GOOS Biogeochemistry Panel**  
**BioEco - GOOS Ocean Biology / Ecology Panel**







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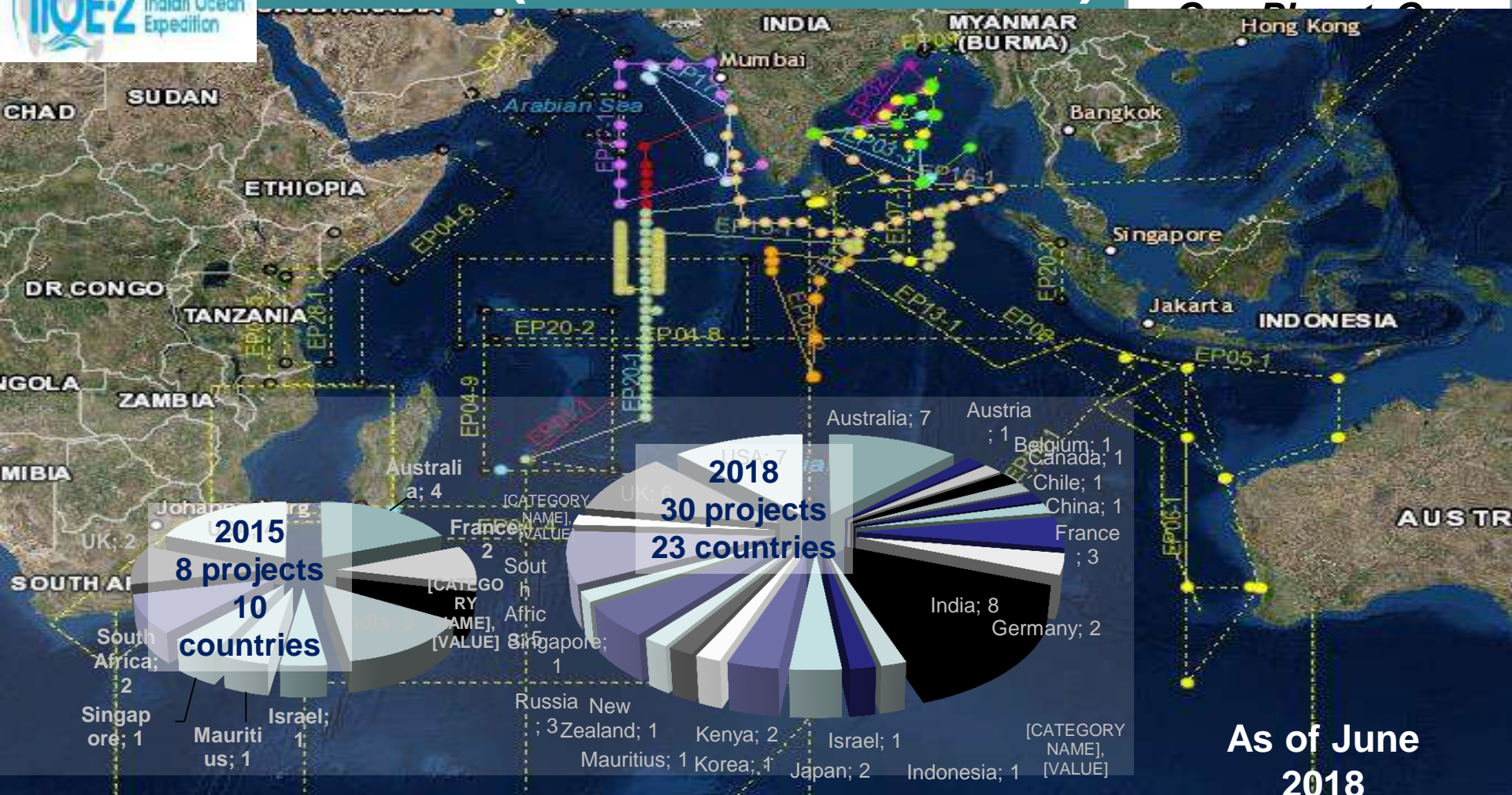
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# IIOE-2 (2015-2020-2025?)

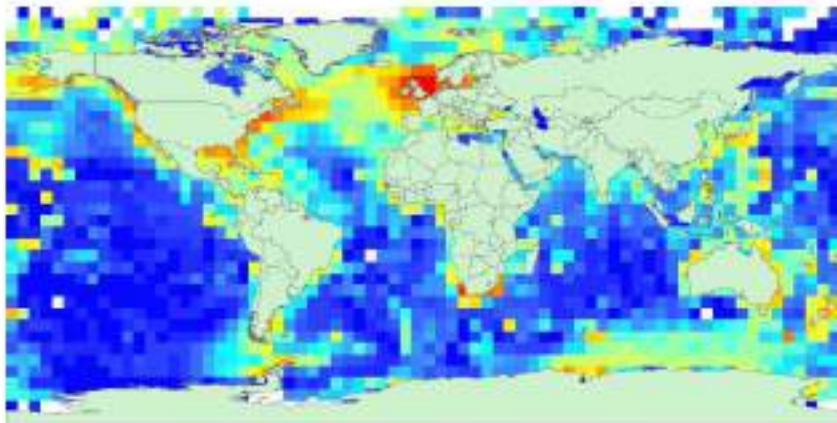




# Data and information



>100 IODE DATA CENTRES  
NODC + ADU (+OBIS)



## IODE VISION

Established in 1961 to enhance marine research, exploitation and development, by facilitating the exchange of oceanographic data and information between participating Member States, and by meeting the needs of users for data and information products



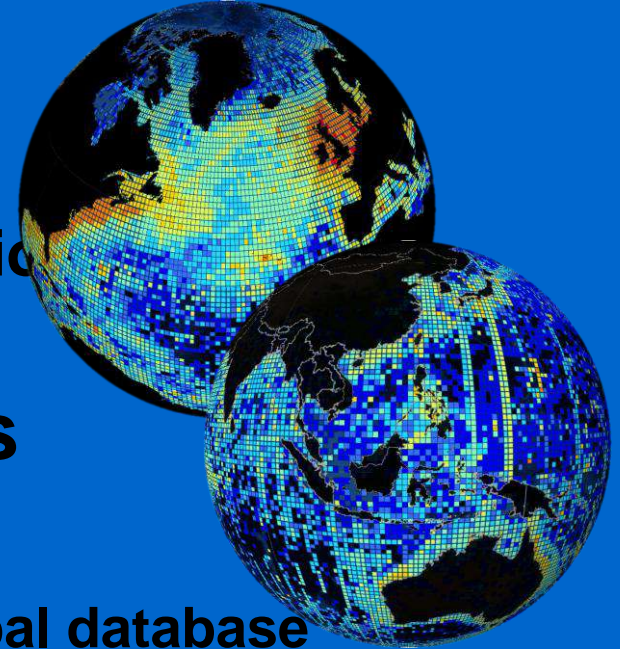


## A data clearing-house and sharing facility



[www.iobis.org](http://www.iobis.org)

**45,000,000** species observations  
**4,600,000** sampling events  
**3,200,000** sampling stations  
**114,000** marine species  
**1,900** databases in **1** central global database  
**500** data providers, **56** countries  
**1,000** papers have cited OBIS



**Science** (

**nature** (

) 4



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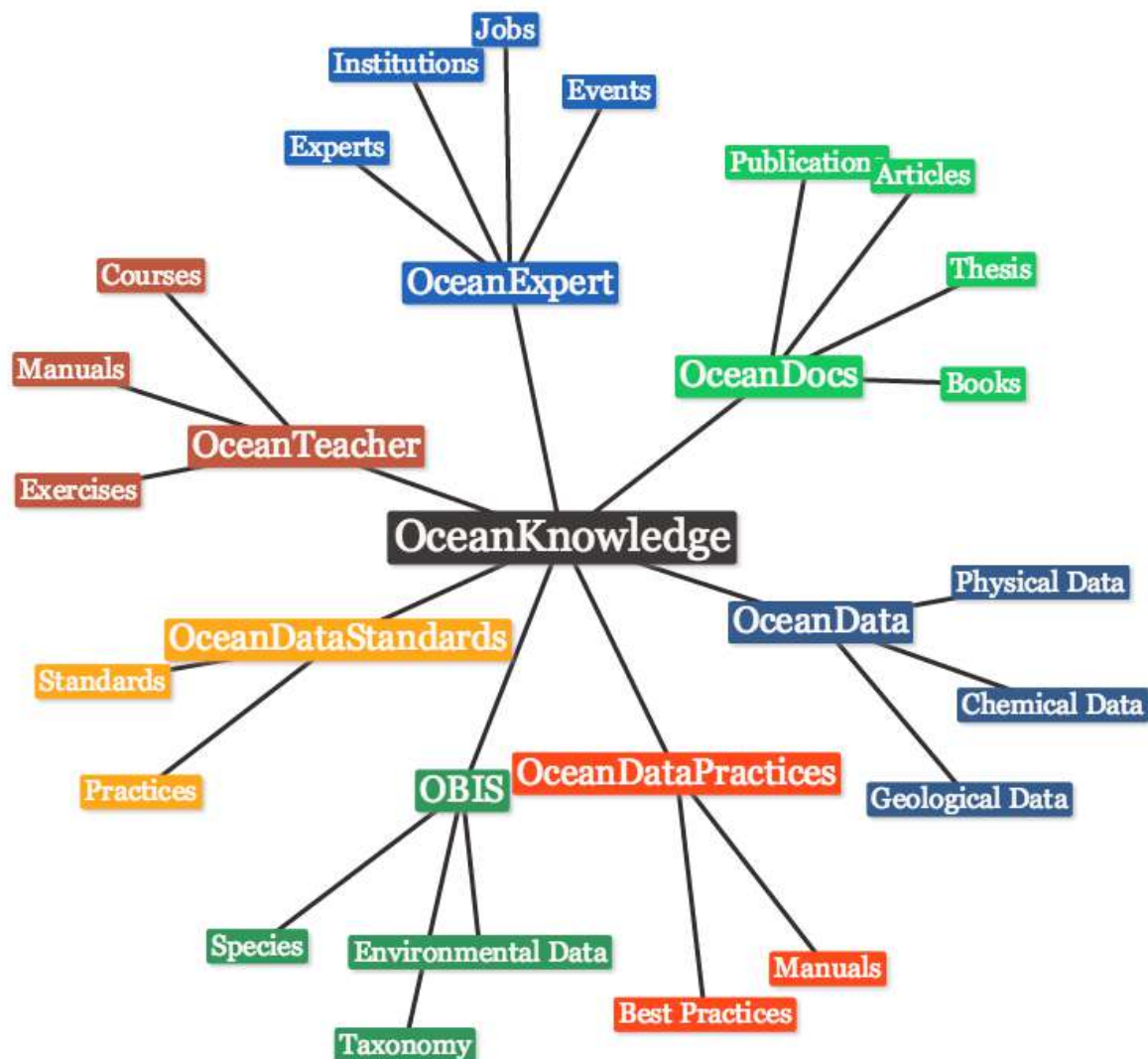
Intergovernmental  
Oceanographic  
Commission



UNGA resolution (A/RES/70) notes with appreciation the contribution of OBIS to marine scientific research.



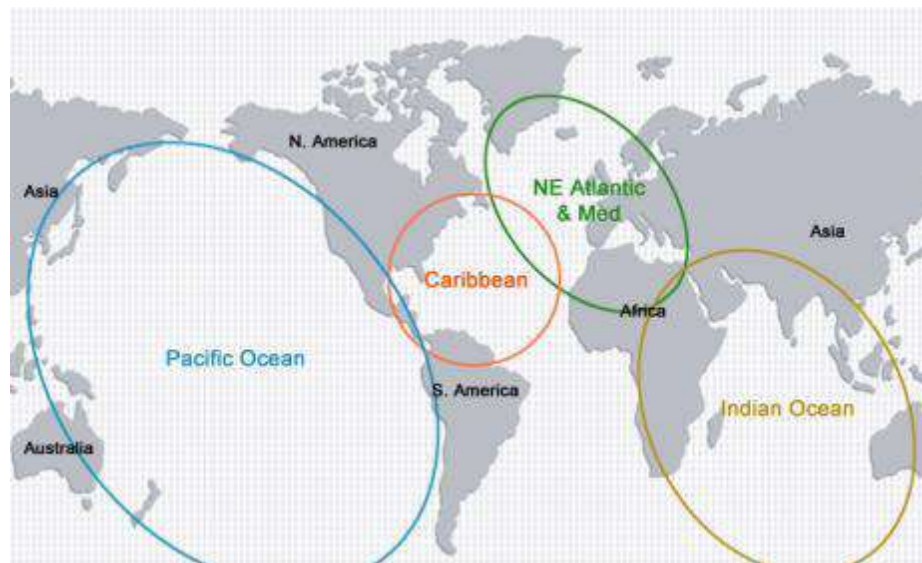
# Ocean knowledge



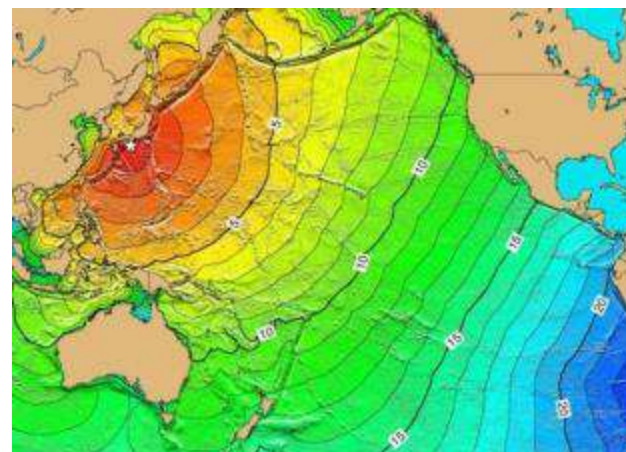


# Function C: Early Warning - Tsunamis

- Pacific since 1965
- 2004 tsunami in Indian Ocean illustrated need for more
- IOC mandated in 2005 to establish three more TWS



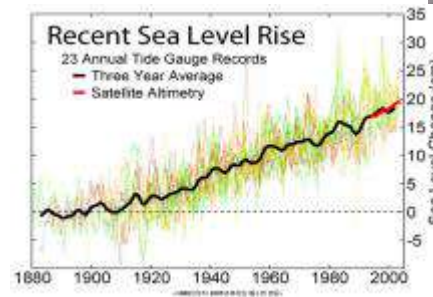
- ICG IOTWS
- ICG CARIBE EWS and
- ICG NEAMTWS





# Other coastal hazards

- Storm surges
- Coastal flooding
- Coastal erosion





# Function C: Early Warning, HABs



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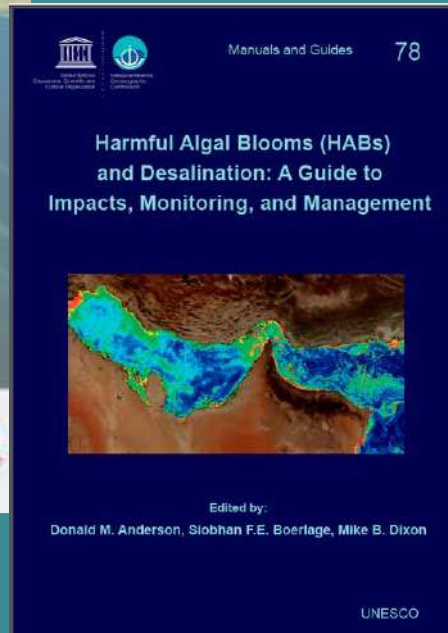


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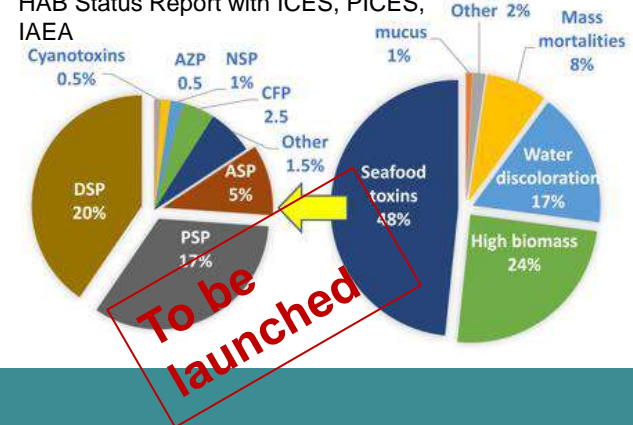
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With IAEA, FAO, WHO: coordinated strategy for the increasing problem of *Ciguatera* fish poisoning

HAB Status Report with ICES, PICES, IAEA





# Function D: Assessments and Information for Policy

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## Portfolio:

- WOA-2, workshops: WESTPAC/Thailand and IOC/ARIBE/Brazil
- Indicators for targets 14.3, 14.a (as custodian), 14.1 and 14.c
- GEBCO, Seabed 2030 – complete mapping of sea floor by 2030
- Development of Information Products and Services for ocean assessments (DIPS-4) based on OBIS and HAEDAT
- Ocean/Coastal Atlases: CLME+, Canary LME, ACMA  
Intl Coastal Atlas Network





# Function E: Sustainable Management/ Governance

## Joint Roadmap to accelerate Marine Spatial Planning worldwide

### PA 1: TRANSBOUNDARY MSP

Guidance on transboundary MSP

Transboundary projects in WestMED & SE Pacific



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& World  
Organization



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### PA 2: SUSTAINABLE BLUE GROWTH

MSP and Blue Growth Studies and Conferences at  
global and regional scale

### PA 3: ECOSYSTEM-BASED MSP

Knowledge and capacities on environmental pressures

### PA 4: CAPACITY BUILDING

Training the trainer for planning our ocean in line with Agenda  
2030 targets

### PA 5: MUTUAL UNDERSTANDING

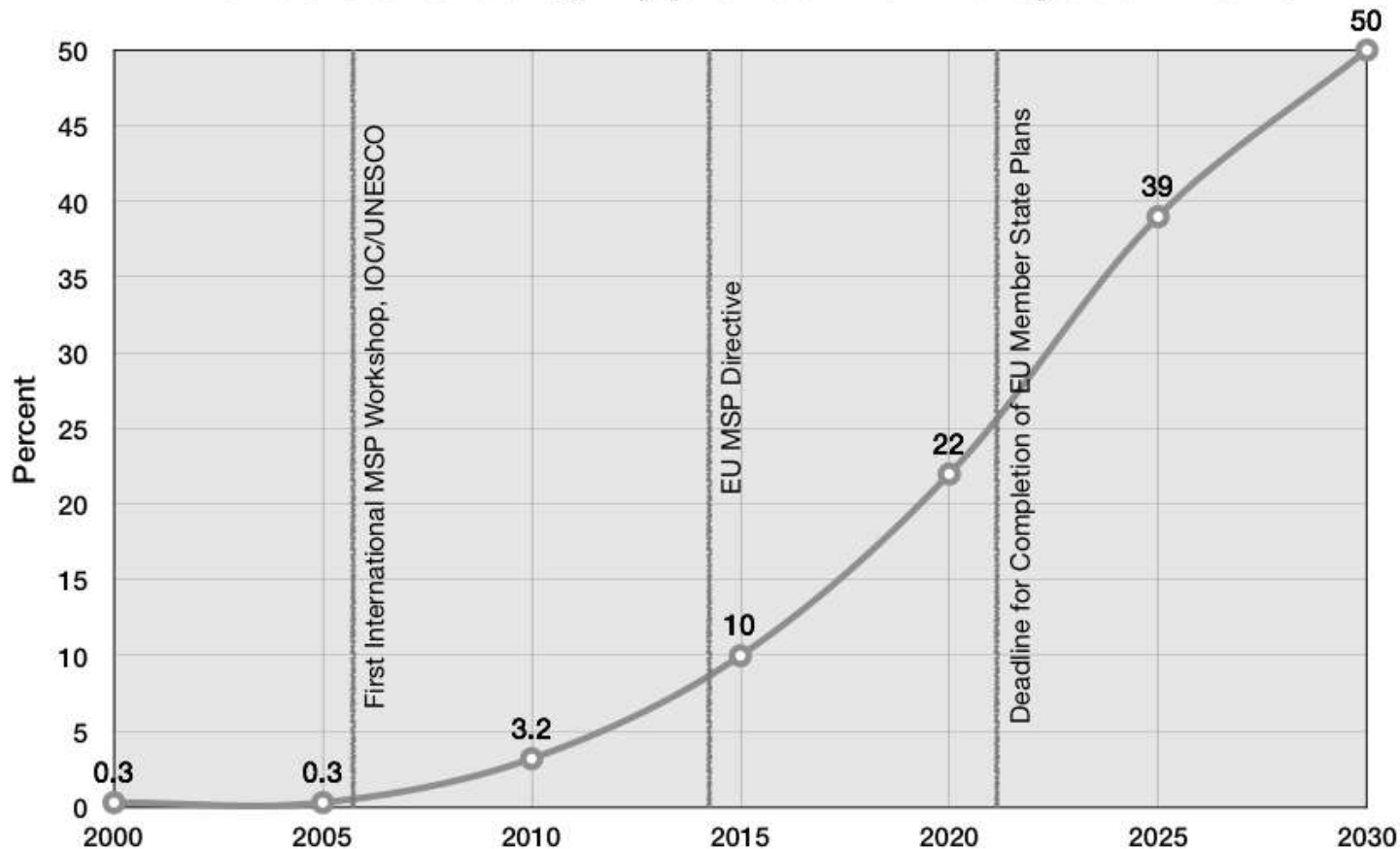
International Fórum of experts and joint communication actions

#OceanAction15346 #MSPglobal



## Function E: Sustainable Management/

### Percent of Surface Area of World's Exclusive Economic Zones Covered by Approved Marine Spatial Plans





- Marine Spatial Planning workshops:
  - ✓ Mahe, Seychelles, November 2017 (English)
  - ✓ Mindelo, Cape Verde, February 2018 (Portuguese)
  - ✓ Dakar, Senegal, September, 2018 (English)
  - ✓ Mombasa, Kenya (September, 2018 (English)
  - ✓ Port Louis, Mauritius, October 2018 (French)

## Partners:

- UN Environment
- UNDP
- WIOMSA
- National agencies







Empowered lives.  
Resilient nations.



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14  
LIFE  
BELOW WATER



Conservation and  
Sustainable Use



## GEF LME:LEARN

*A global provider of training, experience-sharing, programmatic guidance and partnership-building for LME's and their coasts*

- ✓ LME Hub communication tool launched
- ✓ 3 Inter-Project Twinning exchanges conducted
- ✓ 3 regional networks launched (Asia-Pacific, LAC, Africa)
- ✓ 7 “toolkits” developed (Governance, LME Strategic Approach, LME Project Management, Marine Spatial Planning, Environmental Economics, LME Scorecard, Stakeholder Engagement)
- ✓ Partnership Meeting on Regional Ocean Governance (with GEF, FAO, UNEP)
- ✓ 19<sup>th</sup> Annual LME Consultation

[marine.iwlearn.net](http://marine.iwlearn.net)



# Function F: Capacity Development

- IOC Capacity Development Strategy (2014-2021)
- IOC Group of Experts on Capacity Development
- Potential for establishing an operational clearing house mechanism for transfer of marine technology

## Training centers:

OTGA + Regional Training and Research Centers:

- Marine Biodiversity and Ecosystem Health (Jakarta)
- Ocean Dynamics & Climate (Qingdao)

## UNESCO Category 2 Centers:

Tehran (@INIOAS) and Hyderabad (INCOIS)

Multiple UNESCO Chairs in Oceanography



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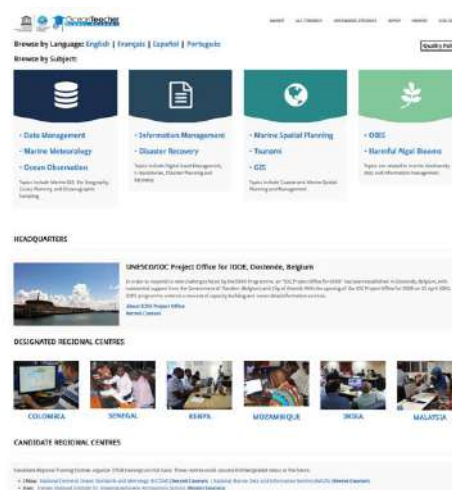


# Function F: OceanTeacher Global Academy

sharing training resources and expertise in a coordinated way



[www.oceanteacher.org](http://www.oceanteacher.org)



> 2 500 people trained from 134 Member States



> 4 200 registered users



> 180 training courses (English, Spanish, French, Portuguese)



Learning Services Provider



**IODE** International Oceanographic Data and Information Exchange



Flanders State of the Art With the support from the Government of Flanders, Belgium



# GLOBAL OCEAN SCIENCE REPORT – GOSR

<https://en.unesco.org/gosr>

The Current Status of Ocean Science around the World



**Figure ES1.** Ocean science categories considered in the Global Ocean Science Report.



# GLOBAL OCEAN SCIENCE REPORT – GOSR

## OCEAN SCIENCE PUBLICATIONS AND CITATIONS

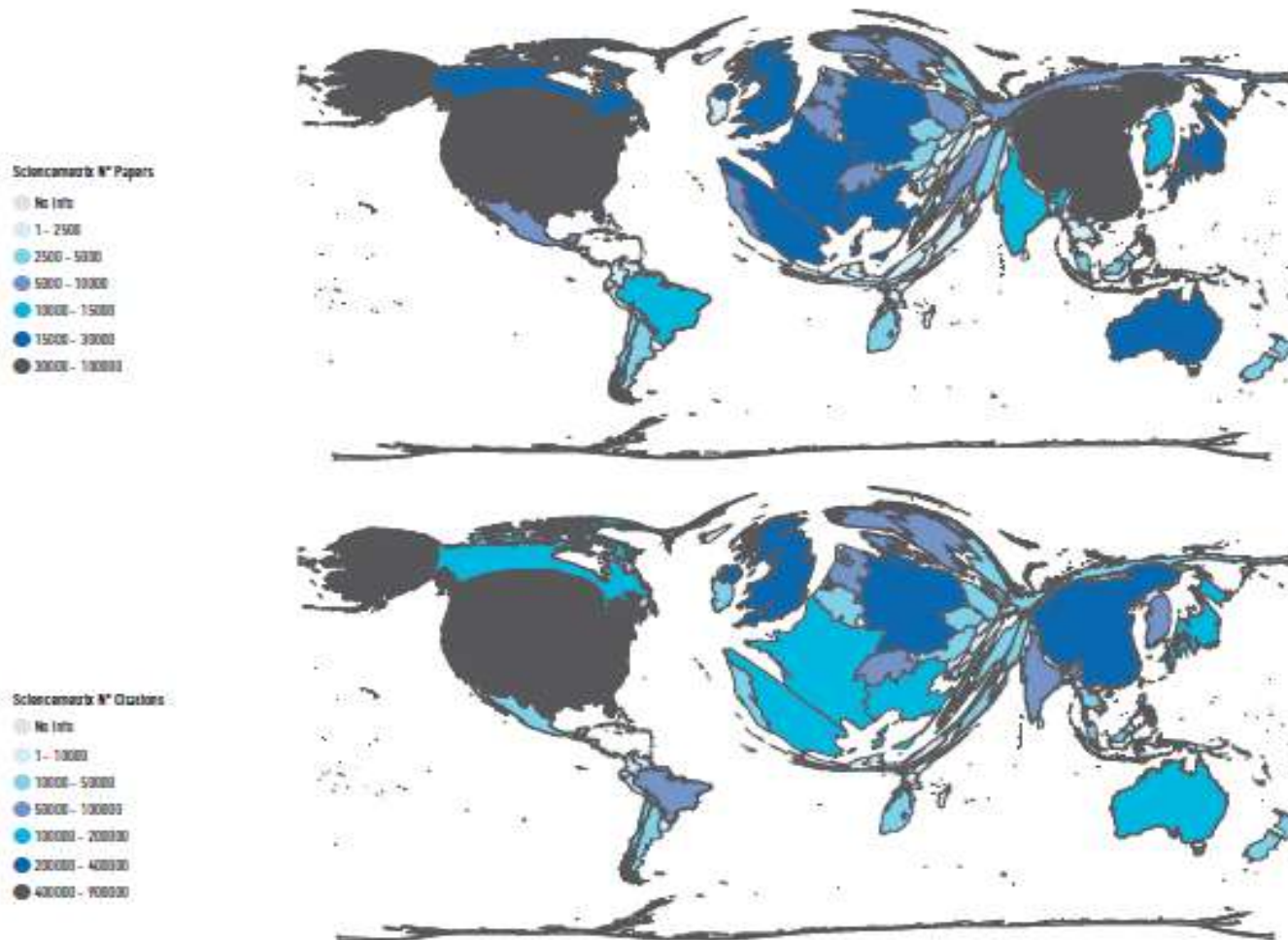


Figure ES7. Publication and citation map of the world. The area of each country is scaled and deformed according to the number of ocean science publications (top) or citations received (bottom). Different colours indicate a different number of publications (top) or citations (bottom). Source: ScienceMetrix, 2015.



# Ocean Literacy



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English

Français (French)



Intergovernmental Oceanographic Commission

## Ocean Literacy Portal

Enter the Portal

What is Ocean Literacy?

Pause video



# Ocean Literacy



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## Ocean Literacy for All

A toolkit

"FAR AND AWAY, THE GREATEST  
THREAT TO THE OCEAN, AND  
THUS TO OURSELVES, IS  
**IGNORANCE**".

Sylvia Earle, President of [Mission Blue](#)

## Ocean Literacy Portal

Students



Educators



Scientists



Media



Policy  
Makers



Private  
Sector





# UN Decade of Ocean Science for Sustainable Development (2021-2030)



On 5 December 2017, the **UN General Assembly proclaimed the Decade** of Ocean Science for Sustainable Development (2021-2030).

**Resolution A/72/L.18** calls upon the IOC to prepare an **Implementation Plan** for the Decade in consultation with:

- **Member States;**
- **UN partners;**
- **Institutional partners;**
- **Other relevant stakeholders.**

And to report to the UN Secretary-General about the implementation of the Decade.

**Resolution A/72/L.18** also invites **UN-Oceans** to collaborate with IOC.

A global framework that will ensure Ocean Science can help governments and societies achieve the major goals of our generation

**UN-OCEANS**

An interagency collaboration mechanism on ocean and coastal issues within the UN system





# Why a Decade of Ocean Science for Sustainable Development?

- A global framework to support efforts to reverse the cycle of decline in Ocean health & create improved conditions for sustainable development
- A global collective research and investment framework to close the knowledge gaps
- A global framework to structure and boost scientific efforts at national and international levels to address global and regional SD challenges





# **A Vision for the Decade**

**Develop scientific knowledge, build  
infrastructure, and foster  
partnerships for a sustainable and  
healthy ocean**





# A Decade to...

# TRANSFORM

knowledge systems  
to support  
sustainable  
development

Potential activities

...

- Complete mapping of the seafloor
- eDNA Sequencing of marine life
- Science products for maritime industries
- Enhanced sharing of data and information





# A Decade to...

## MEASURE

cumulative impacts  
for effective  
solutions

Potential activities

...

- Ocean health research programme
- New environmental services from ocean data/satellites
- Ocean productivity and biodiversity
- EBM tools and models



# A Decade to...

## REDUCE

### vulnerability to ocean and coastal hazards

Potential activities

- Improved coastal hazards warnings syst.
- Better mapping of vulnerable areas
- Coordinated programme of OA research, including forecasting
- Sea-level change and coastal impacts projections





# A Decade to...

## **BOLSTER**

### ocean observing and data systems

Potential activities

- An Ocean Observing System for All Major Ocean Basins
- Sustained Deep Ocean Observing System
- Open access, data portal for all
- Social science metrics



A background image showing a young child with long blonde hair, seen from behind, looking out at a vibrant coral reef underwater. The scene is dimly lit, with the light from the reef illuminating the child's hair and the surrounding water. The image is split diagonally by a blue overlay that contains the text.

# A Decade to...

# ACCELERATE

transfer of marine  
technology, training  
and education

Potential activities

- Marine technology transfer/exchange hubs
- Self-driven regional capacity development programmes
- Ocean literacy initiatives
- Gender focused programmes

...



# A Decade to...

## DELIVER

best available knowledge  
to decision-makers

Potential activities

...

- Promotion of Science/policy mechanisms
- Consolidated network of Decade partners
- Regional & global dialogue enhancement
- Peace through science initiatives





# Research & Development Priority Areas



**Map the entire ocean floor and processes**



**Bolster ocean observation systems in all basins**



**Conduct an inventory of ecosystems and their functioning**



**Develop a data and information portal**



**Establish an integrated multi-hazard warning system**



**New integrated models for ocean prediction**



**Strengthen capacities and accelerate technology transfer and ocean literacy**





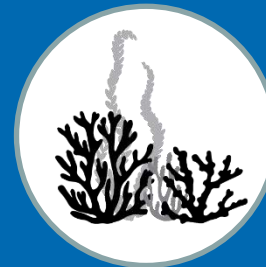
## Key Applications



Coastal zone  
management  
and adaptation



Marine  
Spatial  
Planning/  
Blue economy



Establishment of  
Marine Protected  
Areas



Fishery  
management



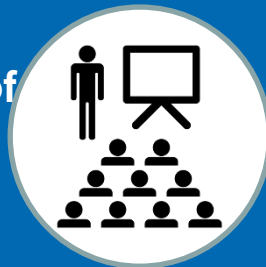
Nationally  
Determined  
Contributions  
to UNFCCC



Development of  
national ocean  
policies



Development of  
national R&D  
strategies



Regional and  
national capacity  
development  
planning



Early warning  
systems







# A cooperation framework for ocean science

**Synthesise existing research** defining trends, knowledge gaps, priorities for future research

**Mobilizing scientists on critical ocean priorities relevant to Agenda 2030**

**New co-designed research strategies**

*Funding / partnerships  
Stakeholders engagement*



**Bridging science, policy and society**

Science-policy dialogues, dissemination, access to data, information, communication

**Synthesising, assessing results, development of user-driven solutions**

**Fostering new joint research and cooperation within & across ocean basins**

*Integration natural & social sciences  
Capacity development*





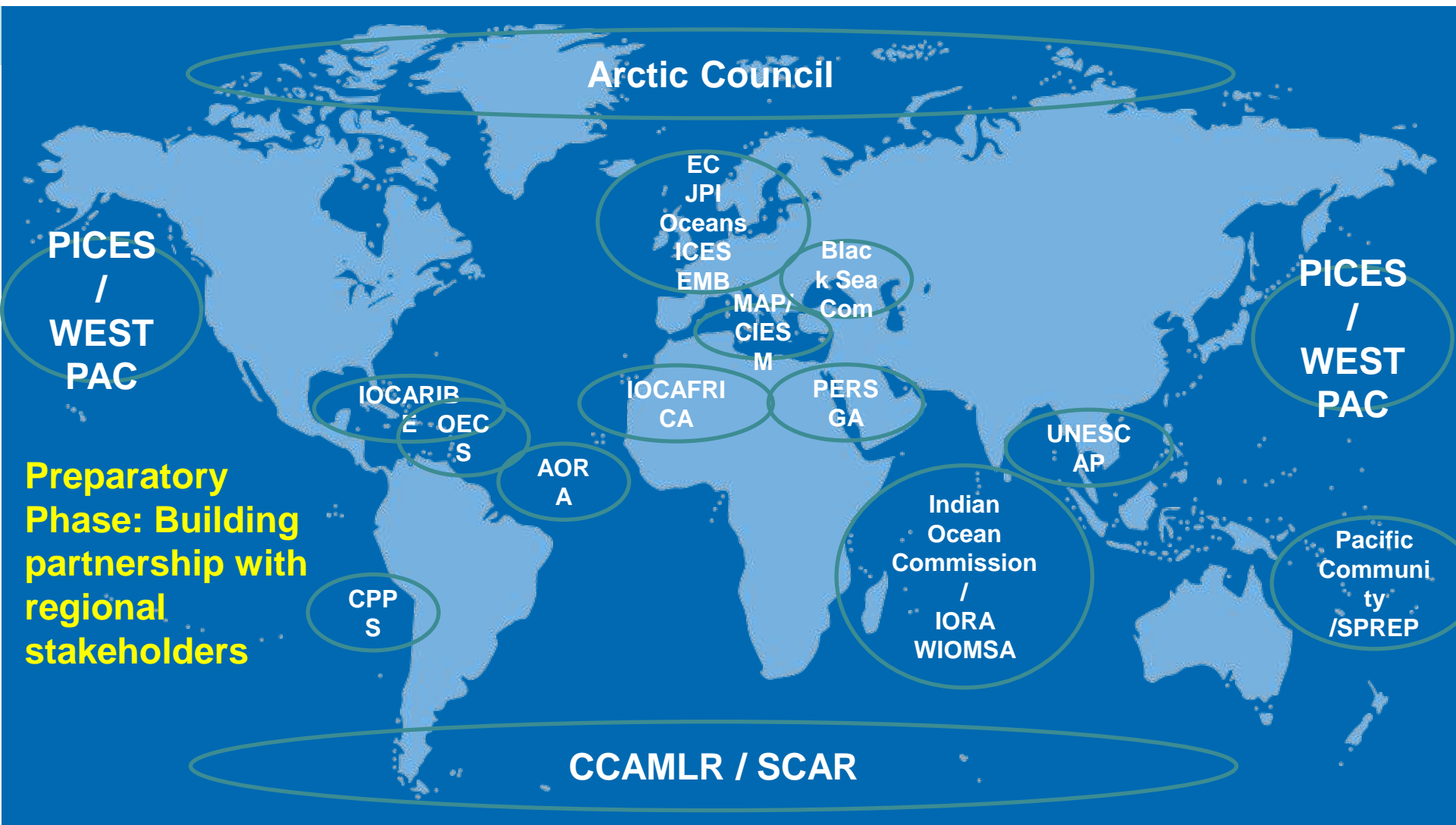
## Implementation Plan

Between 2018 and 2020, the UNGA tasked IOC with preparing the Decade and coordinating the development of an Implementation Plan which will include:

- Science Plan
- Capacity Development Plan
- Resource Plan
- Communications & Engagement Plan
- Monitoring & Reporting









# SCIENCE FOR SOLUTIONS WORKSHOP

10 JUNE 2019



Alex Benkenstein

South African Institute of International Affairs

*African perspectives. Global insights.*



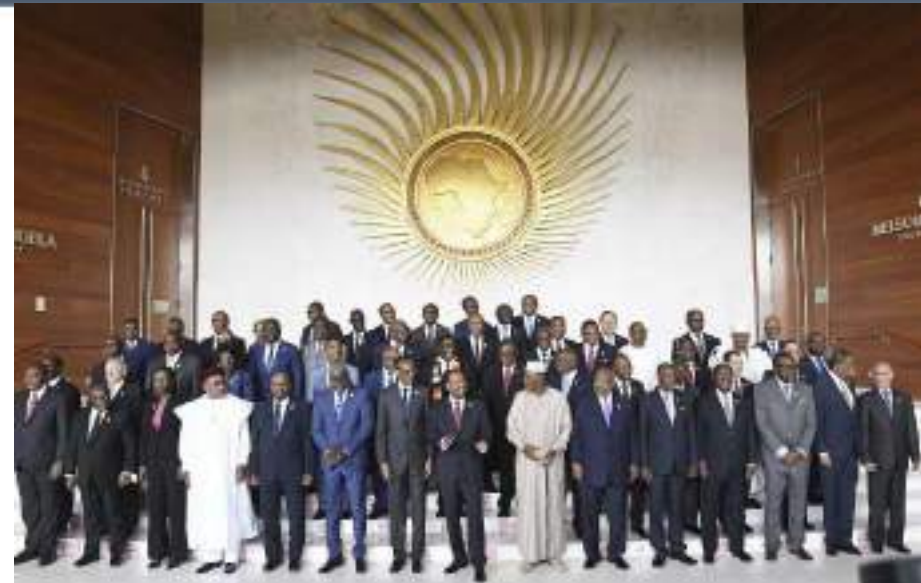
# AFRICA'S BLUE ECONOMY: CROWDED AND CONTESTED





## Agenda 2063:

“Africa’s Blue/ocean economy...shall be a major contributor to continental transformation and growth, through knowledge on marine and aquatic biotechnology, the growth of an Africa-wide shipping industry, the development of sea, river and lake transport and fishing; and exploitation and beneficiation of deep sea mineral and other resources.”





## **Agenda 2063:**

Enhance Africa's united voice in global negotiations, through pooled sovereignty, integration and the development of common African positions.

Catalyse education and skills revolution and actively promote science, technology, research and innovation, to build knowledge, human capital, capabilities and skills to drive innovations and for the African century

Act with a sense of urgency on climate change and the environment

Transform, grow and industrialise our economies through beneficiation and value addition of natural resources

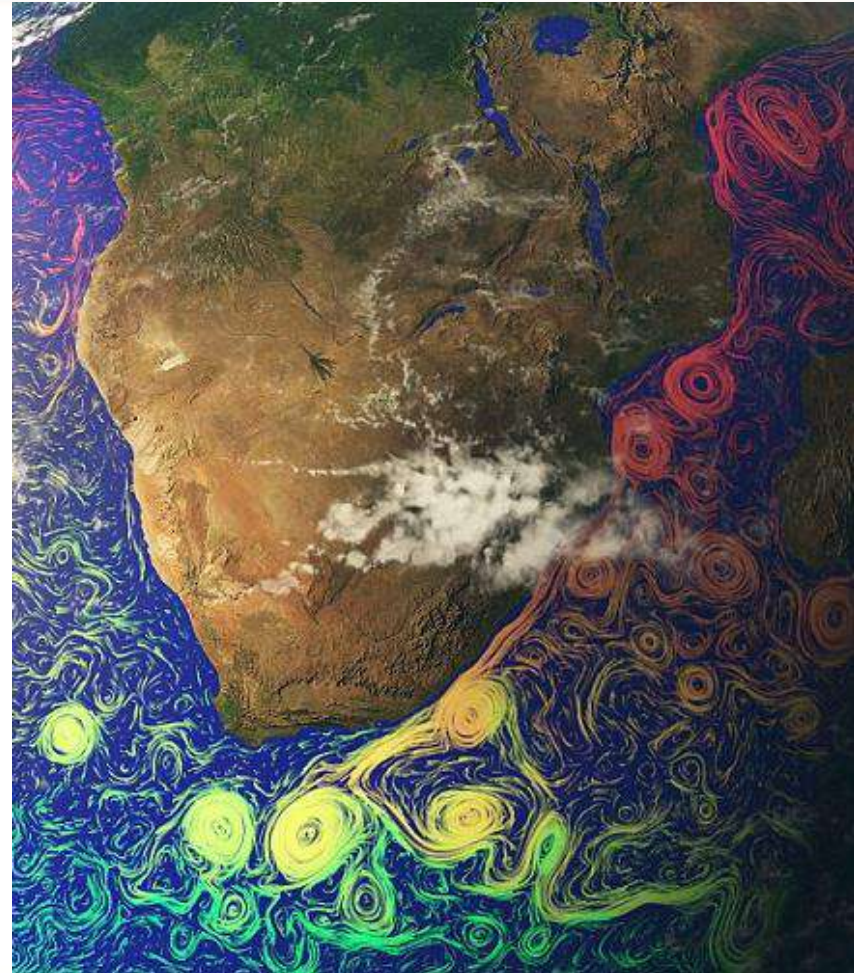




## **2050 AIMS / Lomé Charter**

“...the time has come for Africa to rethink how to manage her inland water ways, oceans and seas.... There is...an urgent imperative to develop a sustainable “Blue Economy” initiative... 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.”





**African Union Reform Process**

**AUDA-NEPAD**

**African Blue Economy Governance  
Infrastructure**





# International (UN) Decade of Ocean Science for Sustainable Development (2021-2030)

#OceanDecade







Publication

Prospects for the Kenyan Blue Economy



Publication

Socio-ecological resilience in South Africa's Blue Economy: the role of marine protected areas



Publication

South Africa's Indian Ocean Rim Association Legacy: A More Inclusive and Open IORA



Publication

The Nexus Between Prosperity in the African Maritime Domain and Maritime Security



News Item

Room for (Blue) Growth? Exploring national, regional and global ocean strategies



Publication

Safeguarding Tanzania's Coral Reefs: The Case of Illegal Blast Fishing



## Conference on Marine and Coastal Ecosystem-based Adaptation



Image: Romy Chevallier



## Room for (Blue) Growth? Exploring national, regional and global ocean strategies





## Small-Scale Fisheries in Mozambique



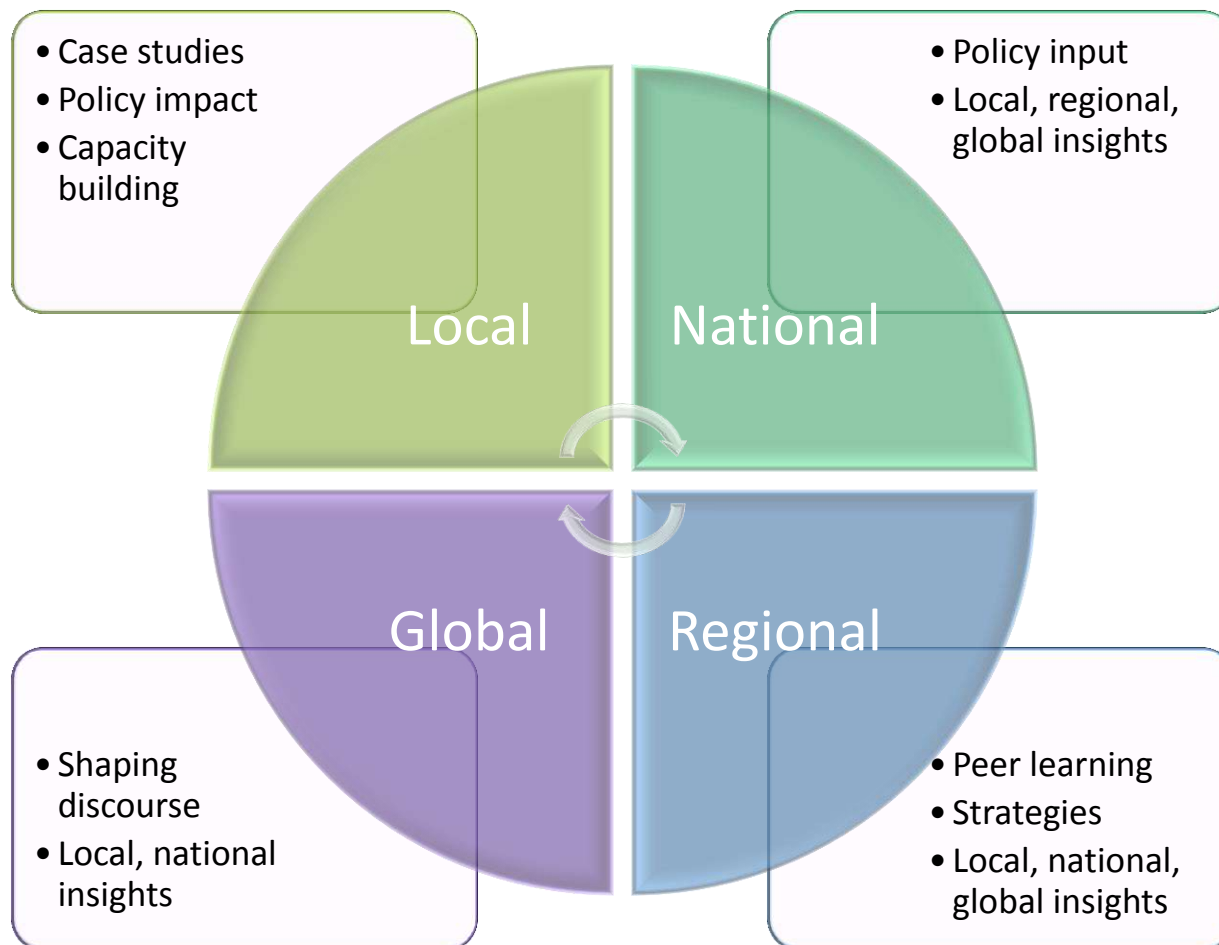
Small-scale fishermen in Mozambique.



## Oil and Fisheries in Ghana: Prospects for a Socio-ecological Compact









[www.saiia.org.za](http://www.saiia.org.za)

[ALEX.BENKENSTEIN@SAIIA.ORG.ZA](mailto:ALEX.BENKENSTEIN@SAIIA.ORG.ZA)



[www.saiia.org.za](http://www.saiia.org.za)

[ALEX.BENKENSTEIN@SAIIA.ORG.ZA](mailto:ALEX.BENKENSTEIN@SAIIA.ORG.ZA)



# AFRICA'S BLUE ECONOMY: CROWDED AND CONTESTED



Image: AFP/Getty





**MiCO**  
Migratory Connectivity  
in the Ocean



Supported by:



Federal Ministry for the  
Environment, Nature Conservation,  
Building and Nuclear Safety

based on a decision of the German Bundestag



Marine  
Geospatial  
Ecology  
Lab

Duke University



Supported by:



Federal Ministry for the  
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based on a decision of the German Bundestag



Daniel Dunn  
Corrie Curtice  
Ellie Heywood  
Connie Kot  
Sarah DeLand  
Ei Fujioka  
Ben Donnelly  
Guillermo Ortuño  
Crespo

Sarah Poulin  
Meredith Whitten  
Hannah Blondin  
Amalia Alberini  
Alejandro Herrero Palacio  
Jesse Cleary  
Pat Halpin



@ExploreMiCO

@duke\_mgel

@GOBIsecretariat



# MICO IS A CONSORTIUM

<https://mico.eco/consortium>



**NOAA  
FISHERIES**

UNIVERSITY OF  
**EXETER**



**W**  
UNIVERSITY of  
WASHINGTON





# MICO IS A CONSORTIUM

<https://mico.eco/consortium>



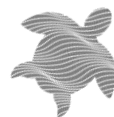
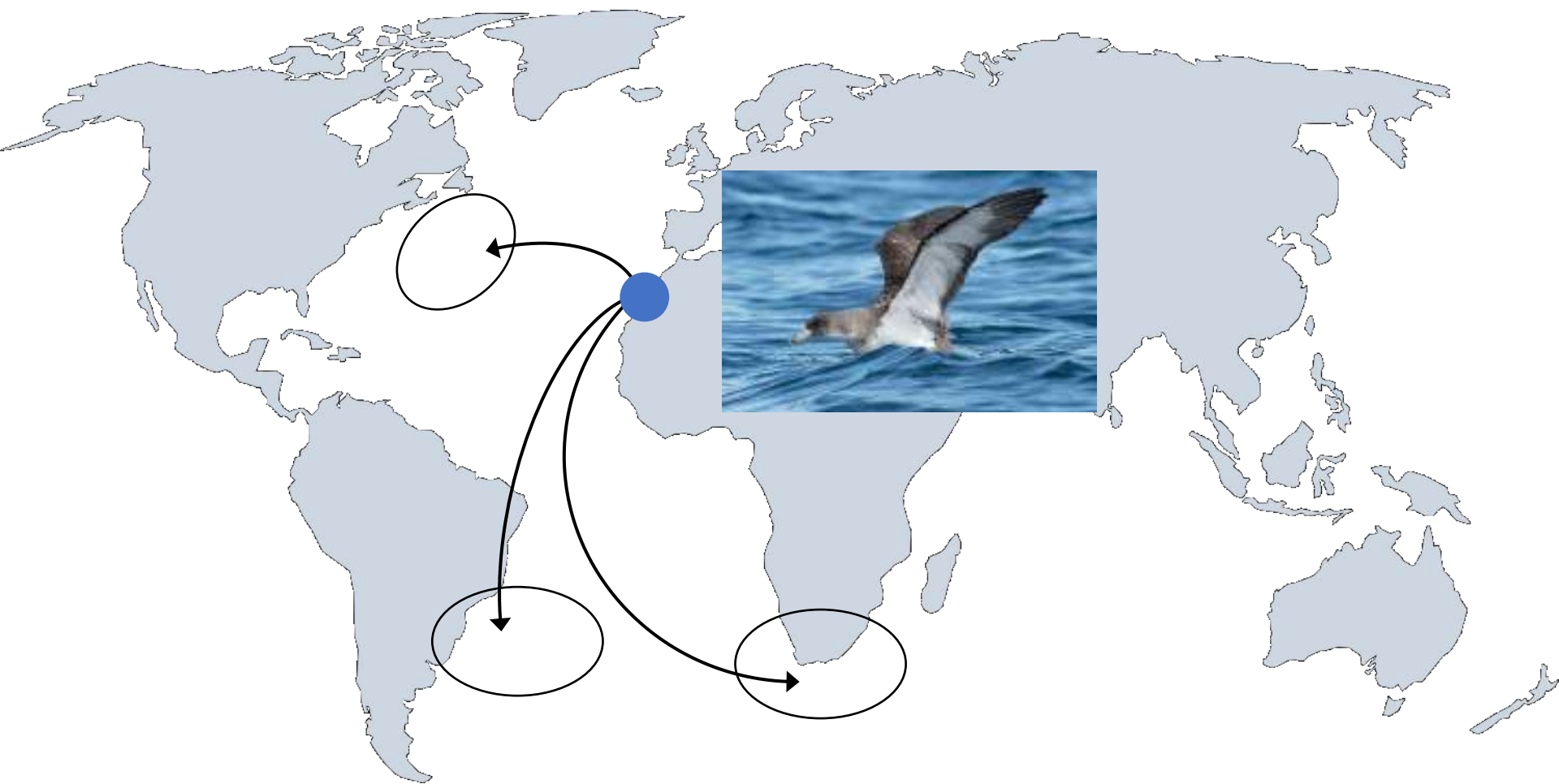


# What is Migratory Connectivity?

Migratory connectivity is the geographic linking of individuals & populations between one life cycle stage and another.



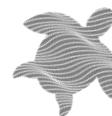
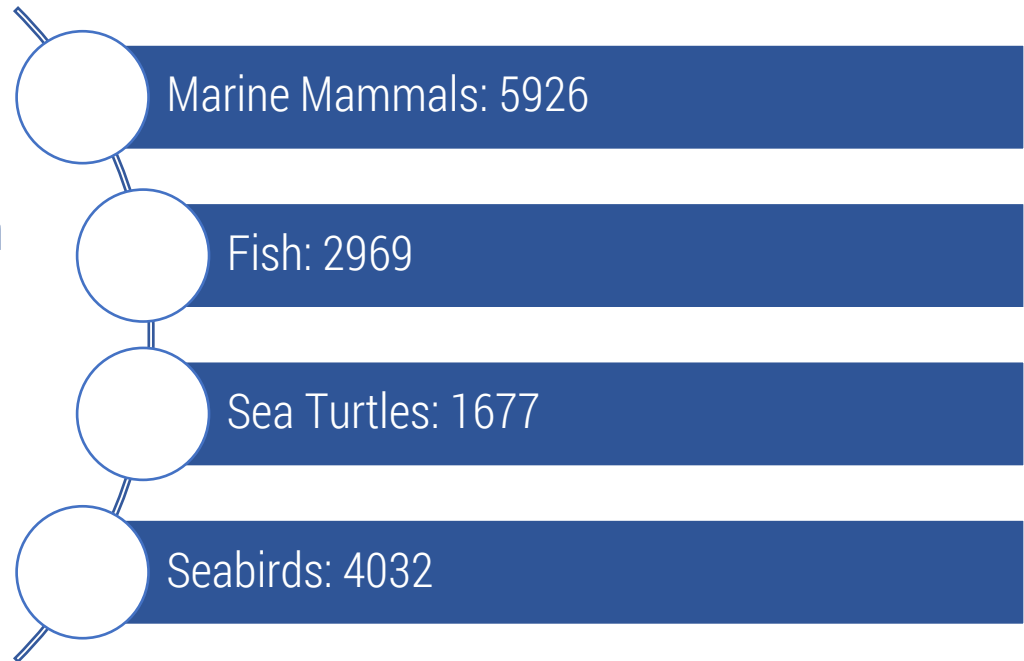






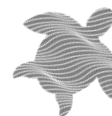
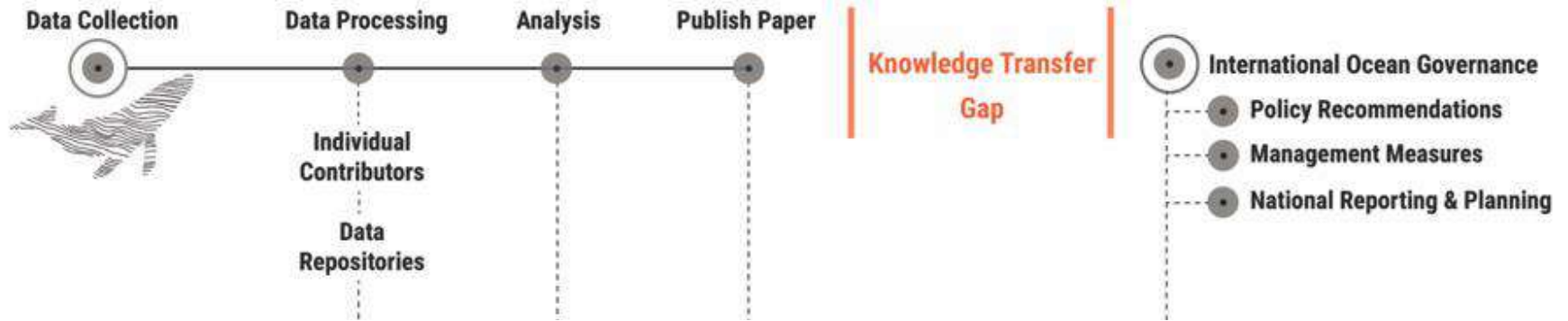
# Abundance of publications on migratory species

>12,000 papers  
returned from a search  
for information on  
migratory connectivity  
since 1990





## Limited research to policy track



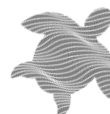
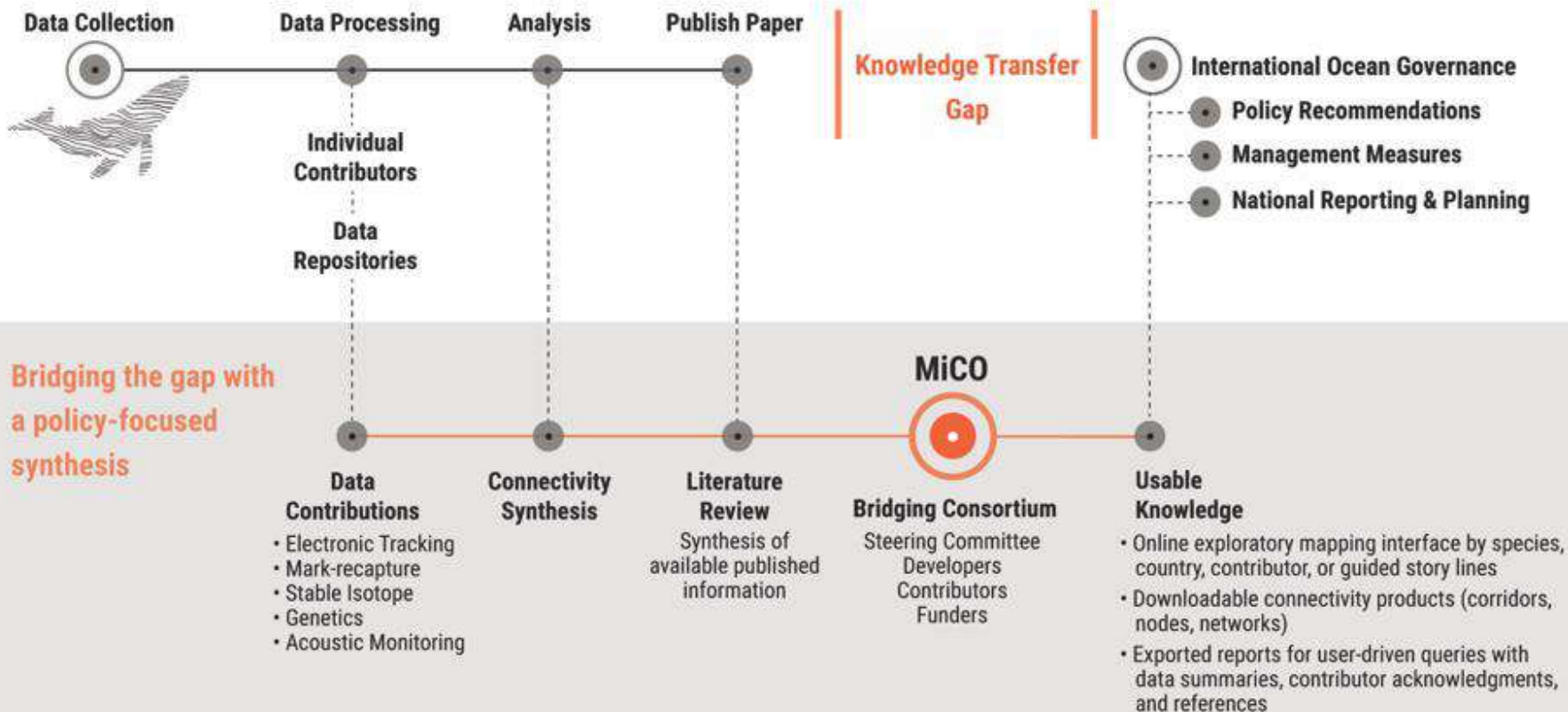




# Migratory Connectivity Knowledge



## Limited research to policy track







# The MiCO System

[mico.eco/system](https://mico.eco/system)

On April 1st, 2019 the MiCO System launches at the 2nd Intergovernmental Conference on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ).

[Learn more and explore the system](#)



Leatherback						
Long, Lat: 3.58178, -7.94489						
Node / Corridor						
Common name	Activity	Desc	Sex	Age	Tag	Type
Leatherback	Migrating	Post-nesting Migration	F	A	PTT	Dist.
Leatherback	Migrating	Post-nesting Migration	F	A	PTT	Dist.



FileEditViewHistoryBookmarksToolsHelp

Visualization Tools for MiCO

https://mico.eco/system

80%

Google Calendar - We...Google ScholarHome | Duke Universit...MiCO\_Duke\_Shared - ...Duke University Public...MiCO v1 Website Pun...Visualization Tools for...Visualization Tools for...

MiCO

Migratory Connectivity in the Ocean

Become a ContributorLaunch MiCO SystemEvents & Publications

### What is MiCO's progress to date?

Reviewed **931** references about migratory connectivity data on **79** species

Analyzed movements of **382** animals based on **95,632** locations

Produced **23** nodes and **17** corridors for **7** species

		Nodes	Corridors
Humpback Whale	<i>Megaptera novaeangliae</i>	2	1
Ancient Murrelet	<i>Synthliboramphus antiquus</i>	4	4
Chatham Petrel	<i>Phaethon aethiops</i>	3	2
Cory's Shearwater	<i>Calonectris diomedea</i>	5	6

See "Which migratory species do you want to explore?" below for more details

Assessments were made possible through

**62** datasets from **35** contributors

See "Who has contributed?" below for more details

Atlantic-centric; Pacific-centric  
Concentration of species whose area use overlaps at a 5-degree resolution

### Which migratory species do you want to explore?

MiCO collects animal tracking data from around the world, analyzes them and produces data products on area use in the form of nodes (e.g. feeding, wintering, breeding, etc.) and corridors. This section lists all migratory species MiCO is working on and overviews of their migrations and other activities. Click the title to start exploring.

### How are the national waters (EEZs) of countries used by migratory species?

Nodes and corridors MiCO produced are associated with national waters (EEZs). This section lists countries with EEZs and overviews on how migratory species use these areas. Click the title to start exploring.

### Who has contributed?

The development of the MiCO system and products are only possible with the participation of many researchers all over the world. This section lists all contributors and overviews of their contributions. Click the title to start exploring.





What is MiCO's progress to date?

Which migratory species do you want to explore?

Fish (29)  
Marine mammals (27)  
Seabirds (16)  
Sea turtles (7)

### Cory's Shearwater *Calonectris diomedea*

138 animals crossing 29 countries

5 nodes and 6 corridors

Traveling to  
66.010 (N)  
-59.170 (W) ↕ 48.600 (E)  
-48.470 (S)

Longest distance (km) monitored  
Breeding 62,002.21 in 127 days  
Migrating 76,254.60 in 110 days  
Non-Breeding 74,537.88 in 93 days

Area (km<sup>2</sup>) of distribution ranges  
from 71,063.35 to 2,926,584.81 in 11 Core Areas  
from 1,428,178.14 to 40,311,278.72 in 11 Use Areas

#### Data Contributions



#### Monthly Activities



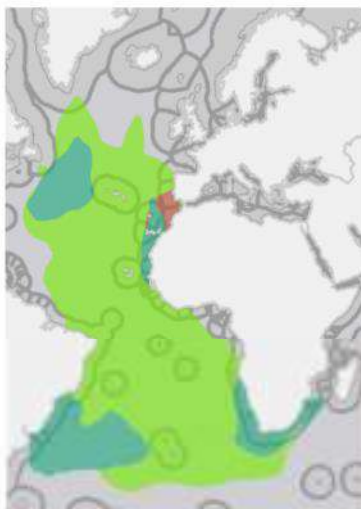




## Which migratory species do you want to explore?

Fish (29)  
Marine mammals (27)  
Seabirds (16)  
Sea turtles (7)

### Map View



Map of Use Areas color-coded by Activity

#### Explore Stories with MiCO Mapping Tool

All Migratory and Area-use Information

Migrating vs. Non-migrating Strategies

Alternative Migration Strategies

### Countries (EEZs) and ABNJ\*

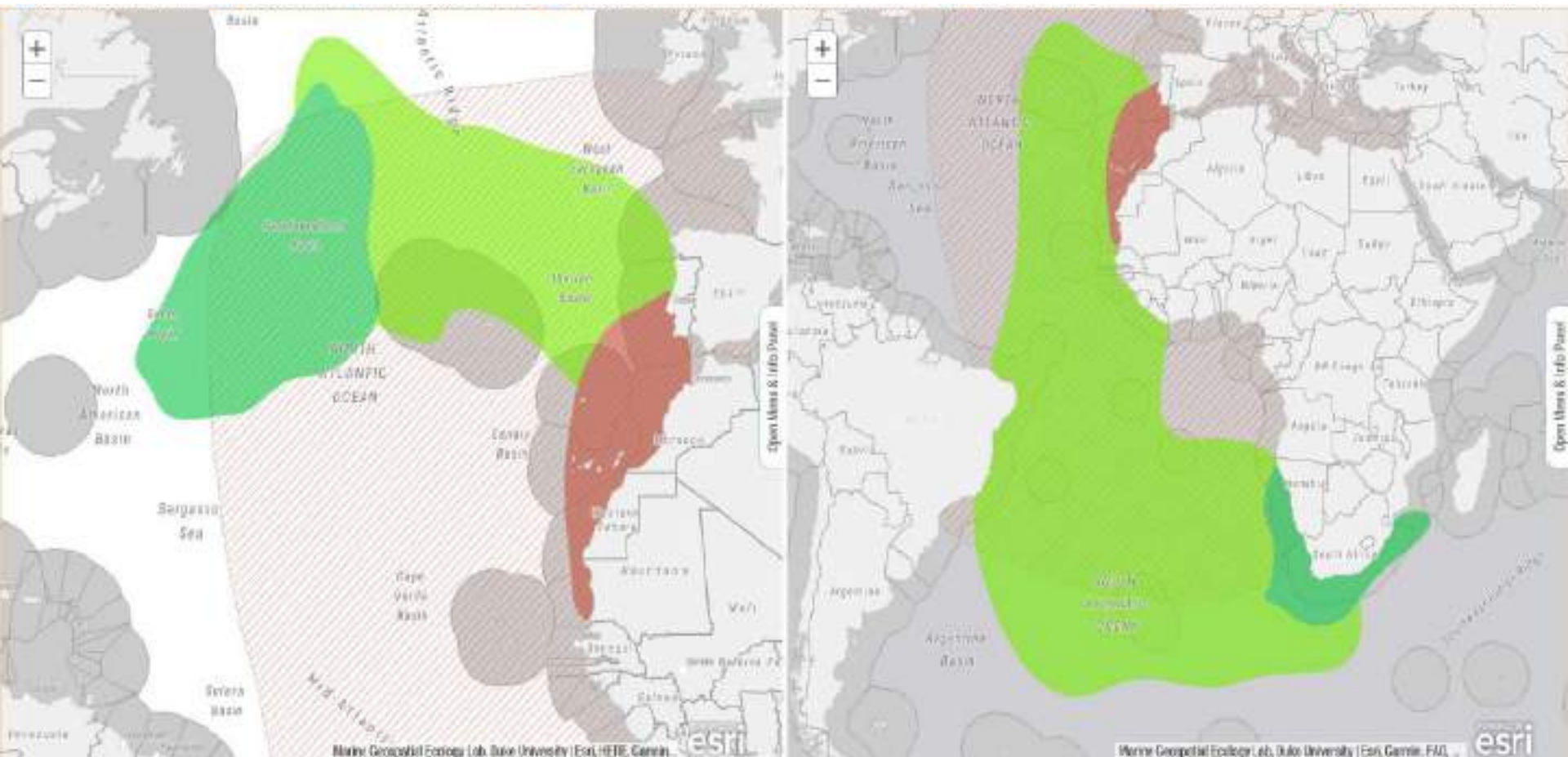
	Area beyond EEZs (%)	
	Use Area	Core Area
ABNJ	78.6	70.7

\*ABNJ: Areas Beyond National Jurisdiction

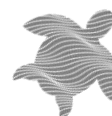
Country	Area (%) of			
	EEZ covered by species		Species covered by EEZ	
	Use	Core	Use	Core
Angola	45.8		0.4	
Argentina	11.0		0.3	
Ascension	100.0		0.7	
Azores	100.0	54.6	2.0	7.4
Brazil	87.1	1.8	4.7	0.7
Canada	8.5		0.1	
Canary Islands	99.9	35.6	0.8	2.0
Cape Verde	100.0	21.6	1.3	2.0
Gambia	98.0	39.9	0.0	0.3
Ghana	13.2		0.0	
Greenland	1.3		0.2	
Guinea	96.2	54.4	0.2	0.6
Guinea-Bissau	96.0	91.8	0.2	1.3
Ivory Coast	91.2		0.3	
Liberia	96.9		0.4	
Madeira	100.0	25.2	0.9	1.5
Mauritania	99.7	99.7	0.5	2.0
Morocco	88.6	6.6	0.5	0.2
Mozambique	20.0		0.2	
Namibia	99.9	20.6	1.0	1.4
Portugal	99.9		0.6	
Saint Helena	100.0	70.6	0.8	2.7
Senegal	96.3	90.3	0.3	1.8
Sierra Leone	96.7	1.1	0.3	0.0
South Africa	92.6	14.3	1.9	2.0
Spain	26.6		0.3	
Trinidad	100.0	43.8	0.8	2.6
Tristan da Cunha	100.0		1.6	
Uruguay	92.9		0.3	

EEZ covered by species: Percentage of EEZ area covered by species Use Area or Core Area.  
Species covered by EEZ: Percentage of species Use Area or Core Area covered by EEZ.

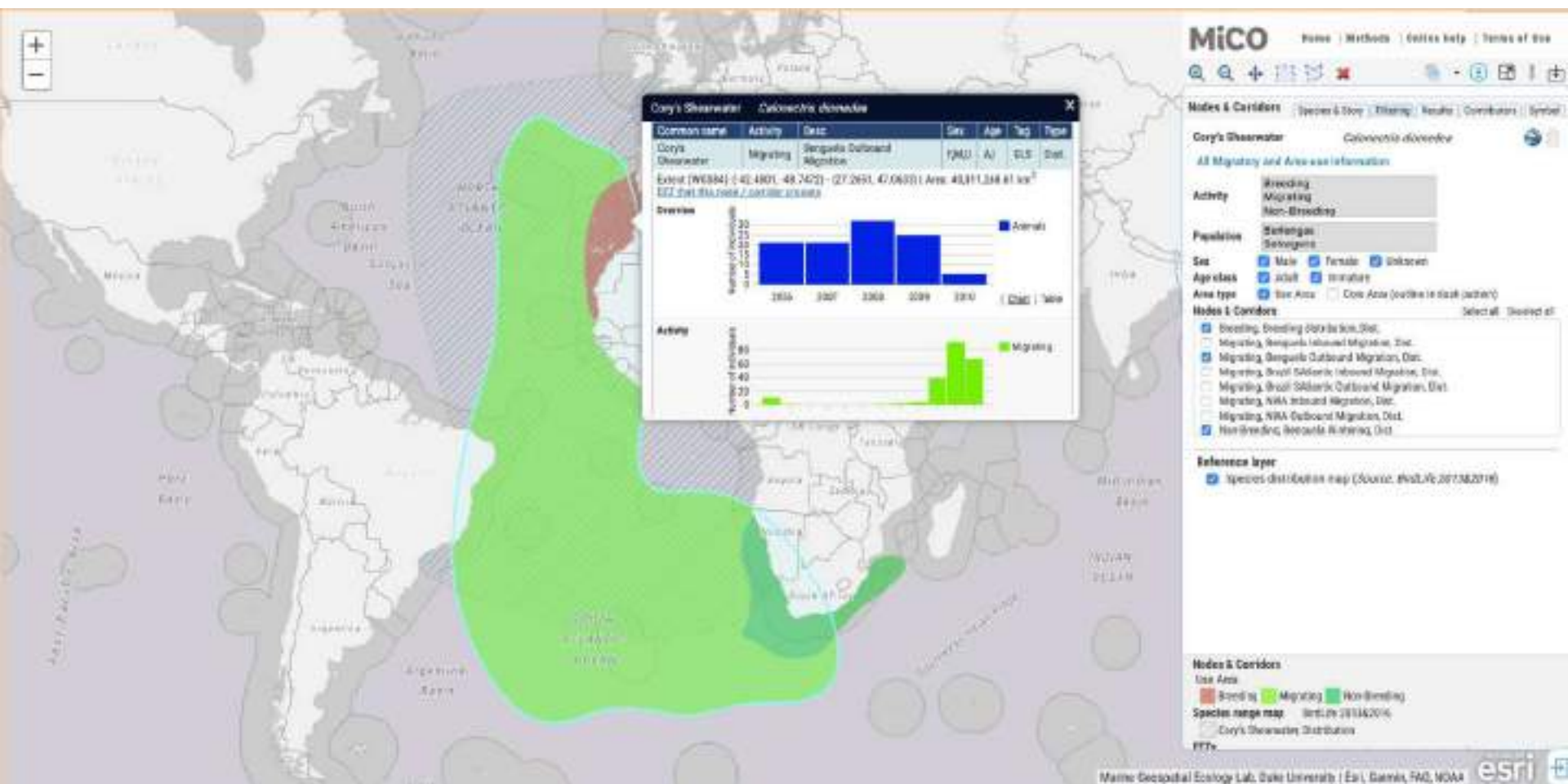




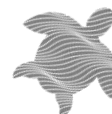
Migratory Connectivity in the Ocean (MiCO). Highly migratory marine species nodes and corridors, developed with data contributed to MiCO. Available from the MiCO System Version 1.0. MiCO. <https://mico.eco>. Accessed June 9 2019.



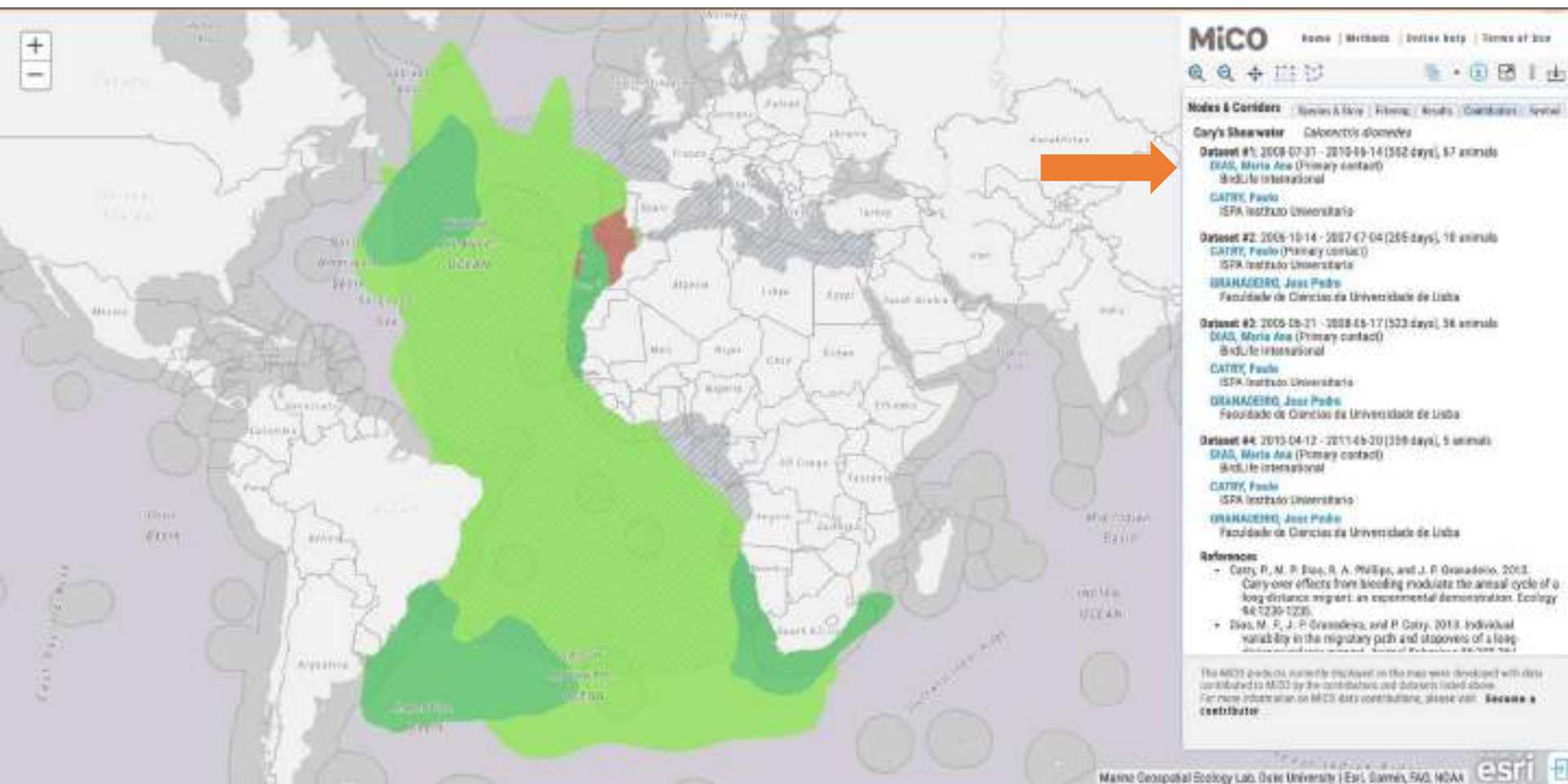




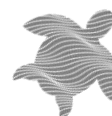
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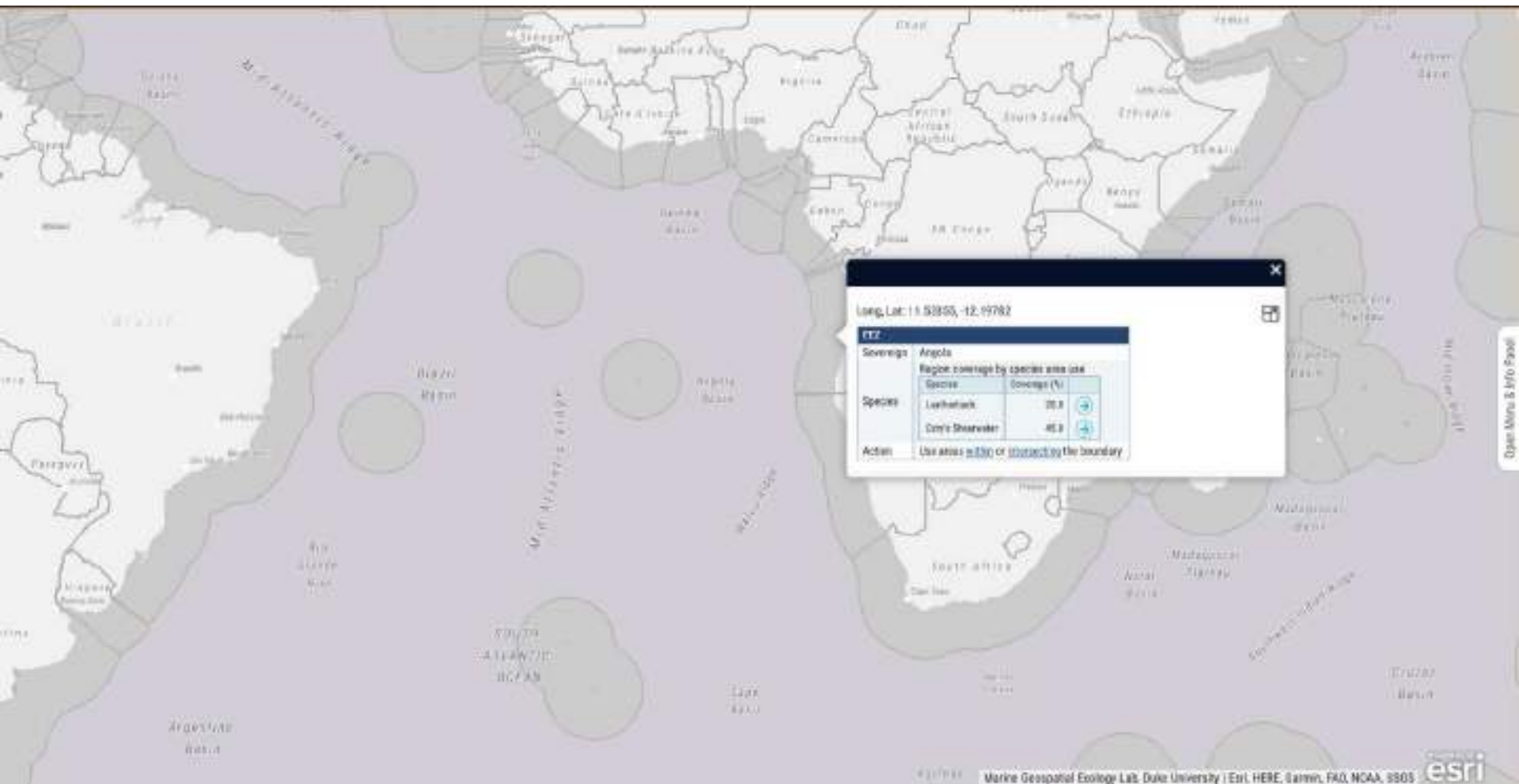




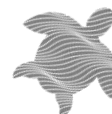
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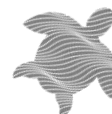


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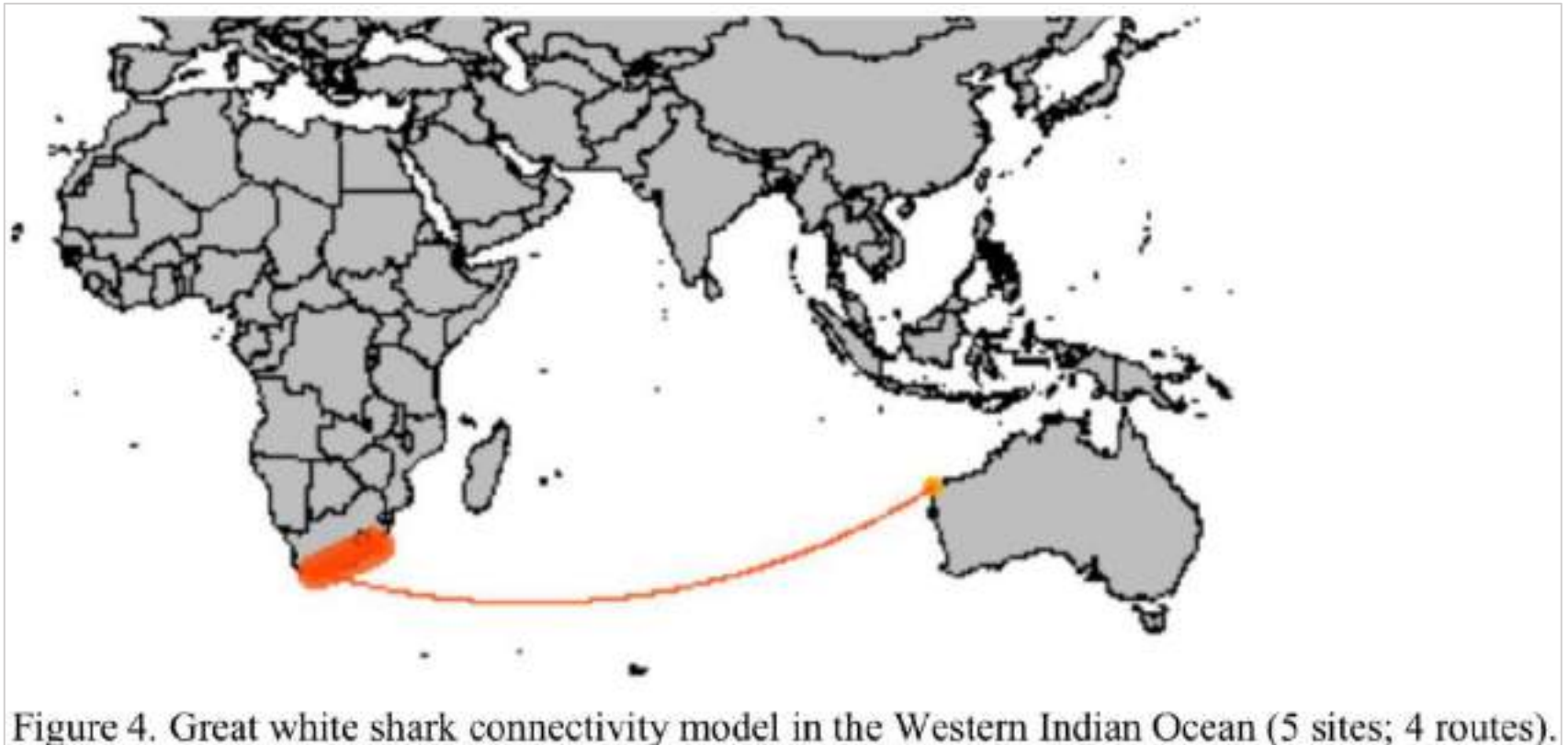


# Abstract network diagrams from data

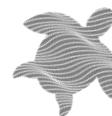




# Abstract network diagrams from literature



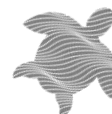
Kot\*, C.Y., S. DeLand\*, S. Poulin\*, M. Whitten\*, E. Fujioka, C. Curtice, D.C. Dunn. 2019. Migratory connectivity of marine megafauna in the Western Indian Ocean and Southeast Pacific. *Migratory Connectivity in the Ocean (MiCO)*.



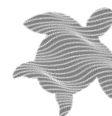
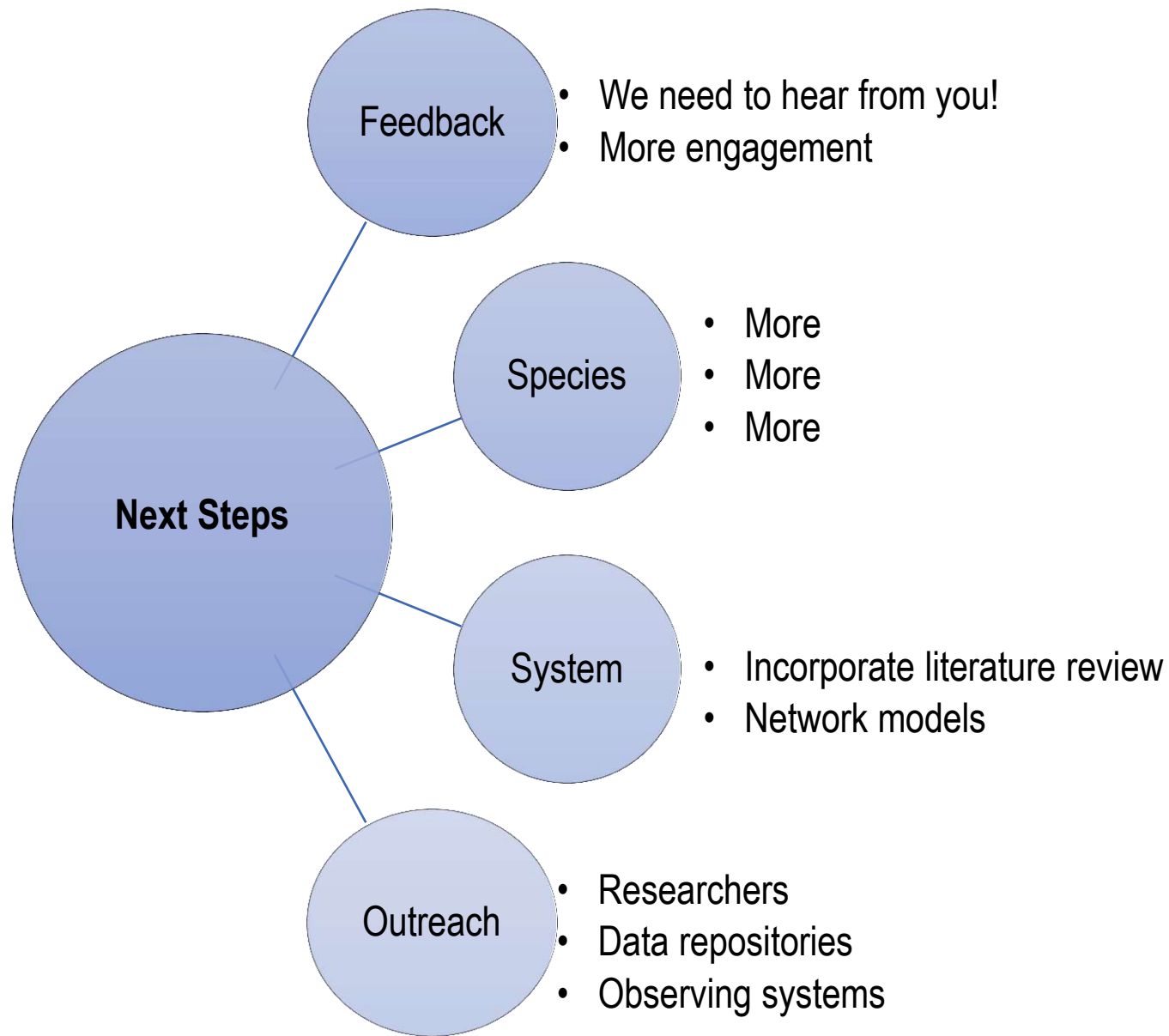


# Engagement & Outreach

1. Report: Migratory connectivity of marine megafauna in the Western Indian Ocean and Southeast Pacific
2. Side event publicly launching MiCO at the **BBNJ ICG2 meeting**, organized by UNEP-WCMC and hosted by Ecuador.
3. International Sea Turtle Symposium workshop on migratory connectivity
4. **STRONG High Seas CPPS** workshop
5. **MarViva workshop**
6. **Important Marine Mammal Areas** (IMMA) workshop in Kota Kinabalu
7. Sustainable Oceans Day at **Convention on Biological Diversity CoP 14**
8. **Benguela Current LME** region workshop to update and supplement the described EBSAs in that region
9. World Conference on Marine Biodiversity
10. **MarViva workshop** "Towards a governance model for the Costa Rica Thermal Dome"
11. UNEP-WCMC presented two MiCO cases studies at the **WIOMSA meeting** in South Africa
12. **IIED Workshop** on "Ecological connectivity between coastal waters and the high seas: scientific evidence to underpin UNCLOS negotiations on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction"
13. International Sea Turtle Symposium presentation
14. **Convention on Migratory Species** Expert Workshop on Migratory Connectivity
15. International Marine Protected Areas Congress
16. Bio-Logging Symposium
17. Society for Marine Mammalogy Conference
18. A MiCO side event at the **Convention on Migratory Species** Conference of the Parties to introduce delegations to the project and lay the groundwork for future use and inclusion of the system in resolutions
19. Animal Movement Ecology session at the **Gulf and Caribbean Fisheries Institute**
20. **CPPS/UNEP-WCMC** CPPS Integrated Regional Ocean Policy and ABNJ project workshop
21. **Convention on Biological Diversity** "Expert workshop to develop options for modifying the description of ecologically or biologically significant marine areas, for describing new areas, and for strengthening the scientific credibility and transparency of this process"
22. Side event at the **4th BBNJ PrepCom** meeting hosted by NF-Nereus Program and Costa Rica, and their Deputy Permanent Representative to the UN, Mr. Rolando Castro Córdoba co-chaired the event along with Co-PI Daniel Dunn
23. Side event at the **3rd BBNJ PrepCom** on Adjacency co-chaired by the Permanent Representative to the UN from the Federated States of Micronesia, Ambassador Jane Chigiyal, and Co-PI Dunn.









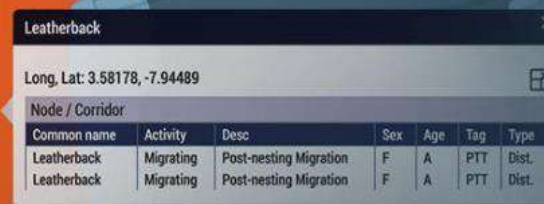


# The MiCO System

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[Learn more and explore the system](#) 



Leatherback

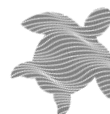
Long, Lat: 3.58178, -7.94489

Node / Corridor						
Common name	Activity	Desc	Sex	Age	Tag	Type
Leatherback	Migrating	Post-nesting Migration	F	A	PTT	Dist.
Leatherback	Migrating	Post-nesting Migration	F	A	PTT	Dist.

@ExploreMiCO

@duke\_mgel

corrie.curtice@duke.edu





**A/Prof. AJ Smit**  
**Southeast Atlantic Coordinator**  
**Biodiversity & Conservation Biology Department**  
**University of the Western Cape**

**Prof. J Murray Roberts**  
**iAtlantic Coordinator**  
**The University of Edinburgh**



**iAtlantic**

INTEGRATED ASSESSMENT OF ATLANTIC  
MARINE ECOSYSTEMS IN SPACE AND TIME





**Belém Statement on  
Atlantic Research and Innovation Cooperation  
Conference in Lisbon on 13-14 July 2017**

FOR THE  
EUROPEAN UNION

FOR THE DEPARTMENT  
OF SCIENCE AND  
TECHNOLOGY, A  
GOVERNMENT  
DEPARTMENT OF THE  
REPUBLIC OF  
SOUTH AFRICA

FOR THE MINISTRY OF  
SCIENCE,  
TECHNOLOGY,  
INNOVATIONS AND  
COMMUNICATIONS OF  
THE FEDERATIVE  
REPUBLIC OF BRAZIL

Carlos Moedas

Commissioner for  
Research, Science and  
Innovation

Naledi Pandor

Minister of Science and  
Technology

Gilberto Kassab

Minister of State for  
Science, Technology,  
Innovations and  
Communications

Realising the mutual benefit that would accrue from **linking research activities in the South Atlantic and Southern Ocean with those in the North Atlantic**, and **exploring synergies with other initiatives** such as the interdisciplinary Atlantic Interactions Research Agenda and the AIR Centre; the Joint Programming Initiatives, the Strategic Forum for International Science and Technology Cooperation, the European Union's Earth Observation and Monitoring programme - Copernicus, and the Benguela Current Commission;

**Increasing operational efficiencies** by optimising the appropriate use and **sharing of research infrastructures**, and **access to and management of data and platforms**; together with **emerging methods of data science**; and,

Further **developing common understanding and deepening scientific knowledge** of marine ecosystems and the interrelations between oceans and climate change, oceans and food, and oceans and energy systems, as well as the dynamics of the Atlantic Ocean and its interconnected Circulation Systems from Antarctica to the Arctic.





# RESEARCH & INNOVATION

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Integration Fund

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COSME

European Statistics Programme

Hercule III Programme

## TOPIC : All Atlantic Ocean Research Alliance Flagship

**Topic identifier:** BG-08-2018-2019

**Publication date:** 27 October 2017

**Types of action:** CSA Coordination and support action

**DeadlineModel:** single-stage

**Planned opening date:** 31 October 2017

**Deadline:** 13 February 2018 17:00:00

**Types of action:** RIA Research and Innovation action

**DeadlineModel:** two-stage

**Planned opening date:** 31 October 2017

**Deadline:** 13 February 2018 17:00:00

**2nd stage Deadline:** 11 September 2018 17:00:00

**Types of action:** RIA Research and Innovation action

**DeadlineModel:** two-stage

**Planned opening date:** 16 October 2018

**Deadline:** 23 January 2019 17:00:00

**2nd stage Deadline:** 04 September 2019 17:00:00

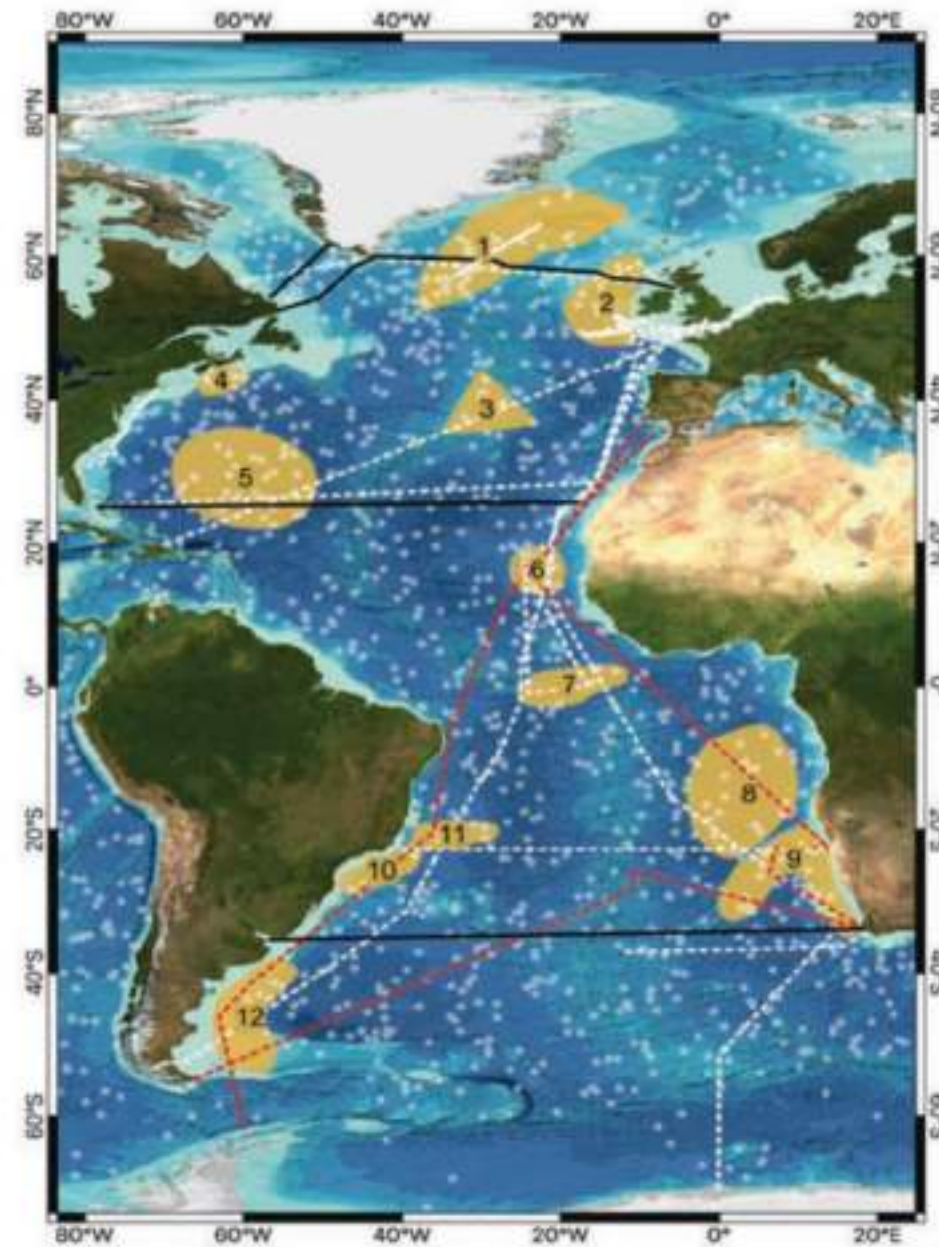
Time Zone : (Brussels time)

iAtlantic start date 1 June, with kick-off meeting 18-20 June 2019



# iAtlantic

- 33 partners
- €10.6M budget
- 11 international associate partners
- €30M programme of 32 cruises



**Figure 2:** Chart illustrating the density of ARGO floats (grey circles) and positions of transatlantic monitoring arrays (black lines) providing oceanographic data to iAtlantic. Dashed white lines illustrate tracks of iAtlantic cruises with the two *S Atlantic Demonstrator Capacity Building cruises* iMirabilis and iCorsage shown in red. Led by the Spanish Institute of Oceanography (IEO) and named for iconic plants of W Africa and S America, these cruises are dedicated to the iAtlantic consortium. iMirabilis targets Regions 6–9 and will bring the UK Autosub6000 AUV equipped with the MAPS eDNA sampler and the Portuguese Luso ROV to the S Atlantic for the first time. The iCorsage cruise primarily targets Region 11 where it will conduct extensive mapping of the Vitória-Trindade Seamounts and provide training in the latest shipboard mapping approaches. iAtlantic will run a third Demonstrator Capacity Building cruise on a UK vessel in Region 2. Equipped with Autosub6000 and science-class ROV, this cruise will be open to iAtlantic fellows with dedicated berths for S Atlantic researchers.



LEADS

WP1



Arne Biastoch  
(GEOMAR)

WP2



Veerle Huvenne  
(NOC)

WP3



Lea-Anne Henry  
(UEDIN)

WP4



Andrew Sweetman  
(HWU)

WP5



Telmo Morato  
(IMAR-UAZ)

WP6



Vikki Gunn  
(Seascope)

WP7



Tina Dohna  
(UniHB)

DEPUTIES



Didier Jollivet  
(SU)



Colin Devey  
(GEOMAR)



Marjorlaine Matabos  
(Ifremer)



Marina Carreiro-Silva  
(IMAR-UAz)



Kate Larkin  
(EMODnet)



Sebastian Unger  
(TMG)



PANGAEA  
(UniHB)

WP8



Murray Roberts  
(UEDIN)

SW Atlantic



Angel Perez  
(UNIVALI-Brazil)

SE Atlantic



AJ Smit  
(UWC-South Africa)

NW Atlantic



Ellen Kenchington  
(DFO Canada)

NE Atlantic



Stefán Áki Ragnarsson  
(MFRI Iceland)

# iAtlantic Steering Committee

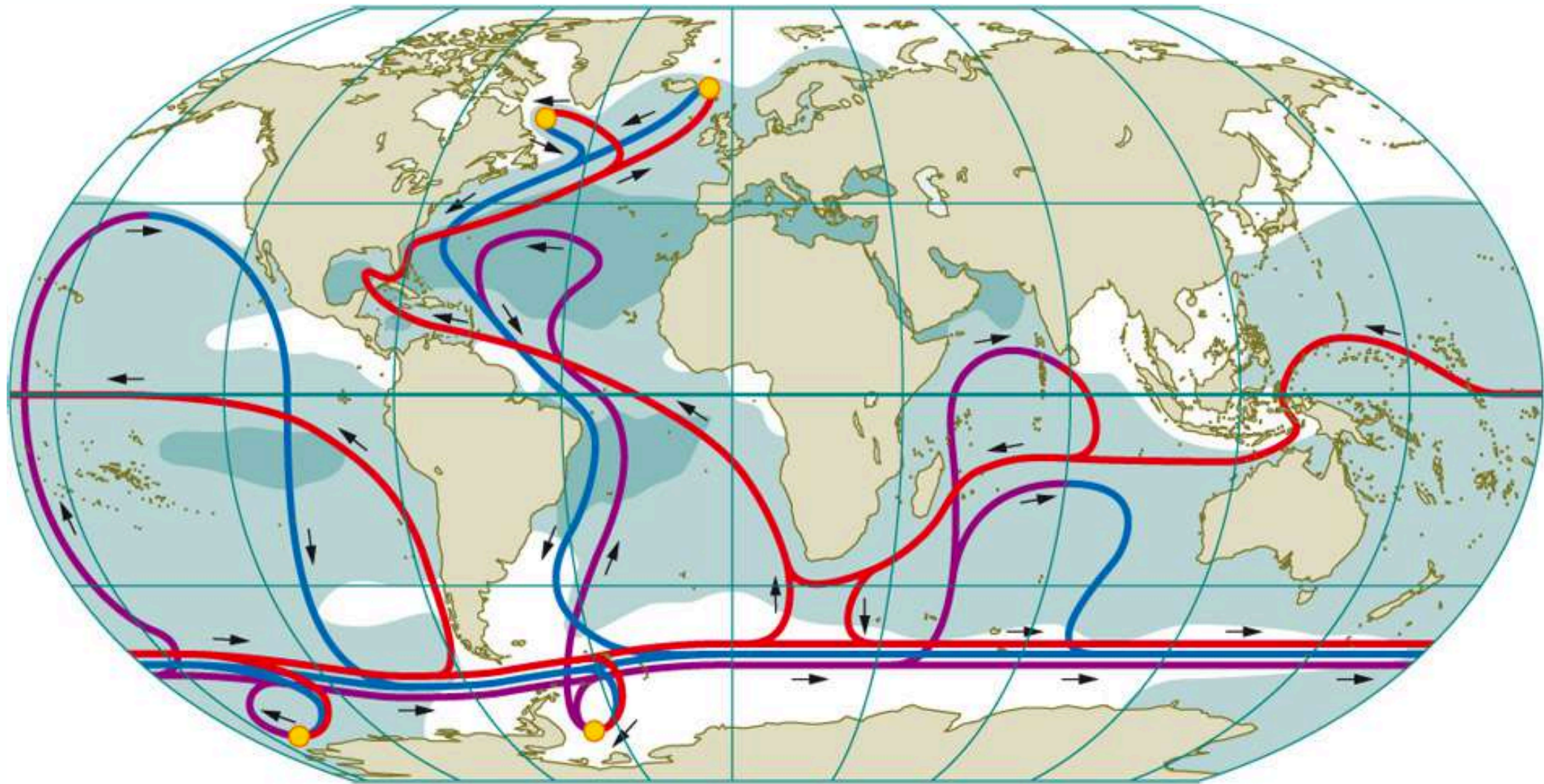
Integrated assessment of Atlantic marine ecosystems in space and time



# iAtlantic WP1

## Atlantic oceanography and ecosystem connectivity

1. *Develop ocean hindcasts and forecasts*
2. *Enhance AMOC monitoring capacity in the SAMOC/SAMBA and OSNAP arrays*
3. *Develop ultra-high resolution ocean models at Lucky Strike and Walvis Ridge*
4. *Measure basin-scale spatio/temporal modes of physical variability*
5. *Conduct genomic studies*



Standardise South and North Atlantic Ocean observations to enable short, medium, and long-term assessments of Atlantic Ocean circulation and its physico-biogeochemical environment.



## SAMOC enhancement

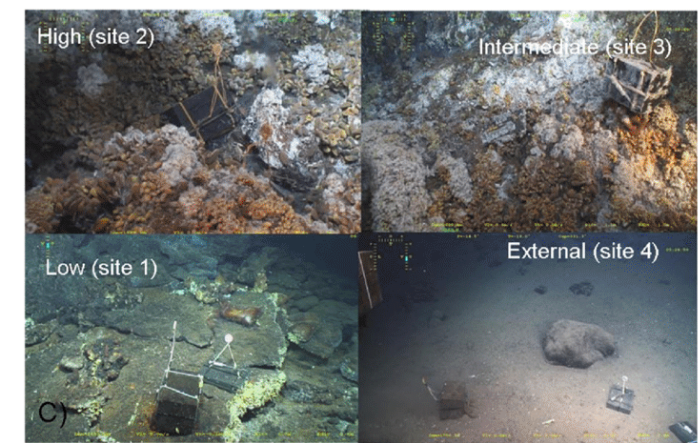
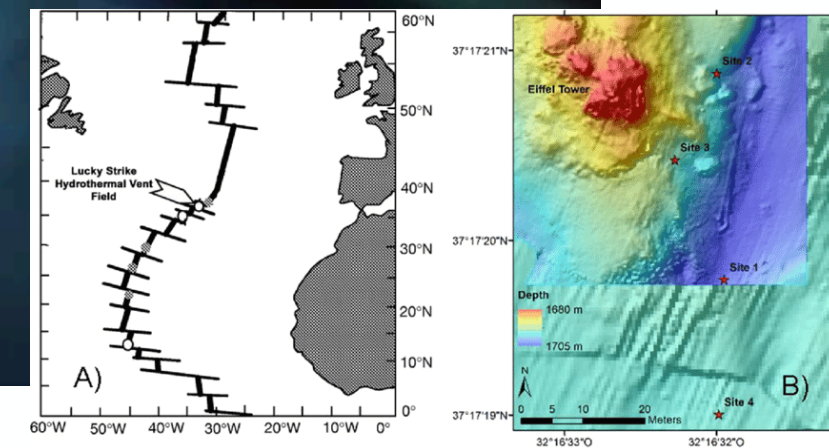
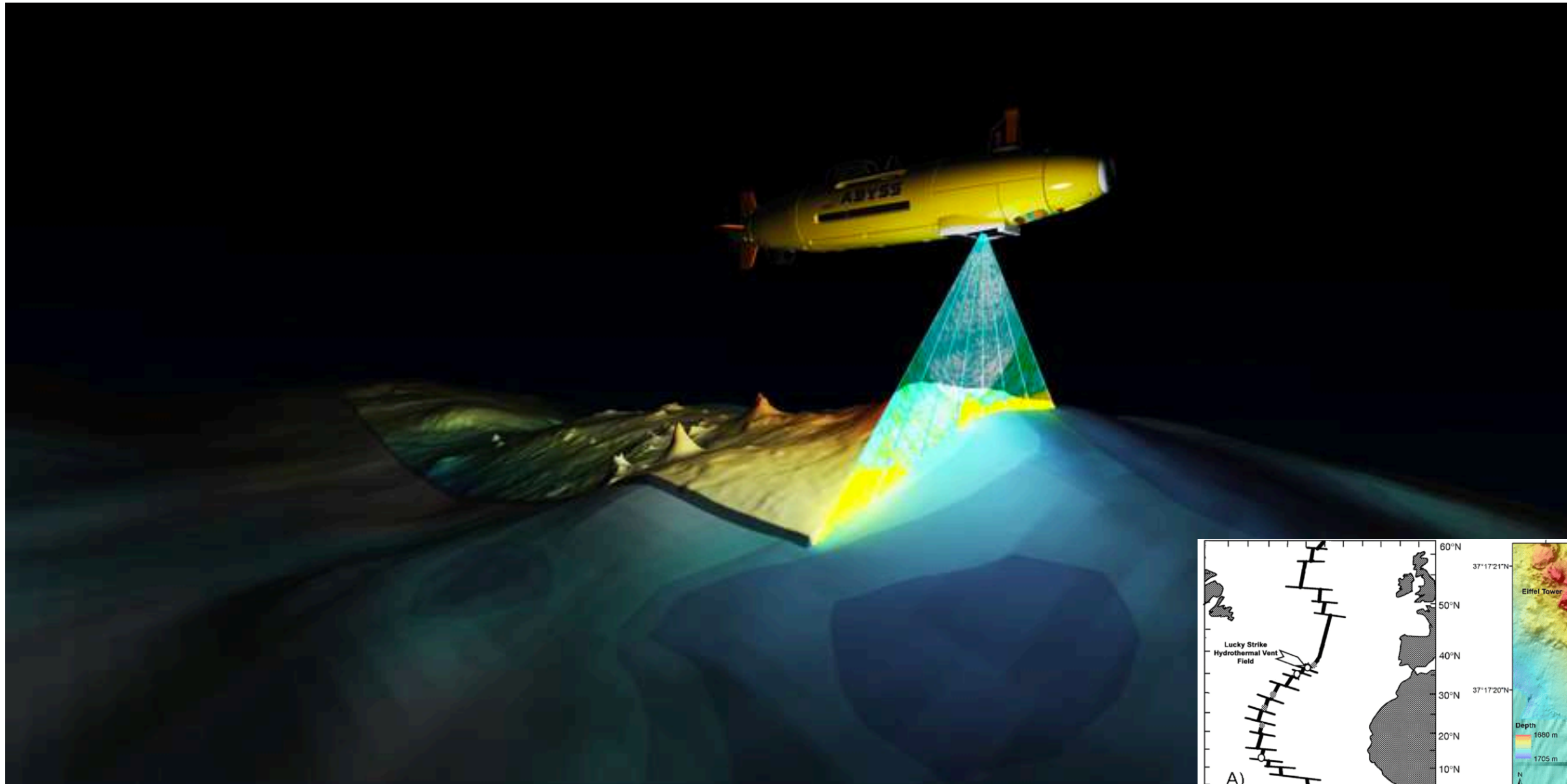
**iAtlantic will enhance the capacities of transatlantic monitoring arrays at both southern and northern boundaries.** At the southern boundary, we will extend the SAMOC array by: (i) augmenting the horizontal coverage of the existing SAMOC-West array, involving mooring deployment at the continental shelf in the region of the Brazil Current (measuring temperature, salinity, pressure, and currents); (ii) *enhancing the SAMOC-West and SAMOC-East arrays with oxygen sensors*, and; (iii) testing the need to have a zonal component in the array (using in situ observations in the central S Atlantic 10°W-[27°S-24°S]). At the northern boundary we will continue the enhancement of OSNAP moorings in the North Atlantic Current branch of the AMOC adding oxygen sensors so that we can compute fluxes of carbon, nutrients and oxygen in the upper limb of the AMOC (funded first under the H2020 AtlantOS and ATLAS projects).



# iAtlantic WP2

## Mapping Atlantic ecosystems

1. Basin-wide (all-Atlantic) data collation and analysis
2. Regional-scale mapping in iAtlantic's 12 regions (100-1000 km)
3. Local scale habitat mapping (1-10s km)
4. Advance the technology readiness level of new mapping technologies
5. Analysis of spatial patterns in ecosystem drivers



Map deep and open-ocean ecosystems at basin, regional, and local scales.



# iAtlantic WP3

## Drivers of ecosystem change and tipping points

1. *Create an inventory of inter-annual to multidecadal data*
2. *Trial and report on use of ancient eDNA (aDNA) to create ecosystem timeseries*
3. *Analyse drivers of ecosystem change and tipping points over centennial to millennial timescales*
4. *Analyse ecosystem changes, drivers and tipping points over inter-annual to multidecadal timescales*
5. *Assessment of scenarios of oceanographic change and impact on ecosystem dynamics*



Assess the stability, vulnerability, and any tipping points of deep and open-ocean Atlantic ecosystems to changes in ocean circulation, and effects of single and multiple stressors.



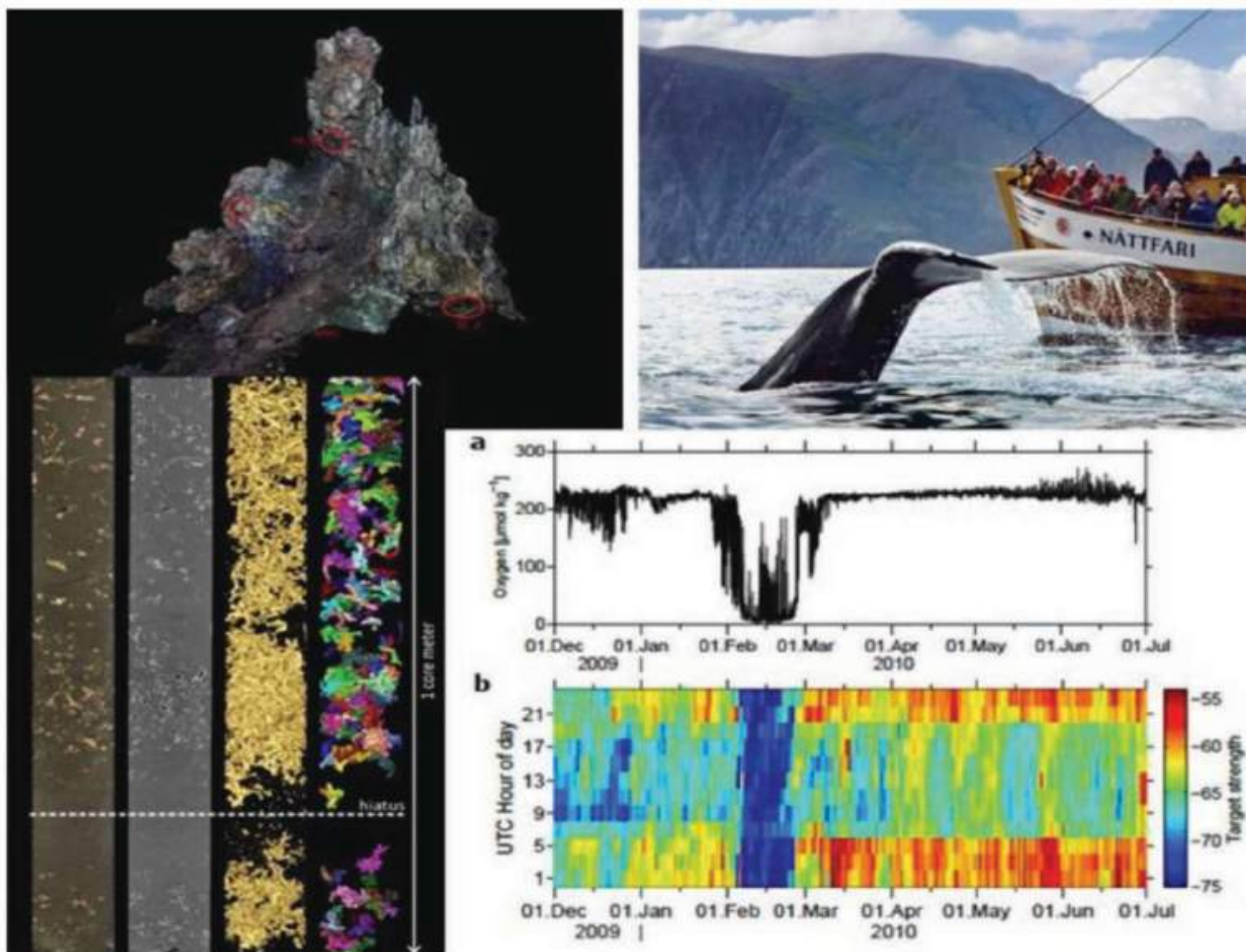


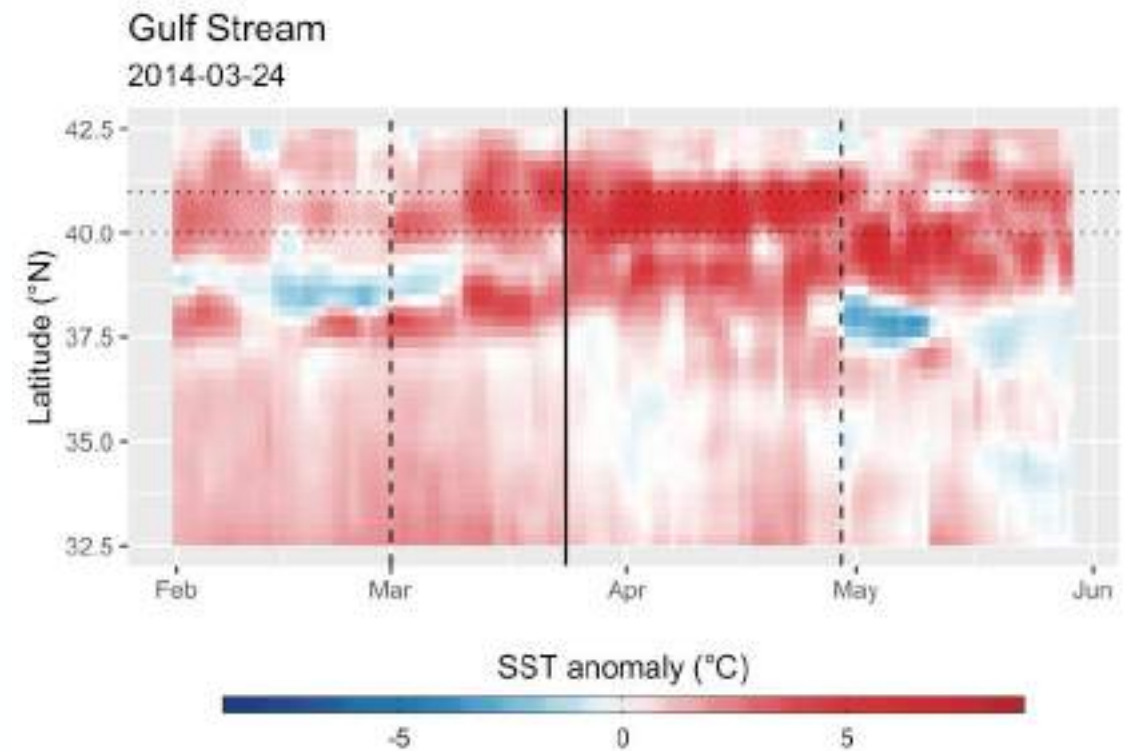
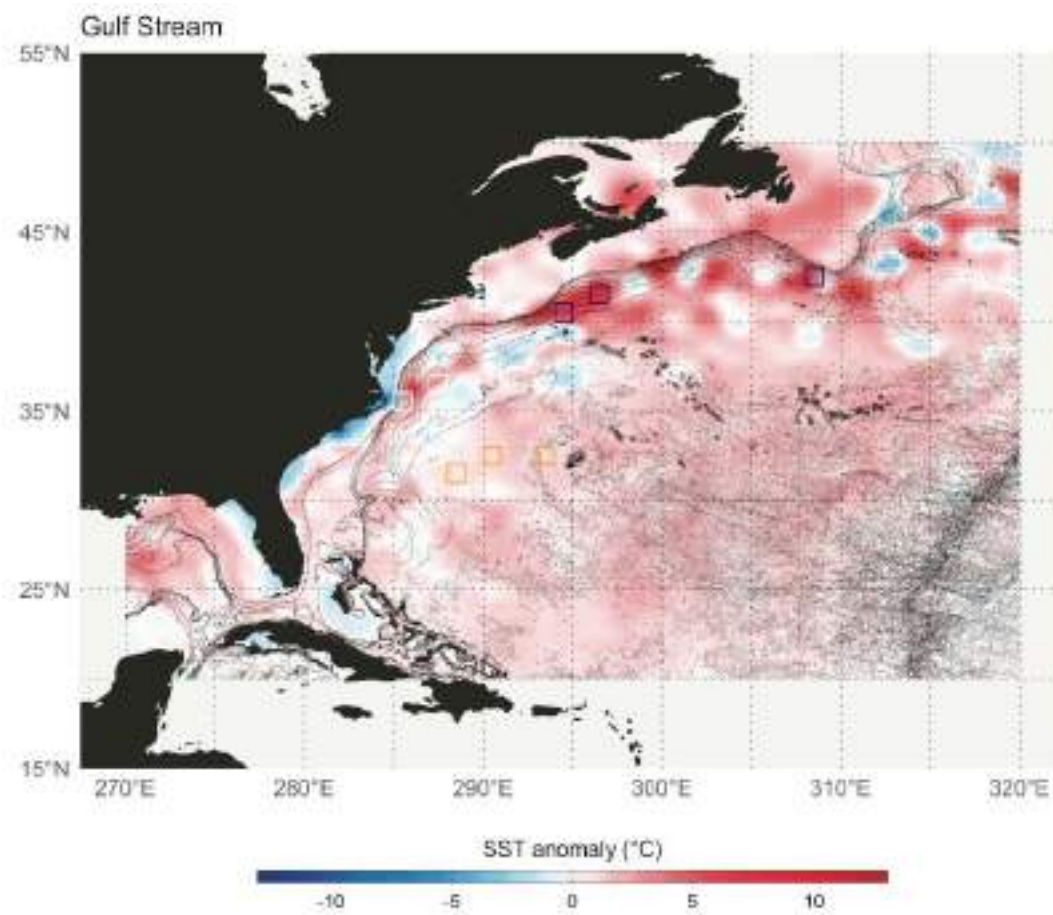
Figure 6: Examples of novel methods to create ecosystem timeseries. Clockwise from top left: 3D reconstruction of benthic communities at the Lucky Strike hydrothermal vent using photomosaics; whale fluke identifications from Iceland and Bermuda to reconstruct temporal changes in population size; inter-annual changes in oxygen (a) and effects on zooplankton (b) derived from ADCP from the CVOO off Cape Verde (Karstensen et al., 2015); sediment core from Mauritania with periods of coral growth and hiatuses from Wienberg & Titschack (2017).



# iAtlantic WP4

## Impact of multiple stressors

1. Conduct ex situ multiple stressor impact experiments on mesopelagic zooplankton communities
2. Compare natural spatial gradients in deep pelagic and benthic ecosystem functioning
3. Conduct ex situ single and multiple stressor experiments on hard-bottom VME species
4. Conduct ex situ single and multiple stressor experiments on soft-sediment ecosystems
5. Evaluate impacts of single and multiple stressors on pelagic larvae of VME species



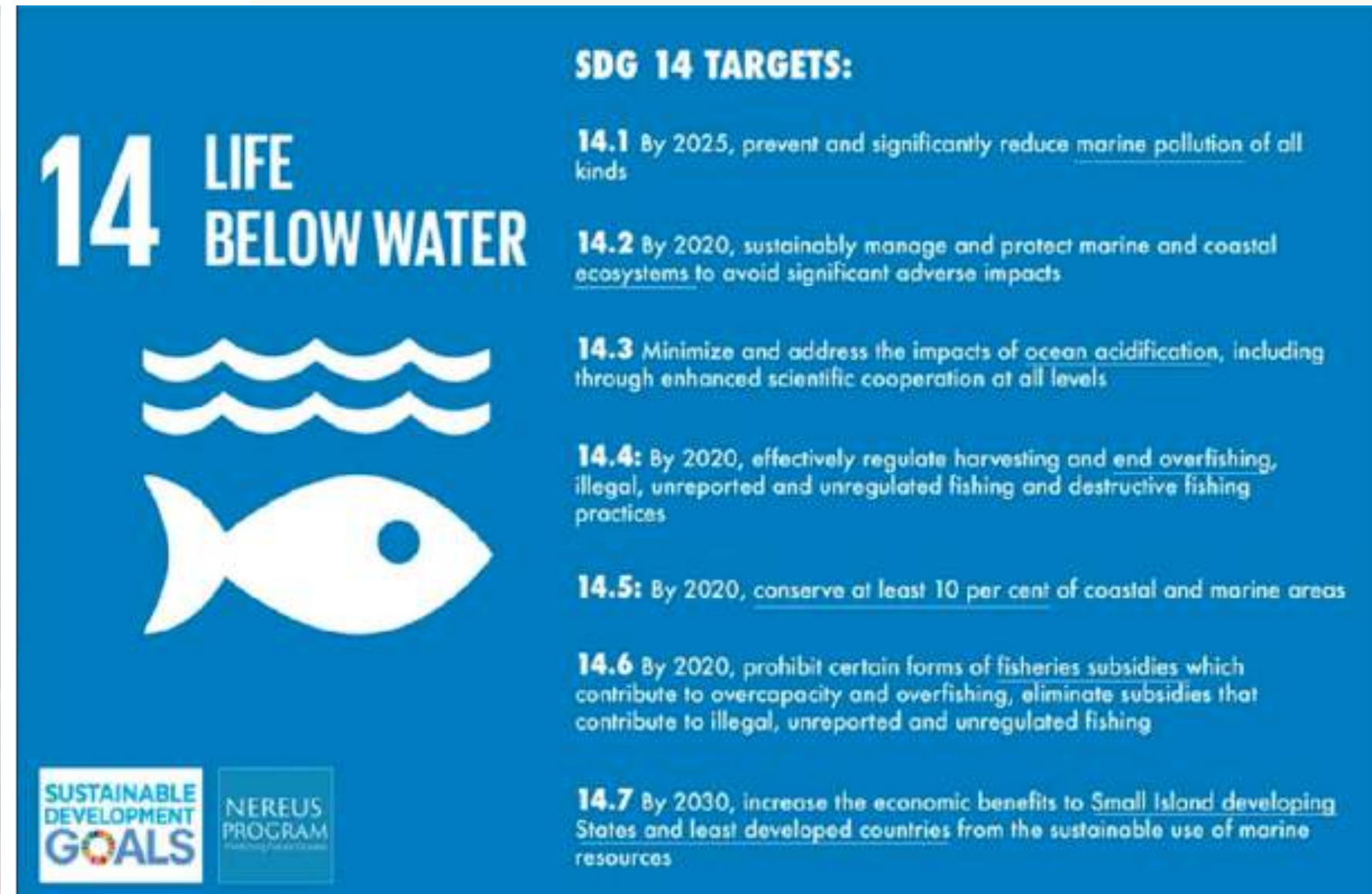
Ecosystem and species responses to multiple stressors will be enabled by targeted *in situ* and *ex situ* experimental studies.



# iAtlantic WP5

## Spatial and temporal management and protection (sustainable management)

1. *Compilation of regions of interest maps from existing data sources*
2. *Development of iAtlantic advanced web-based GIS-tools*
3. *Regional prioritisation and scenario development*
4. *Evaluation of sustainable management planning scenarios*



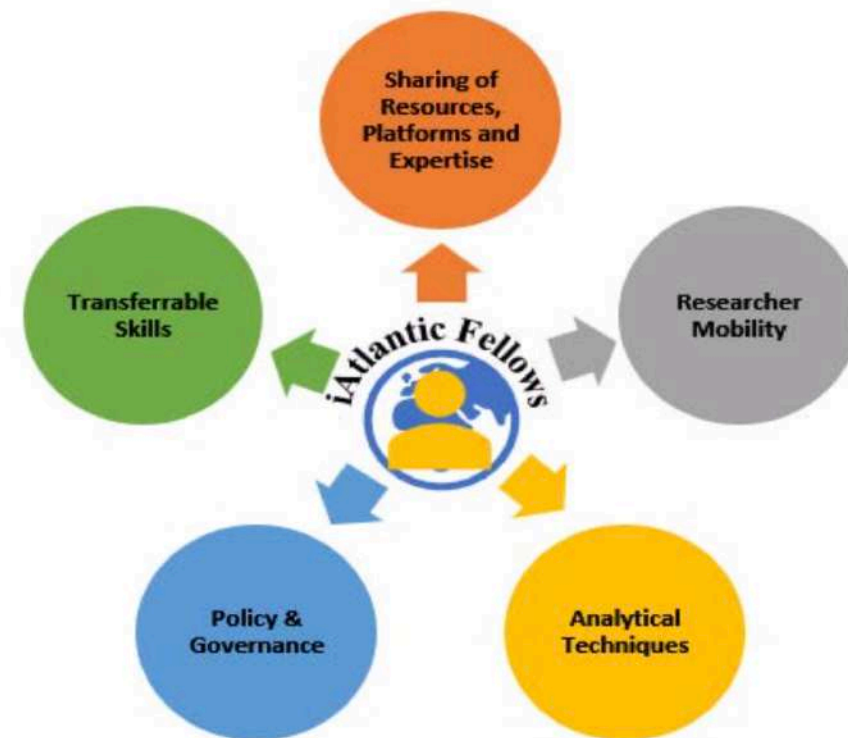
Define requirements for sustainable management with industry, regulatory and governmental stakeholders to reflect societal needs and inform policy developments that ensure and encourage a sustainable Blue Economy.



# iAtlantic WP6

## Capacity building, policy, stakeholder engagement and outreach

1. *Development of dissemination, communication and engagement plan*
2. *Innovation and exploitation*
3. *Outreach and dissemination*
4. *Stakeholder engagement*
5. *Capacity building*
6. *Ocean governance*



Agreement in principle for industry sponsorship to enhance iAtlantic fellowship scheme.

Align and enhance human, technological, and data inter-operability capacities for cost-effective cooperation and planning across the Atlantic.



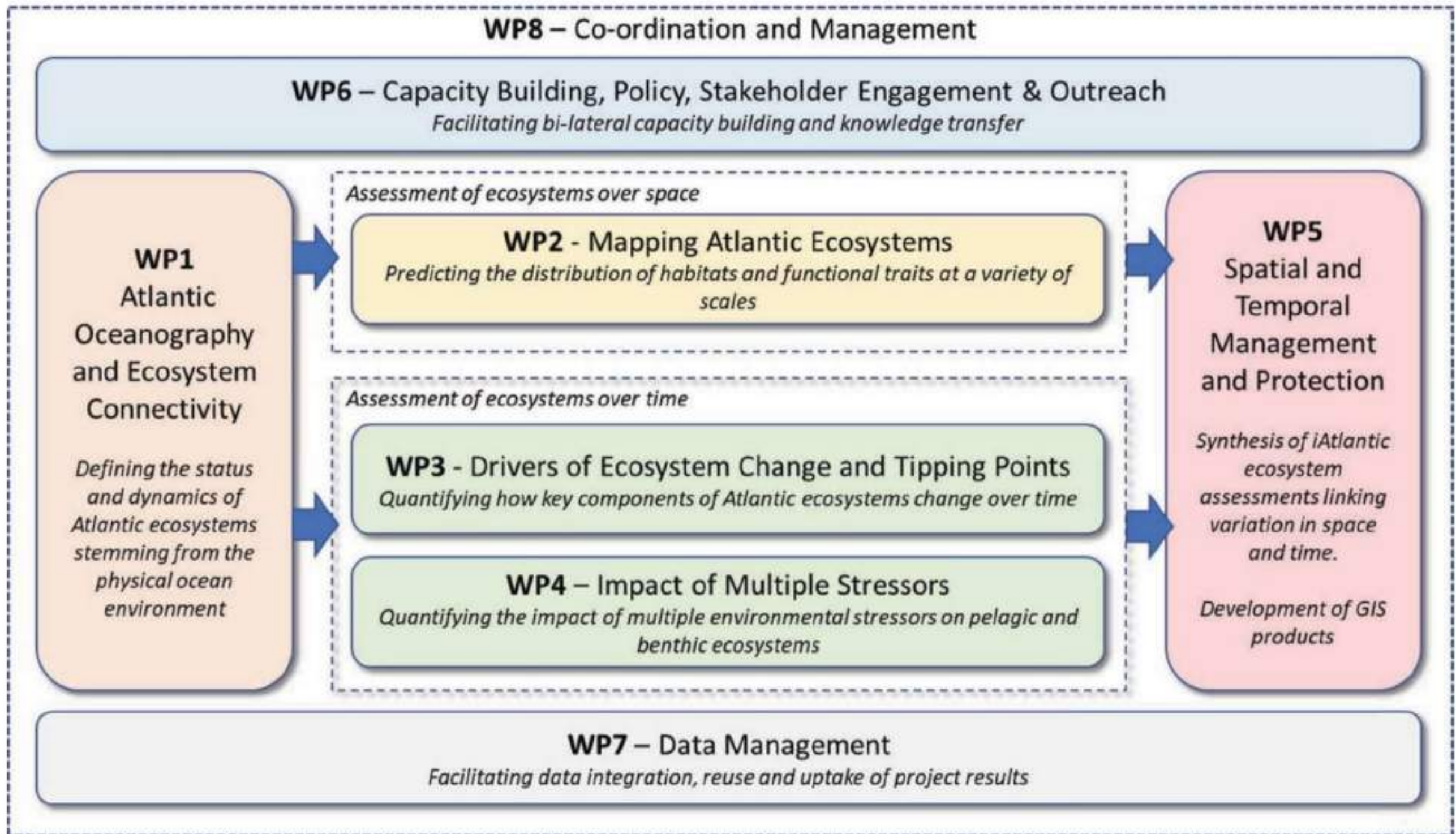
**iAtlantic WP7**  
Data management

**iAtlantic WP8**  
Coordination and management



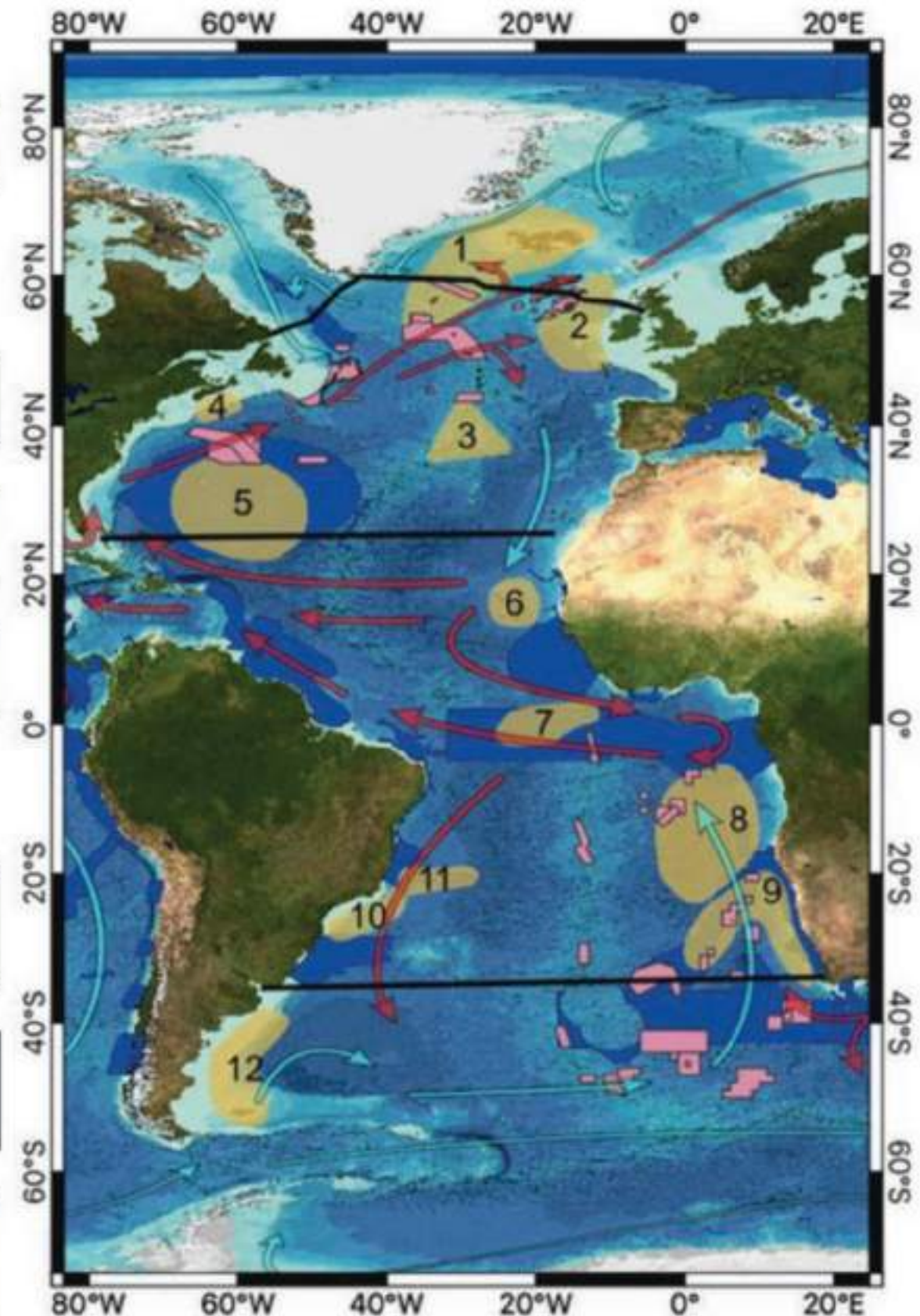
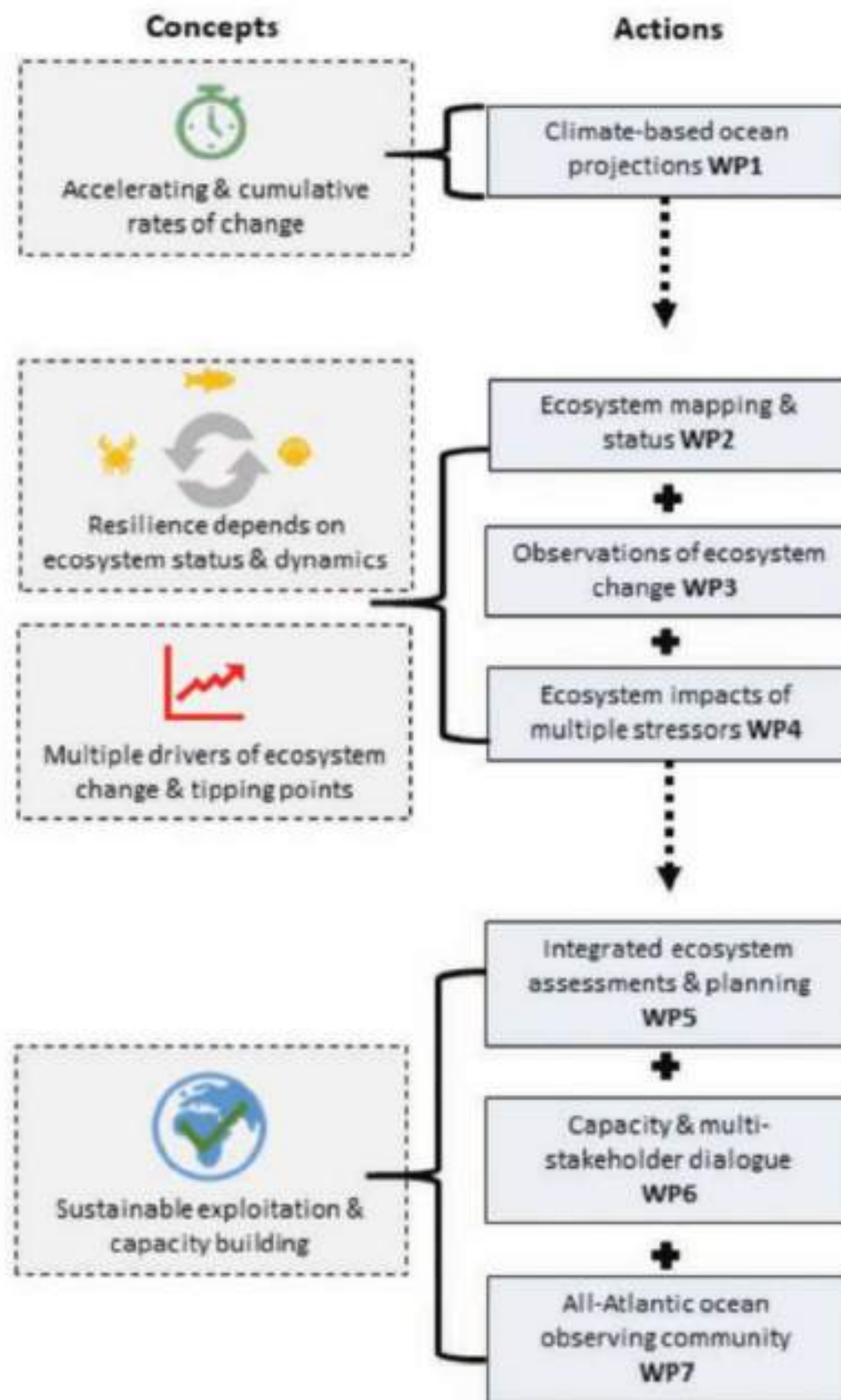
# iAtlantic

Integrated assessment of Atlantic marine ecosystems in space and time





# iAtlantic



COMMON TOOLS & DATA STANDARDS  
LONG RANGE PLANNING FOR SUSTAINABLE BLUE GROWTH



Research and Innovation Activity	Link with iAtlantic
ACEP Phuhlisa (SAIAB, UWC, South Africa)	The ACEP Phuhlisa (Development) programme is an NRF/DST supported initiative managed by iAtlantic partner SAIAB. It aims to transform the S African marine science community to become more representative of the demographic ratios in the country. ACEP Phuhlisa has been planned and designed around key impediments which limit entrance or participation in marine science. Marine disciplines are represented by iAtlantic, and graduates from this programme will be encouraged to participate in iAtlantic-related research projects and the iAtlantic Fellowship Scheme.
Abidjan Convention	The Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region (Abidjan Convention) covers a marine area from Mauritania to South Africa. iAtlantic will provide ecosystem assessments in four S Atlantic regions under Abidjan's remit (Regions 6–9), and through our links to the STRONG High Seas Project (led by Partner TMG), will help develop innovative governance solutions for the conservation and sustainable use of marine biodiversity in coastal and ABNJ regions, including one of its priority areas the South East Atlantic (see LoS from Abidjan Convention).
Atlantic Regional Environment Management Planning (ISA, United Nations)	The data generated by iAtlantic will be of direct relevance to the ISA's initiative, supported financially by the EU, to develop a regional environmental management plan for the Atlantic (formerly SEMPIA), which is working with ISA and stakeholder groups in relation to deep-sea mining activities on the Mid-Atlantic Ridge. iAtlantic will deliver data in support of these activities through an MoU.
ATLAS (H2020, EU)	iAtlantic will leverage data produced by ATLAS (2016-2020) on N Atlantic deep-sea ecosystem response to projected AMOC change and will enhance and complement datasets from this project with new data from the S Atlantic.
AtlantOS (H2020, EU)	iAtlantic will build upon foundations established by AtlantOS, notably the first high resolution hydrographic transect along 34.5S between South America and South Africa (led by iAtlantic partner GEOMAR).
Benguela Current Commission (Angola, Namibia, South Africa)	The BCC was established with the vision to ensure 'A Benguela Current Large Marine Ecosystem that is sustainably used and managed, conserved, protected and contributes to the wellbeing of the people of the region'. iAtlantic will cooperate closely with BCC to share access to data, offshore expeditions and through joint capacity building activities (see LoS).
BIOIL (USP and Shell, via IOGP, Brazil)	Biology and geochemistry of oil and gas seepages (BIOIL) is a partnership between USP and IOGP member Shell to find and study the ecology and geochemistry of cold seeps in the Campos and Santos basins (Region 10). Two cruises programmed in the next three years with iAtlantic participation.



Research and Innovation Activity	Link with iAtlantic
CLASS (UKRI-NOC, UK)	Climate-Linked Atlantic Sector Science is a £22.3M programme (2018-2023) designed to deliver improved knowledge of the Atlantic to support management, conservation, exploration and economic development. CLASS will link with iAtlantic providing access to ship time and long-term datasets in Region 2 (see LoS).
DeepSearch (BOEM/USGS/NOAA, USA)	DeepSearch is a 4.5-year study of deep-sea coral, canyon, and gas seep ecosystems in the NW Atlantic involving researchers from US universities coordinated by iAtlantic partner Temple University. DeepSearch and iAtlantic will share sampling opportunities, particularly in relation to deep coral and chemosynthetic ecosystems.
Deep Secrets Project (African Coelacanth Ecosystem Programme, South Africa)	The Deep Secrets Project leveraged a high-resolution multibeam bathymetry dataset through a collaboration with IOGP member Anadarko. This dataset reveals a large pockmark field and several previously unmapped submarine canyons on the continental slope off South Africa. The project team will collaborate with iAtlantic to support regional studies of gas seep and canyon ecosystems and facilitate new surveys of chemosynthetic and deep-water coral ecosystems in Region 9. This builds on previous surveys in the SE Atlantic shelf edge and links to WP2. Deep Secrets also has a capacity building component that promotes technical and human capacity development in line with WP6.
DECODE USP and PETROBRAS, via IOGP, Brazil)	The DEep-sea Coral Observatory: Decoding Ecological patterns and dynamics (DECODE) project is a partnership with Petrobras (who are supporting iAtlantic through IOGP, see LoS), involving ecological analyses of industry ROV videos and the installation of a deep-sea lander, which will collect time-lapse stereo images and environmental data from Campos and Santos Basins (Region 10). Four cruises are programmed (2019-2022) with iAtlantic participation.
Global Ocean Biodiversity Initiative (International partnership)	GOBI is an international network of scientists working to promote the conservation of marine biodiversity. In particular, GOBI works very closely with the Convention on Biological Diversity in support of the process to establish Ecologically or Biologically Significant marine Areas (EBSAs), and also with the Convention on Migratory Species (CMS). iAtlantic will work closely with the GOBI community to ensure new scientific knowledge of important Atlantic ecosystems is fed into the CBD's EBSA mechanism to strengthen existing EBSA descriptions and to support the description of potential new areas meeting EBSA criteria.
INTEMARES (EU-LIFE)	'Integrated, innovative and participatory management of the Natura 2000 network in the Spanish marine environment' is one of the largest marine conservation projects in Europe. INTEMARES has a budget of €49.8M and lasts till the end 2024. iAtlantic will cooperate with INTEMARES on approaches and outputs (e.g. oceanographic forecasts) relevant to Spain's marine environmental management.
MERCES (H2020, EU)	'Marine Ecosystem Restoration in Changing European Seas' is developing conceptually coherent ecosystem tools and methodologies for deep-sea restoration and assessing their cost-effectiveness including the role of passive restoration, which iAtlantic will integrate with its connectivity models and larval stressor experiments to promote restoration in dialogues with industry.
INCT Mar COI - CNPq (Brazil)	The National Institute of Science and Technology Mar - Center of Integrated Oceanography (INCT Mar COI) (CNPq) subproposal 2 aims to describe, through seafloor imagery, deep-sea habitats and megafauna diversity at the Brazilian continental margin and oceanic seamounts as baselines for future human activities. iAtlantic will provide opportunities to collect new data using state-of-the-art technology and integrate results with other areas and research groups in the Atlantic Ocean.
NOAA-OER and ASPIRE (USA)	NOAA's Office of Ocean Exploration and Research collaborates with iAtlantic particularly through plans for joint work at sea developed through the ASPIRE initiative in Regions 1, 3, 4 and 5. The iAtlantic consortium submitted White Papers on these regions and will attend ASPIRE discussions in November 2018. The Director of OER will join the ATLAS Advisory Board (see LoS from NOAA).
Oceanic Islands' Long-Term Ecological Research Program (PELD-ILOC) (CNPq – CAPES), (Brazil)	The Long-Term Ecological Research Program (PELD) is an initiative funded by CNPq-Brazil since 1999. There are 30 PELD sites in Brazil, and the PELD-ILOC (Oceanic Islands) site includes the only atoll in the S Atlantic (Rocas Atoll) and three oceanic islands: The Trindade Island in particular, still harbours a comparatively high biomass of fish and other marine life, and it is part of the Vitória-Trindade Seamount chain that will be surveyed in the iAtlantic project (Region 11). Since PELD-ILOC and other projects only sample the shallow-water and mesophotic realms of the Vitória-Trindade Seamount chain, iAtlantic will provide pivotal new data on ecosystem status in the deep waters of this region.
SAMOC (NOAA, USA; FAPESP, Brazil; Argentina)	The SW Atlantic Meridional Overturning Circulation is a multi-national effort with contributors in the USA, Brazil and Argentina. iAtlantic will add to the capacity of SAMOC's ocean observing infrastructure to align it with the N Atlantic RAPID and OSNAP arrays.
Sargasso Sea Commission	The Hamilton Declaration on Collaboration for the Conservation of the Sargasso Sea established the SCC in 2014 to 'encourage and facilitate voluntary collaboration toward the conservation of the



Research and Innovation Activity	Link with iAtlantic
(Azores, Bahamas, Bermuda, UK, USA)	Sargasso Sea'. iAtlantic's Region 5 is the Sargasso Sea where our work ecosystem status assessment will encompass timeseries analyses directly relevant to SSC and the Hamilton Declaration (see LoS).
Seabed 2030 (Nippon Foundation–GEOBCO)	Several iAtlantic partners play key roles in Seabed2030, a 10-year effort to map the world's oceans. These links allow for a two-way flow of knowledge between the programmes. iAtlantic mapping efforts will be guided by Seabed2030 work and vice-versa. Partnerships in Seabed2030 will also provide additional stakeholder access for iAtlantic cooperation and outreach efforts linking to the International Hydrographic Organisation, the Intergovernmental Oceanographic Commission of UNESCO and EMODnet.
SEAmester (South Africa)	SEAmester introduces marine science as an applied and cross-disciplinary field to students in a combined theoretical classroom learning approach with the application of this knowledge through ship-based and hands-on research. Students graduating from SEAmester will participate as student researchers on iAtlantic-linked research programmes. Its long-term vision is aimed at building capacity within the marine sciences by coordinating cross-disciplinary research projects through a highly innovative programme. SEAmester is led by iAtlantic partner UCT and uses the state-of-the-art research vessel, SA Agulhas II, proposed to participate in iAtlantic research cruises.
MEEE-PDES (CNPq)	The Spatial Management with an Ecosystem Approach for the Demersal Fisheries off southeastern and southern Brazil project is using fisheries and environmental data to design a network of spatial fishing management units off SE-S Brazil. iAtlantic will allow the analysis of deep-sea coral ecosystems status (and associated megafauna) at the continental margin (Region 10) to contribute relevant information to the design of slope bottom fisheries management units.
SponGES (H2020, EU)	iAtlantic will access new results on the distribution and functional ecology of N Atlantic deep-water sponge grounds, notably via the SponGIS compilation of spatial data arising from the project (2016-2020), for mapping at the local, regional and all-Atlantic scales.
STRONG High Seas (Germany)	The Strengthening Regional Ocean Governance for the High Seas project is working with countries in the Abidjan Convention region (SE Atlantic, see LoS) as well as the Permanent Commission for the South Pacific to strengthen regional ocean governance and facilitate development of integrated and cross-sectoral approaches to develop a new legally-binding instrument for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction (ABNJ).





# iAtlantic Beneficiaries

Integrated assessment of Atlantic marine ecosystems in space and time





Pêches et Océans  
Canada

Fisheries and Oceans  
Canada

# iAtlantic International Partners

Integrated assessment of Atlantic marine ecosystems in space and time





Phil Williamson (Chair)



Lisa Levin



Kristina Gjerde



International  
Association  
of Oil & Gas  
Producers



Wendy Brown



GLOBAL OCEAN TRUST

Thorsten Thiele



Gordon Paterson  
(Chair Science Council)



Alan Leonardi



# iAtlantic Advisors

Integrated assessment of Atlantic marine ecosystems in space and time



**Thank you**





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# Cross-sectoral area-based planning in ABNJ

*Sustainable fisheries management and biodiversity conservation of deep-sea living marine resources and ecosystems in the Areas Beyond National Jurisdiction*

**Rachael Scrimgeour**

**Programme Officer** UN Environment World Conservation Monitoring Centre

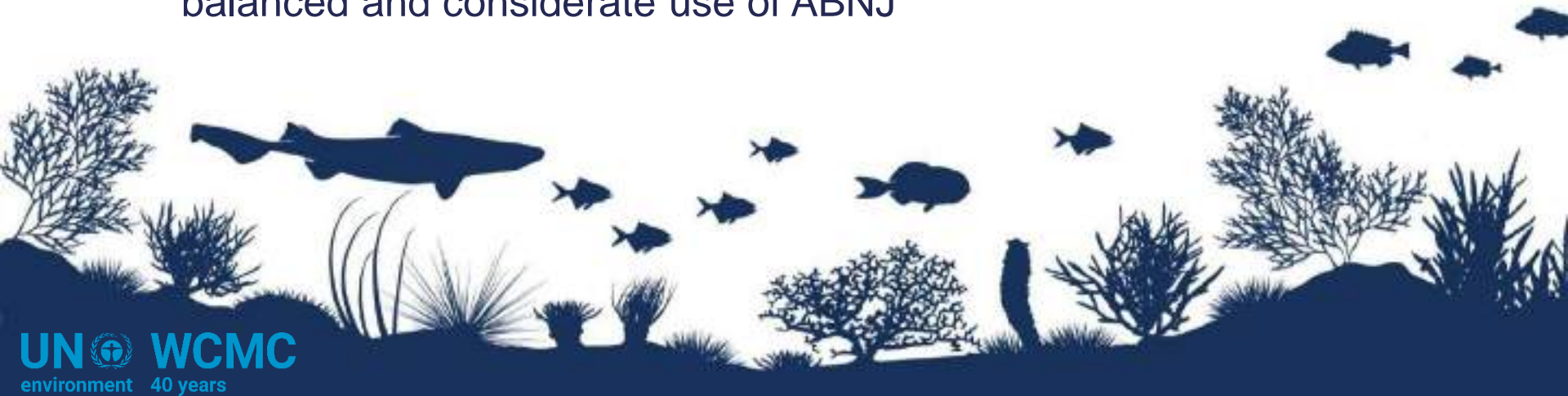


# What is Area Based Planning?

*“the consideration of a geographic area in which activities are carried out, and accounting for different factors which may influence, where, when and how you undertake those activities.”*

## Area Based Planning in ABNJ

- \* Sector-specific planning approaches
- \* Uncertainty as to how sectoral approaches will interact in the future
- \* Cross-sectoral area-based planning provides an opportunity to ensure balanced and considerate use of ABNJ





# Relevance to BBNJ

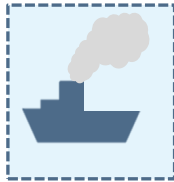
\* ABNJ governed under sectoral regimes

ISA

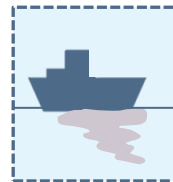


Areas of  
Particular  
Environmental  
Interest

IMO



MARPOL  
Emission  
Control Area

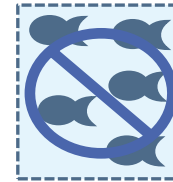


MARPOL  
Special Area for  
Sewage

FAO  
RFMO/As



Vulnerable  
Marine Ecosystem



Fisheries  
Closures





# Relevance to BBNJ

- \* Legal, governance and geographic gaps – no overarching regime for biodiversity
- \* Difficult to measure cumulative impacts

Marine  
Spatial  
Planning

- \* BBNJ implementing agreement – ABMT element

*[Terms raised in relation to measures such as area-based management tools, including marine protected areas]*

(15) “Area-based management tool” means:

**OPTION I:** A tool designed and applicable in a specified area located beyond national jurisdiction with a view to achieving defined objectives.

**OPTION II:** A spatial management tool for a geographically defined area through which one or several sectors/activities are managed with the aim of achieving particular conservation objectives and affording higher protection than the surrounding areas.

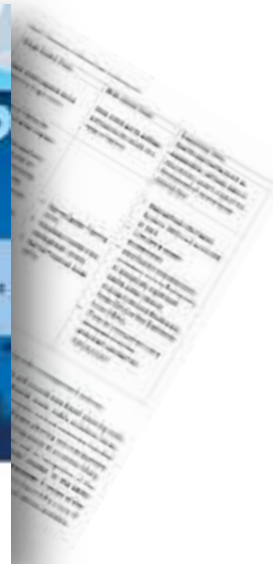
- \* Ambition to “*not undermine*” existing processes

Communication, cooperation and coordination



# Marine Spatial Planning

- \* **Cross-sectoral area-based management framework**
- \* Its purpose is to **deliver policy objectives**
- \* Follows an ecosystem based management approach
- \* Participatory, and science based approach founded on best available data
- \* Currently only occurring in national jurisdictions



[wcmc.io/ABNJ\\_toolsreview](http://wcmc.io/ABNJ_toolsreview)







# Project Objective

## Develop a draft area-based planning methodology suitable for use in ABNJ

- Review applicability of area-based planning tools to ABNJ
- Gather experiences and good practices from other regions
- Understand the relevant governance frameworks



# Development of the methodology



- \* Research into the different aspects of area-based planning

**Knowledge  
Sharing and  
Capacity**

**Governance**

**Data and Tools**

Marine Spatial Planning identified



Development of  
methodology





# Development of the methodology

- \* Review of existing marine spatial planning frameworks for national jurisdiction
  - **Key elements** of marine spatial planning
  - **Guiding principles**
- \* Explored elements in the context of ABNJ
- \* Methodology comprises: **key elements** with associated activities
  - **What** could be done
  - The next step is to describe **how** activities would be undertaken and by **whom**.

This workshop will provide input on this when 'testing' the methodology





## Key Elements of the Marine Spatial Planning Methodology

### Pre-Planning & Cross-cutting Elements

Identifying Objectives

Leadership

Stakeholder Engagement



Enabling conditions

Governance  
Frameworks

Participatory  
Planning

Adaptive Review

Management Plan  
Development

Monitoring and  
Evaluation

Implementation &  
Enforcement

Enabling conditions

Financial Support  
Capacity

Planning Cycle and Enabling Conditions





## Key Elements of the Marine Spatial Planning Methodology

### Pre-Planning & Cross-cutting Elements

Identifying Objectives

Leadership

Stakeholder Engagement

### Identifying the need, objective and location for planning

- Define and agree the objective. This could involve generating a common vision.
- Identification of existing ecological conditions
- Prioritisation of issue and definition of specific area
- Consider wider stakeholder input on objective and priorities

Governance  
Frameworks

Adap

### Planning Cycle and Enabling Conditions



## Key Elements of the Marine Spatial Planning Methodology

### Pre-Planning & Cross-cutting Elements

Identifying Objectives

Leadership

Stakeholder Engagement

### Stakeholder identification and engagement

- Define and agree the objective. This could involve generating a common vision.
- Develop a mechanism for stakeholder engagement
- Identify when and how stakeholders can participate

### Leadership

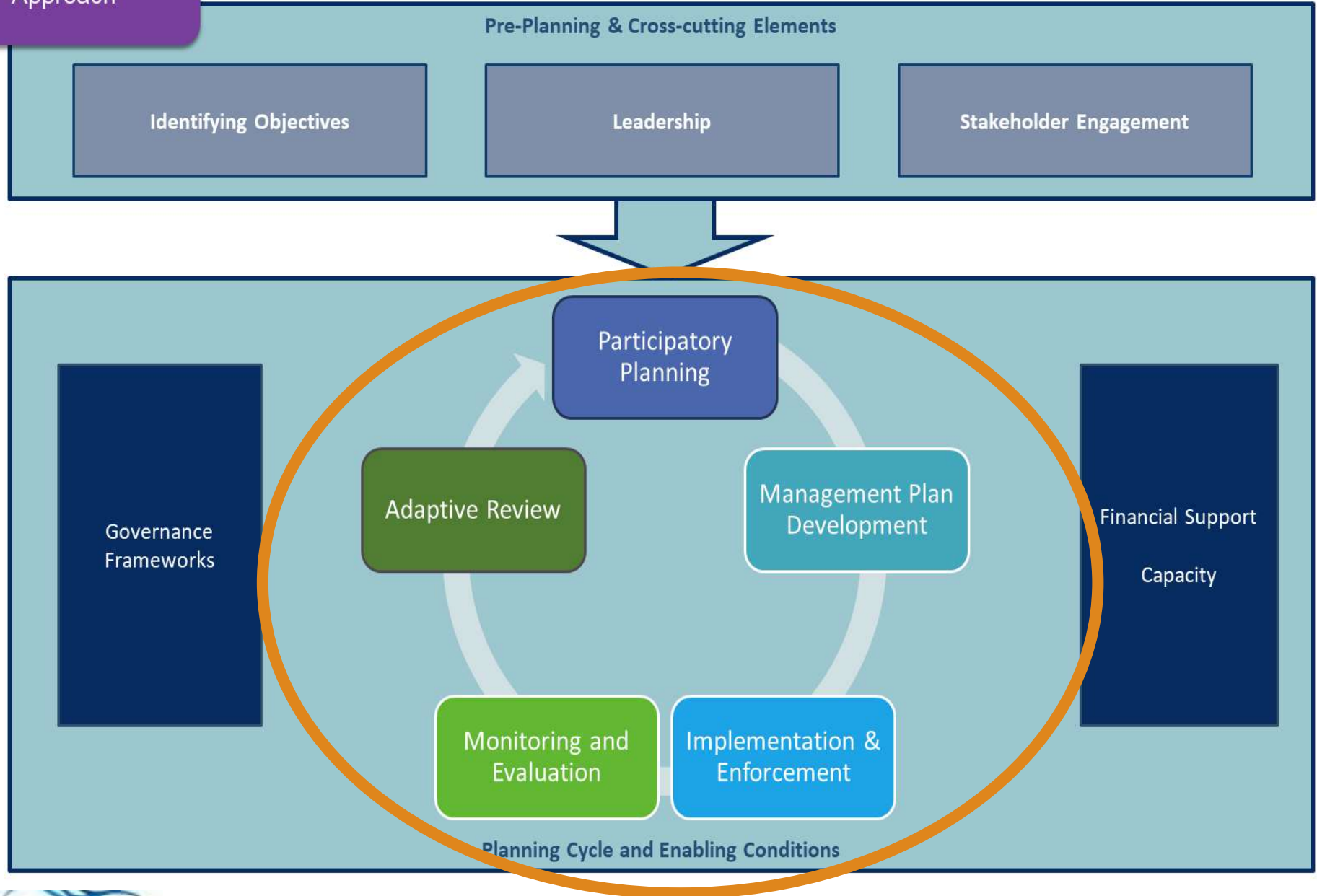
- Define roles and responsibilities

Plan  
nt

Financial Support  
Capacity



## Key Elements of the Marine Spatial Planning Methodology





# Considerations

- \* Outlined a general Marine Spatial Planning process
- \* Lack of a cross sectoral governance framework for ABNJ is a potential barrier to the implementation of marine spatial planning
- \* Developed governance options under which the methodology can be 'tested'
- \* ABNJ-specific guidance to be developed for each element
- \* Stakeholder feedback to refine methodology





# Next steps for the Marine Spatial Planning Methodology

- \* March 2019 – input from CPPS workshop
- \* Draft output available for South East Pacific regional review
- \* June 2019 – input from Nairobi Convention workshop
- \* Draft output available for Western Indian Ocean regional review
- \* July 2019 – Circulation for external expert review
- \* August 2019 – finalised methodology potentially presented at IGC 3







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# Thank you



## Key Elements of the Marine Spatial Planning Methodology

### Legal frameworks

- Identify, review and agree upon existing relevant legal frameworks and mandates of relevant organisations

### Finance

- Identify financial mechanisms to support the planning process
- Identify sustainable finance for implementation

### Capacity

- Identify champions for the planning process
- Identify capacity needs and develop to engage with and implement plan

Identifying Ok

er Engagement

Governance  
Frameworks

Financial Support  
Capacity

Planning Cycle and Enabling Conditions



## Planning Cycle



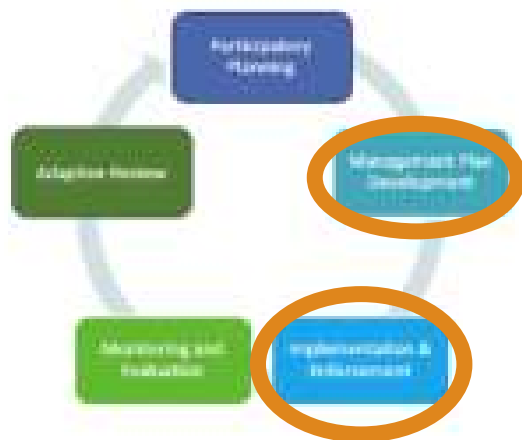
### Participatory plan formation

- Develop participatory planning process
  - Who, how, when
  - Dispute settlement processes
- Identify and incorporate relevant data
  - Existing activities, measures etc.
  - Analysis of future conditions





# Planning Cycle



## Management plan development

- Draft management plan for area-based management measures

## Implementation and enforcement

- Responsible entities (previously identified) to implement management measures
- Enforcement identified in planning process





# Planning Cycle



## Monitoring and Evaluation

- Conduct monitoring activities in line with management plan requirements
- Evaluation of effectiveness of measures (process in line with management plan)

## Adaptive review

- Participatory process to review management actions
- Adaptation of measures







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# Approach to testing a marine spatial planning methodology

Rachael Scrimgeour

Programme Officer UN Environment World Conservation Monitoring Centre



# The issue

- \* **Key challenge:** governance framework
  - \* Evolution of governance framework in the future
  - \* Increases in- and emergence of new- activities in ABNJ

*We need to understand how the methodology will be affected by the evolving governance and usage landscapes.*

To do this, we need to consider a hypothetical future...





# In this future....

*Increased activity has been noted in an area of the High Seas with important biodiversity features.*

- \* Marine Spatial Planning is needed to ensure biodiversity conservation and sustainable resource use, the continuation of activities, and avoiding incompatible

**This information can be found in ANNEX 1**

- \* Current uses include:

## Conservation

- Migrating whales
- Deep-sea coral and sponges exist
- EBSA and KBA descriptions

## Fisheries

- Fishing footprint increasing
- RFMO management more sophisticated
- VME designation for deep-sea coral

## Tourism

- Tourism revenue from whale watching
- Coastal tourism

## Telecommunications

- Communications cable runs through mining exploration area
- Awareness of cable locations increasing
- Some cables still at risk of damage

## Mining

- Designated mining exploration area in proximity to VME.
- REMP processes nearly finished for all ocean basins
- APEIs designated in associated with all mining concessions.



# Testing the methodology

- \* Imagine you are a marine planner living in this imaginary future.

*We need to understand how the MSP will be affected by the evolving governance regimes.*



To do this you will explore **one element** of the MSP methodology under **two different** governance options.

No International Legally  
Binding Instrument

International Legally  
Binding Instrument

**This information can be found in ANNEX 2**





# Testing the methodology

## Tourism

- Tourism revenue from whale watching
- Coastal tourism

## Conservation

- Migrating whales
- Deep-sea coral and sponges exist
- EBSA and KBA descriptions

## Fisheries

- Fishing footprint increasing
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- Communications cable runs through mining exploration area
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## Mining

- Designated mining exploration area in proximity to VME.
- REMP processes nearly finished for all ocean basins
- APEIs designated in associated with all mining concessions.

How does the governance option influence this element of MSP?

No International Legally Binding Instrument



International Legally Binding Instrument





# Activity

## \* This is a group activity

- \* You will be given a number
- \* After coffee break, please join the group match
- \* Groups will be separated into French and Eng
- \* Please nominate a rapporteur
- \* Groups will report back after lunch

## \* Each group will be given:

- \* An instruction sheet
  - \* Annex 1 = Hypothetical future
  - \* Annex 2 = details on governance options
- \* 2x worksheets
  - \* Each worksheet corresponds to a different element
  - \* Each group will look at a different element

Marine Spatial Planning methodology interactive session

Workshop material, Joint Workshop, June 12<sup>th</sup> 2023, Cape Town

Coastal Zone Management, Marine Policy and Impact

**Identify Issues and Objectives**

A marine spatial planning methodology for cities has been developed by WCMC, for the 18th Cape Town group, which will support you to assess specific elements of the methodology and consider how they might be applied to your own coastal governance policies.

**WCMC will use your feedback to improve the methodology and the guidance it contains – your responses will help make it more robust and easier to use in the new world the methodology will be published as a report at the end of the project.**

**Identify Issues and Objectives**

Currently, there are no existing activities occurring in the city, however, for the city's coastline, we have developed a hypothetical future in which new activities, objectives and the environment of the city's coastline has become available, and a range of human activities compete with each other and pose threats to the environment. We have developed a range of options for the future scenario of the coastline.

Imagine you are a marine planner for the city's coastline. Your job is to use marine spatial planning as a tool to balance conflicts and manage environmental threats related to human activities in the city.

**Identify Issues and Objectives**

**Step 1: Identify the issues**

- Please read through the issues to be assessed.
- Think about the potential threats and risks, and how they might impact the city.

**Step 2: Identify the potential options**

- Please look at the two governance options in Annex 2.
- Governance option 1: Consider a situation where there is no intervention legally binding on the city's coastline. In this situation, governance option 2: Consider a situation where there is a new intervention legally binding on the city's coastline.

**Step 3: Ranking**

- The marine spatial planning methodology is ranking of different elements, this would be the process of ranking the issues and the two governance options.
- Consider if the elements of marine spatial planning can be undertaken under each governance option, and what might be involved in supporting the process. Think about the potential for cross-sectoral coordination and the integration and harmonisation of all elements.

Governance option 1: No intervention legally binding on the city's coastline  
Governance option 2: Intervention legally binding on the city's coastline

**Element 1: Identifying objectives**

Is issue identification and prioritisation possible under the governance option?

Issues for consideration	Issues	Challenges / opportunities
Identified management objectives, proposed activity, mechanism for proposal, reaching an agreement (e.g. agreement, area, size, time)		
Legal framework (what problems are identified in the legal framework which influence issue identification)		
Data and information (what data and information may be required, who can collect data, how to use it / two case decision-making, scientific, jurisdictional)		
Stakeholder engagement (how are stakeholders identified and how do they communicate)		
Cross-sectoral issues (can actors come together to discuss issues of concern, how could this occur?)		



# What you will do

## \* In your groups

- \* Read the materials provided
- \* Consider the element of marine spatial planning on your worksheet
- \* One worksheet is to be used for each governance option
- \* Determine whether you agree with the statement at the top and comment using your experiences
- \* Points to consider are provided to encourage discussion on how the element is influenced

Governance option 1: No internationally legally binding instrument
Governance option 2: Internationally legally binding agreement

Element/s: Identifying objectives

Is issue identification and prioritisation possible under the governance option?

Points for consideration	How?	Challenges / opportunities
<p>Intentional arrangement (leadership, project entity, mechanism for proposal, reaching an agreement e.g. objectives, area, size, shape)</p>		
<p>Legal framework (what principles are enshrined in the legal framework which influence issue identification?)</p>		
<p>Data and information (what data and information may be required; who can collect data; how is it used / not used; decision-making; scientific committee)</p>		
<p>Stakeholder engagement (how are stakeholders identified and how do they communicate?)</p>		
<p>Cross-sectoral forum (how actors come together to discuss issues of concern; how could this occur?)</p>		





# Worked example

- Element: stakeholder engagement

**Governance Option:**  
No ILBI



- Stakeholders to engage include: ISA, IMO, RFMO, scientific research and academia, NGOs, cable laying company (and the country in which that country is based)
- A regional platform could coordinate consultation
- Wider involvement of sectoral stakeholders in regional platform required – potential for gaps
- Lack of recognition of regional platform at global level may be challenging. might hinder its support/ability to engage meaningfully

## Points for consideration

**Institutional**  
(entity responsible for undertaking stakeholder engagement, relevant stakeholders, how they will be engaged)

## Legal framework

(obligation to ensure wider stakeholder obligation)

## Stakeholder engagement

(what stakeholders should be involved and how, are there existing mechanisms for engagement)



# Worked example

- Element: stakeholder engagement

**Governance Option:**  
No ILBI

Relevant stakeholders can be easily identified and engaged.

Agree

Maybe

Disagree

- In the fictional scenario stakeholders who would need to engage would include: ISA, IMO, RFMO, scientists studying deep seabed and whales, NGOs, the cable laying company (and the country in which that country is based) ....and others?*
- A regional platform provides a mechanism to coordinate consultation*
- There could be gaps from organisations who are not part of the platform*
- Lack of global recognition of the regional platform might hinder its support/ability to engage meaningfully*

Points for consideration	Notes	Challenges / opportunities
<b>Institutional arrangement</b> (entity responsible for undertaking stakeholder engagement, who determines relevant stakeholders and how they will be engaged)		
<b>Legal obligations</b> (stakeholder engagement)	<ul style="list-style-type: none"> <li>The regional platform could be made up of a Regional Seas Organisation and a Regional Fishery management organisation.</li> <li>Either of these could organise a consultation mechanism.</li> <li>There is no obligation for all actors to engage in that process</li> <li>Public participation would be challenging to include as there is no current mechanism to support this</li> </ul>	<ul style="list-style-type: none"> <li>Engagement with the process would be optional as there is no formal mechanism</li> <li>An open process could be done to allow stakeholders to self select – but this would potentially miss some.</li> <li>Experts could be consulted to identify additional individuals to engage.</li> <li>X? might challenge the process</li> </ul>
<b>Stakeholder involvement</b> (stakeholder engagement)		



# Worked example

- Element: stakeholder engagement

**Governance Option:**  
No ILBI



Relevant stakeholders can be easily identified and engaged.

Agree

Maybe

Disagree

- In the fictional scenario stakeholders who would need to engage would include: ISA, IMO, RFMO, scientists studying deep seabed and whales, NGOs, the cable laying company (and the country in which that country is based) ....and others?*
- A regional platform provides a mechanism to coordinate consultation*
- There could be gaps from organisations who are not part of the platform*
- Lack of global recognition of the regional platform might hinder its support/ability to engage meaningfully*

Points for consideration	Notes	Challenges / opportunities
<b>Institutional arrangement</b> (entity responsible for undertaking stakeholder engagement, who determines relevant stakeholders and how they will be engaged)	<i>The regional platform could be made up of a Regional Seas Organisation and a Regional Fishery management organisation. Either of these could organise a consultation mechanism. There is no obligation for all actors to engage in that process Public participation would be challenging to include as there is no current mechanism to support this</i>	<i>Engagement with the process would be optional as there is no formal mechanism An open process could be done to allow stakeholders to self select – but this would potentially miss some. Experts could be consulted to identify additional individuals to engage. X? might challenge the process</i>
<b>Legal frameworks</b> (is there an obligation to ensure wider stakeholder obligation)	Continue adding notes in response to these points.....	
<b>Stakeholder engagement</b> (what stakeholders should be involved and how, are there existing mechanisms for		



# When reporting back...

- \* Please report on the following:
  - \* Agree, disagree, uncertain about element?
  - \* Why?
  - \* What are the key challenges or opportunities?





# Thank you

- UNEP-WCMC:
  - [Rachael.Scrimgeour@unep-wcmc.org](mailto:Rachael.Scrimgeour@unep-wcmc.org)
  - [Nina.bhola@unep-wcmc.org](mailto:Nina.bhola@unep-wcmc.org)

<http://www.commonoceans.org/>



# Marine spatial planning elements – ABNJ context

## Identifying the Need

- Limited sectors operating in ABNJ
- Ecological conditions in ABNJ are not yet fully understood

## Ecosystem Approach

- It will require data on the ecosystems, and an understanding of what benefits people are gaining from them. E.g. deep sea sponges may provide medicine now and in the future through scientific research, whales are important for eco-tourism and deep sea habitats can support aspects of fisheries.
- Can this information be accessed? Who holds it?
- Is there an obvious scientific committee, or working group, that could help with this aspect?

## Leadership, Roles and Responsibilities

- Do any organisations currently have a mandate for cross-sectoral planning?
- Is it something being considered in the BBNJ process?
- Maybe they don't need a mandate but would need those participating to agree that org X could lead a planning process (similar to the national gov agreeing an NGO could lead one in a specific country).



# Capacity needs assessment for BBNJ in the SE Atlantic



# STRONG High Seas Project

## Project Goals

- Development of targeted measures aimed at strengthening integrated/cross-sectoral governance of ABNJ at multiple scales
- Promotion of cross-regional cooperation and global-regional interaction
- Development of targeted measures based on the ecosystem approach to support the above
- **Development of capacity to participate in international negotiations on BBNJ**
- **Development of capacity to implement conservation and management measures in ABNJ**
- Identification/development of tools and best practices for: i) monitoring, control and surveillance; and ii) integrated ocean governance in ABNJ
- Promote stronger role for regional approaches in international ABNJ negotiations



# Project Activities

- Awareness-raising and capacity-building
- Assess capacity building needs and provide training on the implementation of regional ABNJ governance approaches ( training in 2019 & 2020).

**Responsibility for the capacity building component of the project in the ABC region was assigned to IOI-SA as a local project partner.**



# Capacity Needs Assessment

First step was to undertake a **Capacity Needs Assessment** with a view to providing direction for the training and awareness-raising activities both under the project and in the longer term.

For purposes of the assessment, capacity was seen to include:

- Capacity to implement **conservation and management measures** in ABNJ;
- Capacity to participate in the **BBNJ negotiations**; and
- **Awareness-raising** aimed at **building the political will** in the region to support and participate in ABNJ/BBNJ.



# Capacity building & BBNJ Negotiations

**Capacity building and technology transfer** are one of the elements being considered in the BBNJ negotiations

The Policy Brief on Capacity Building (Common Oceans Project) describes them as the “enabler” of the other elements which include:

- Area-based management tools, including marine protected areas;
- Environmental impact assessments;
- Marine genetic resources, including questions of their access and sharing of their benefits.



# Scope of technical skills required

- Legal skills – including an understanding of international law, and the development of national policy and legislation on marine and coastal management issues (eg. ICZM, resource management, spatial planning etc)
- Identification and development of resources in ABNJ which could potentially contribute to Blue Economy initiatives
- Application of various management tools (ABMTs – such as VMEs, PSSA's, EBSA's, MPAs - EIAs etc)
- Implementation of the ecosystem approach
- Scientific research
- Technology transfer
- Data acquisition and information management.

**NOTE: Most of these skills are not unique to ABNJ but are also required for management on marine areas within the jurisdiction of coastal states**



# Capacity needs assessment process

A set of questions was developed based on the definition and scope of capacity building adopted for the project.

The questionnaire was circulated by e-mail – with the option of either completing a copy as a Word file OR via an online facility – to between 150 and 200 stakeholders (including all the ABC Focal Points). It was also made available via social media.

To date, 20 responses have been received from individuals from 11 of the 22 countries in the ABC region. Most were from government officials - including 6 Focal Points – but responses also received from academics, research institutions and NGOs.

Given the low response, what we are presenting should be considered as **preliminary results/ recommendations**. In order to strengthen the basis of the recommendations, we would like to request those present from ABC countries to complete a **questionnaire**.



# Levels of Awareness of ABNJ/BBNJ

Target group	Yes	No	NR
Respondents	18	2	
Decision-makers	10	7	3
Colleagues	14	5	1
General public	1	18	1



# Legal aspects

Of the 11 countries from which responses were received, the following number had policies/legislation on:

- Integrated Coastal Zone Management – 8
- Conservation and sustainable use of marine biodiversity – 9
- Fisheries management – 10
- Marine Spatial Planning – 3.

With respect to participation in the BBNJ negotiations and/or UNDOALOS training on ABNJ, **7 countries indicated that they were involved in the negotiations** but **none** had participated in the training. Of concern was that, based on information from other sources – eg. workshop reports – it is clear that people from quite a few of the countries have, in fact attended the training. This suggests that there is a lack of sharing of information around the BBNJ negotiations & related activities within the countries.



# Management tools

Tool	Yes	No response
Area-based Management Tools (inc MSP)	6	5
Vulnerable Marine Ecosystems (FAO)	6	5
Particularly Sensitive Sea Areas (IMO)	5	6
Special Areas (IMO)	3	8
Areas of Particular Ecological Importance (ISA)	3	8
Marine Protected Areas (CBD)	11	0
Ecologically or Biologically Sensitive Areas (CBD)	9	2
Environmental Impact Assessments	11	0
Ecosystem approach	Most	

Some are linked to specific sectors, so response likely influenced by expertise of respondent



# Research, data acquisition & management

- All of the 11 countries undertake research on marine/coastal ecosystems/resources but only 5 include work on ABNJ.
- The latter include work on Deep Sea Biodiversity, Marine Genetic Resources and Management Tools.
- Some of them are involved in international collaborations but there were no clear indications of technology transfer.
- 9 of the countries have coastal/ocean monitoring systems in place (ocean observation systems (9); water quality (6); coral reef (3); and seagrass (1)).
- Most also have information management systems in place.



# Priorities for capacity building

Type of capacity building		High	Medium	Low
Building political will	Decision makers	15	0	4
	General public	5	6	5
Legal/ enforcement capacity	Drafting policy/laws	10	8	1
	Compliance & enforcement	11	6	2
Management capacity	Management tools	12	5	1
	Ecosystem approach	11	3	1
Research capacity		14	3	2
Technology transfer		13	3	1



# Capacity building options

Option	# of votes
Regional introductory short course on ABNJ/BBNJ	18
Policy dialogue at regional level	18
Regional short course/s on management tools	17
High Level Seminar on ABNJ/BBNJ (political will)	16
Public awareness via social media	15
Public awareness via traditional media	12
Primer/policy brief aimed at decision-makers	11
Academic course on ABNJ/BBNJ	11
Massive Online Open Course	8
Webinars	7



# Existing opportunities in the region

## ☐ IOC-AFRICA

## ☐ SEAFO – partner of Common Oceans Deep Seas Project

- Monitoring, Control & Surveillance Workshop (Dec 2018)
- Surveys on Fridtjof Nansen (Jan/Feb 2019)
- Observer training (May 2019)
- Port Inspection training (June 2019)

## ☐ BCC – BCLME

## ☐ iAtlantic ?

## ☐ IDDRI Project on Oil & Gas

## ☐ DOSI – Deep Ocean Stewardship Initiative

## ☐ Mami Wata Project

## ☐ IOI Ocean Governance training



# Recommendations on capacity building

Option	Other opportunities
<b>SHORT TERM:</b>	
Regional short course on ABNJ/BBNJ	Priority for STRONG
Policy dialogue at regional level	STRONG HS, iAtlantic etc
Regional short course/s on management tools	Various existing courses
High Level Seminar on ABNJ/BBNJ (political will)	Priority for STRONG (COP 2020)
<b>LONGER TERM:</b>	
Primer/policy brief aimed at decision-makers	ABC Working Group?
Academic course on ABNJ/BBNJ	Available in US, section in IOI OGTP
Massive Online Open Course	
Webinars	



## Way forward

- First round of training scheduled to take place in the second half of this year.
- The ABC WG on ABNJ has a sub-group on capacity building which we would like to request to consider the recommendations of this report and in the longer term help drive and coordinate implementation of regional capacity building activities around ABNJ/BBNJ.
- Should also consider capacity needs assessments from other sources.
- National Working Groups to coordinate activities/ information in-country.



# Complete questionnaire

# Thank you



# Stakeholder Platform Design



# STRONG Dialogue Workshop 1 – Abidjan 2018

“At the moment, there is no framework in place for cooperation and management of issues connected to ABNJ in the Southeast Atlantic. Participants identified the lack of an information-sharing mechanism and the lack of a centralised information platform with, for example, basic information on ABNJ issues and details on regional events such as conferences and workshops. It was recommended to establish a platform that would help stakeholders stay in touch and to propagate information.”





# Information dissemination and communication platform

[www.abidjanconvention.org](http://www.abidjanconvention.org)



← → ↻ ⓘ Not secure | [abidjanconvention.org](http://abidjanconvention.org)



[HOME](#) [MEETINGS](#) [VACANCIES](#) [GALLERY](#) [CONTACT](#)



**2019 ABIDJAN CONVENTION  
PLENIPOTENTIARIES  
CONFERENCE**

**ABIDJAN, CÔTE D'IVOIRE  
2ND JULY 2019**

**MEETING OF THE ABIDJAN  
CONVENTION BUREAU**  
1st JULY 2019

**ABIDJAN CONVENTION  
FOCAL POINTS MEETING**  
3th JULY 2019

**ABIDJAN CONVENTION  
PARTNERS MEETING**  
3th JULY 2019

[unenvironment-abidjan-convention@un.org](mailto:unenvironment-abidjan-convention@un.org)  
+225 22 51 46 00





# Proposed pages



<http://abidjanconvention.org/biodiversity-beyond-national-jurisdiction-web-platform-abidjan-convention-region>



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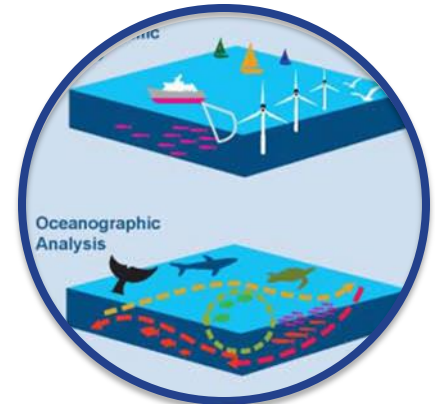
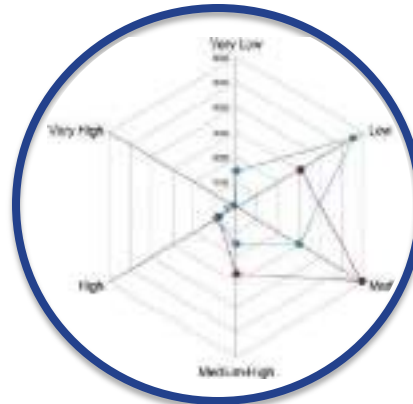
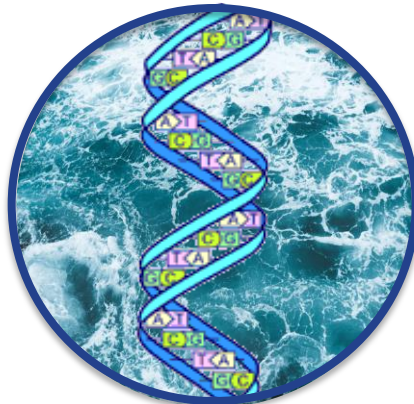
A vibrant underwater photograph of a coral reef with many small orange fish swimming around.

**BIODIVERSITY BEYOND NATIONAL JURISDICTION  
WEB PLATFORM FOR ABIDJAN CONVENTION  
REGION**



# Biodiversity Beyond National Jurisdiction web platform for Abidjan Convention region

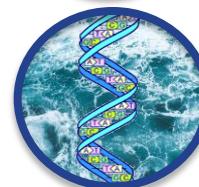
Pages to include e.g.: Brief, relevant description of the topic in user friendly, jargon-light text and most importantly, Links to where you can find more information.







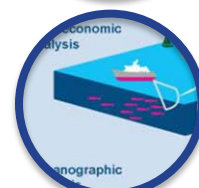
**Understanding BBNJ and its importance for Africa**



**Marine Genetic Resources**



**Environmental Impact Assessments and Strategic Environmental Assessments**



**Area-Based Management Tools (ABMT)**



**Capacity building and Knowledge transfer**



**Updates from the New York Negotiations**



**Publications**

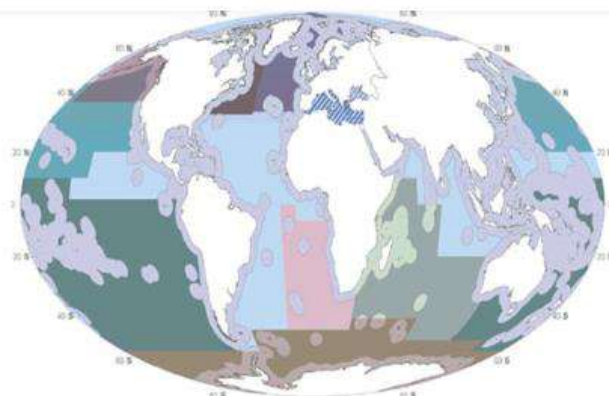


**Links to organisations, data sources & articles**



# Proposed pages

## BIODIVERSITY BEYOND NATIONAL JURISDICTION WEB PLATFORM FOR ABIDJAN CONVENTION REGION



200nm limit

**Non-Tuna Regional Fisheries Management Organizations**

- Conv. on Cons. of Antarctic Marine Living Resources
- Conv. on Cons. & Mgmt of Pollock Resources in the Central Bering Sea
- General Fisheries Council for the Mediterranean
- International Pacific Halibut Commission
- Northwest Atlantic Fisheries Organization (NAFO)
- North East Atlantic Fisheries Commission (NEAFC)
- North Pacific Anadromous Fish Commission
- South East Atlantic Fisheries Organization (SEAFO)
- South Indian Ocean Fisheries Agreement (SIOFA)
- South Pacific Regional Fisheries Mgmt Org
- Southwest Indian Ocean Fisheries Commission

Source: Ben et al., 2014.

### ECOLOGICAL CONNECTIVITY OF THE OCEAN

## UNDERSTANDING BBNJ AND ITS IMPORTANCE FOR AFRICA

The adoption of UNCLOS in 1982 was established to manage human activities taking place in and on the ocean. It however does not reflect the ecological connectivity of the ocean.

The ocean is dynamic environment within which nutrients, gases, energy and heat move both horizontally across marine realms and vertically within the water column through physical, chemical and biological processes that enable their distribution across latitudes,

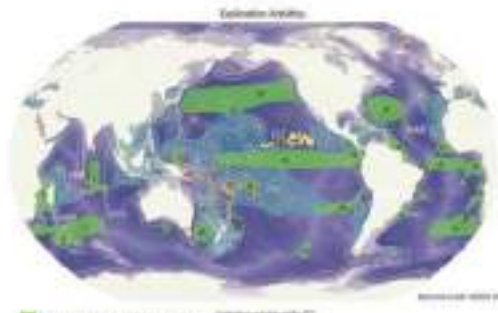


# Proposed pages

## BIODIVERSITY BEYOND NATIONAL JURISDICTION WEB PLATFORM FOR ABIDJAN CONVENTION REGION

### ENVIRONMENTAL IMPACT ASSESSMENTS AND STRATEGIC ENVIRONMENTAL ASSESSMENTS

#### WHAT IS THE ISSUE ?



Deep-sea mining is the process of retrieving mineral deposits from the deep sea – the area of the ocean below 300 m which covers about 65% of the Earth's surface.

There is growing interest in the mineral deposits of the deep sea. This is largely due to depleting terrestrial deposits for metals such as copper, nickel, aluminium, manganese, zinc, lithium and cobalt, coupled with rising demand for these metals to produce high-tech applications such as smartphones and green technologies such as wind turbines, solar panels and electric storage batteries.

So far, the focus has been on exploring the deep sea – assessing the size and extent of mineral deposits. By May 2016, the International Seabed Authority (ISA)



# Proposed pages

## BIODIVERSITY BEYOND NATIONAL JURISDICTION WEB PLATFORM FOR ABIDJAN CONVENTION REGION

### AREA-BASED MANAGEMENT TOOLS

#### OFFICIAL MPA MAP



Source: IUCN and UNEP-WFP/WWF. The data presented in this map is for information only. It is not intended to be used for legal purposes. For more information on MPA coverage, please visit [www.mpa-map.org](#).

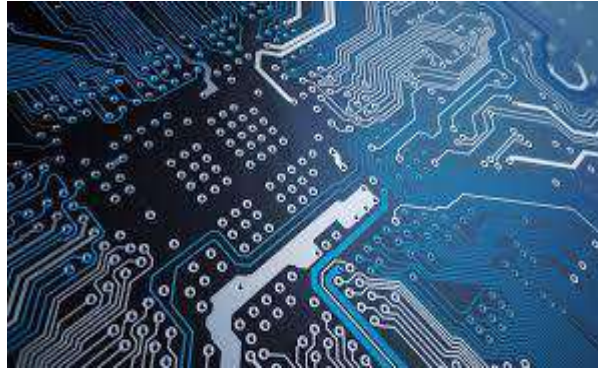
5.1% of the Global Ocean covered by marine protected areas  
Exclusively for Title = 1.23%

In order to evaluate progress towards achieving the global targets in the marine environment the *WOPA* is used to track the rate of change via the *Protected Planet Reports*, the *SDG* process as well as several academic publications see for example "Evaluating official marine protected area coverage for Aichi Target 11: appraising the data and methods that define our progress" *Thomas et al. 2014*. The progress in growth in the MPA network, resulting from a combination of new sites being created, existing sites being expanded and a number of large sites being announced, will contribute even more to an increase in the total protected area coverage. An important tool in tracking the continued evolution of the global MPA network is the "Official MPA Map" series developed in conjunction with IUCN which utilises versions of the *WOPA* to highlight progress in reaching the global targets.





# Capacity building and Knowledge transfer



Links to Training Opportunities:

- STRONG High Seas BBNJ Training for Abidjan Convention Region
- IOI-SA Course in Ocean Governance

Find Deep Sea Experts:

[www.deepseaexperts.org](http://www.deepseaexperts.org)

Find organisations working on BBNJ:

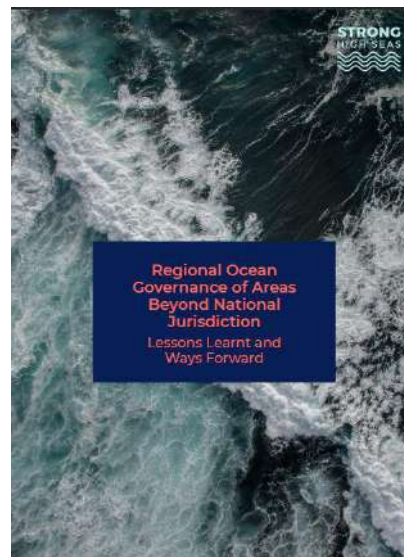
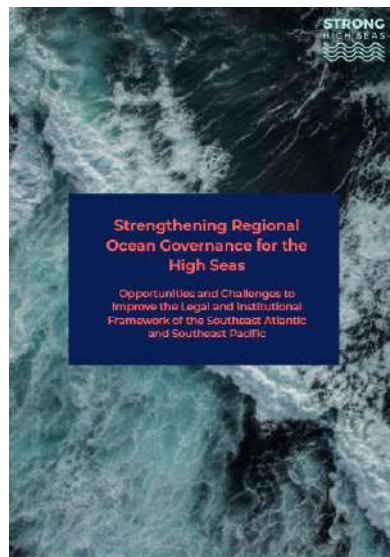
### Links to organisations

 <a href="http://www.iddri.org">www.iddri.org</a>	 <a href="http://www.iass-potsdam.de">www.iass-potsdam.de</a>	 <a href="http://www.unenvironment.org">www.unenvironment.org</a>	 <a href="http://www.prog-ocean.org">www.prog-ocean.org</a>	 <a href="http://www.un.org/oba/">www.un.org/oba/</a> <a href="http://www.worldoceanassessment.org">www.worldoceanassessment.org</a>
 <a href="http://www.eur-midas.net">www.eur-midas.net</a>	 <a href="http://www.ssrcc.co.uk/research/global-ocean-commission">www.ssrcc.co.uk/research/global-ocean-commission</a>	 <a href="http://www.highseasalliance.org">www.highseasalliance.org</a>	 <a href="http://www.ocean-council.org">www.ocean-council.org</a>	
 <a href="http://www.ioi.org/jm/bbnj">www.ioi.org/jm/bbnj</a>	 <a href="http://www.ioi-africa.org">www.ioi-africa.org</a>	 <a href="http://www.birdlife.org">www.birdlife.org</a>	 <a href="http://www.iucn.org">www.iucn.org</a>	
 <a href="http://www.ucl.ac.uk">www.ucl.ac.uk</a>	 <a href="http://www.worldwildlife.org">www.worldwildlife.org</a>	 <a href="http://www.savehighseas.org">www.savehighseas.org</a>	 <a href="http://www.dosi-project.org">www.dosi-project.org</a>	 <a href="http://www.deepseaexperts.org">www.deepseaexperts.org</a>





# Publications



<https://www.prog-ocean.org/resources/>



# User Log on interface

User name: xxxxxxxx

Password: xxxxxxxx

- Join the conversation on marine genetic resources
- Join the conversation on EIA and SEA
- Join the conversation on ABMT
- Join the conversation on Capacity Development and Technology Transfer
- View the calendar of events
- View training opportunities
- Access the latest and archived news
- Webinars



# Links to events



**ABEF**2019  
AFRICA BLUE ECONOMY FORUM

TUNIS 25 – 26 JUNE 2019  
[www.abef2019.com](http://www.abef2019.com)



“Achieving a healthy ocean – Regional ocean governance beyond 2020”.

30 September – 02 October 2019  
in Berlin, Germany



<https://www.sustainableoceansummit.org/>



# Ngiyabonga! Dankie! Merci! Asante! Enkosi! Thank you!



International Ocean Institute  
African Region

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INTERNATIONAL  
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## PROG

Partnership for Regional  
Ocean Governance

**Shannon Hampton**  
**IOI-SA**

Institute for Advanced Sustainability Studies e.V.

Berliner Strasse 130

D – 14467 Potsdam

Web: [www.iass-potsdam.de](http://www.iass-potsdam.de) & [www.prog-ocean.org/](http://www.prog-ocean.org/)



ABIDJAN CONVENTION  
CONVENTION D'ABIDJAN



IDDRI



International Ocean Institute  
African Region







# **ABNJ Deep Seas Project Capacity Assessment, Nairobi Convention: Area-Based Planning in ABNJ**

Louise Lieberknecht, Miles Macmillan-Lawler (GRID-Arendal)  
Nina Bhola, Rachael Scrimgeour (UNEP-WCMC)





# Workshop Session



Capacity of the Nairobi Convention **network** (Member States + Secretariat) to carry out **area-based planning in ABNJ** of the Western Indian Ocean



1. **Identify current capacity development needs.**
2. Review previous capacity assessment.
3. Identify progress made on capacity building within ABNJ Deep Seas Project.









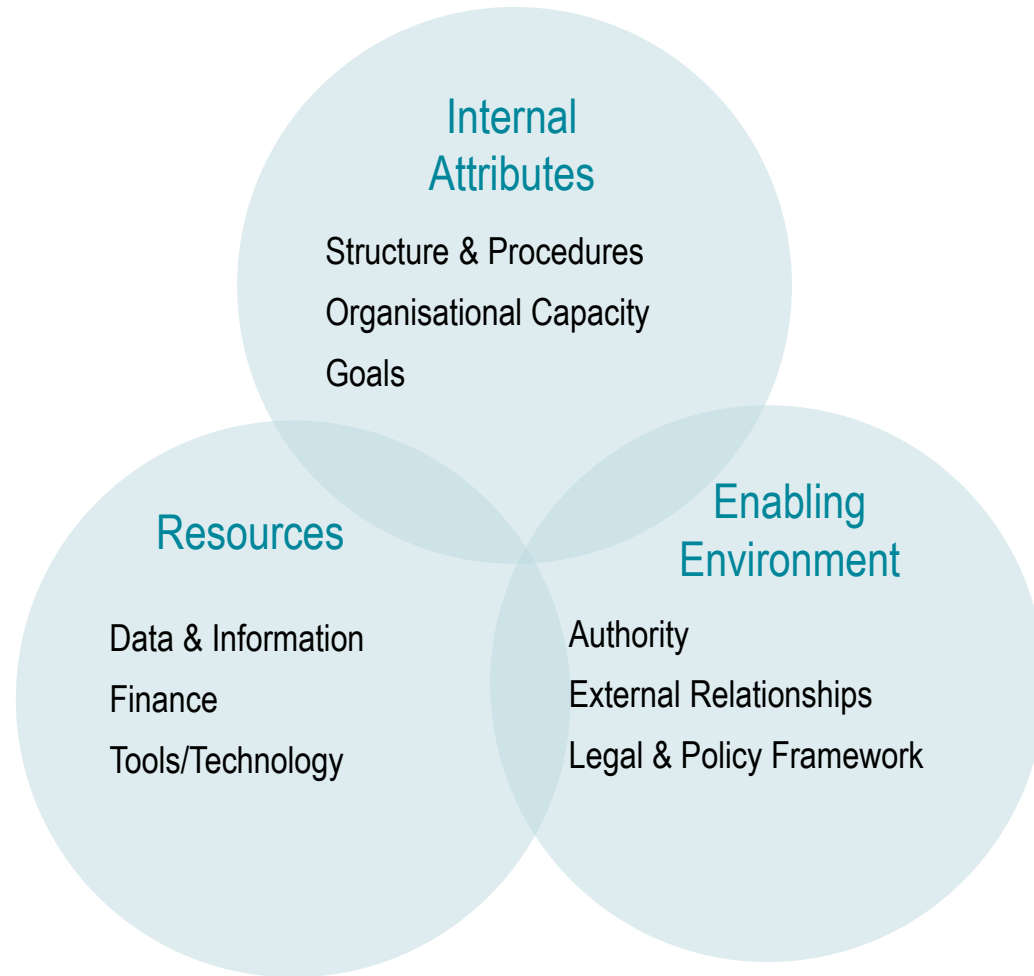


**What do we mean by “capacity”?**





# 3 Components of Capacity





# 2016-2017 Capacity Assessment



Banham, W., Bubb, P., Moktar, Z. (2016) UNEP-WCMC Capacity Development Tool: User Guidelines, version 3.0. UNEP-WCMC, Cambridge, UK.





“data on key species  
and habitats available  
at appropriate scale”

“data on the most  
important human  
activities available at  
appropriate scale”

### Internal Attributes

Structure & Procedures  
Organisational Capacity  
Goals

### Resources

Data & Information

Finance

Tools/Technology

### Enabling Environment

Authority

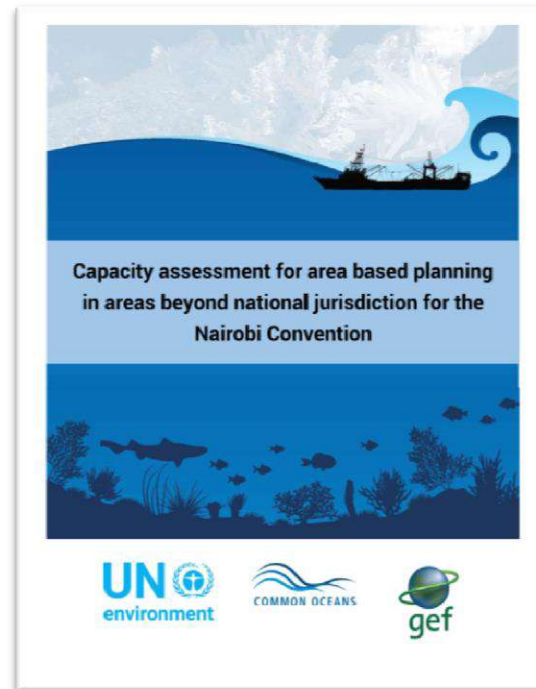
External Relationships

Legal & Policy Framework





# 2016-2017 Capacity Assessment



Macmillan-Lawler, M., Thomas, H., Fletcher, R., and Martin, J. 2018. Capacity assessment for area based planning in areas beyond national jurisdiction for the Nairobi Convention. Technical document produced as part of the GEF ABNJ Deep Seas Project. Cambridge (UK): UN Environment World Conservation Monitoring Centre. 22pp





The background is a stylized illustration. The top half shows a bright, cloudy sky with a large, stylized blue wave on the right. A black silhouette of a fishing ship is on the water. The bottom half is a dark blue underwater scene with various fish and coral silhouettes.

**Workshop session...**





# Workshop Session



Capacity of the Nairobi Convention **network** (Member States + Secretariat) to carry out **area-based planning in ABNJ** of the Western Indian Ocean

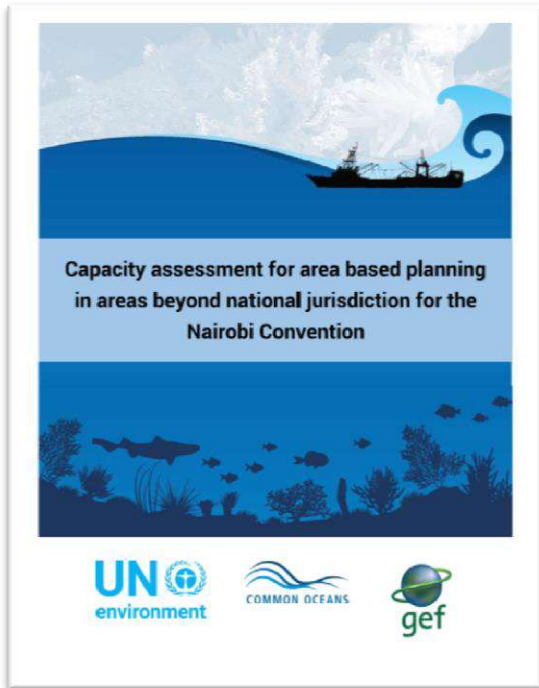


1. **Identify current capacity development needs.**
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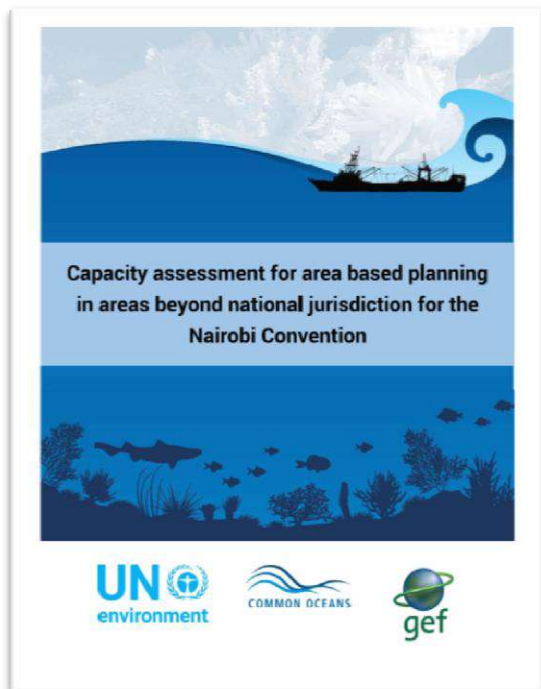


# Workshop Session





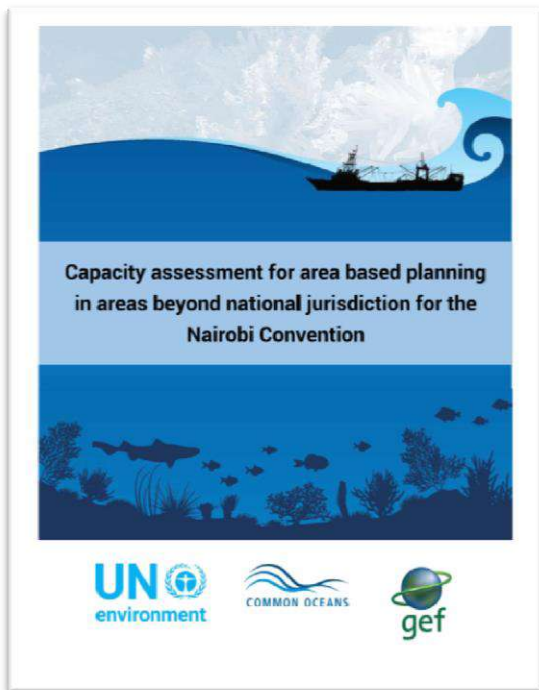
# Workshop Session



Desired Capacity	Existing Capacity → Capacity development needs & actions



# Workshop Session



## Desired Capacity

### *Data & Information*

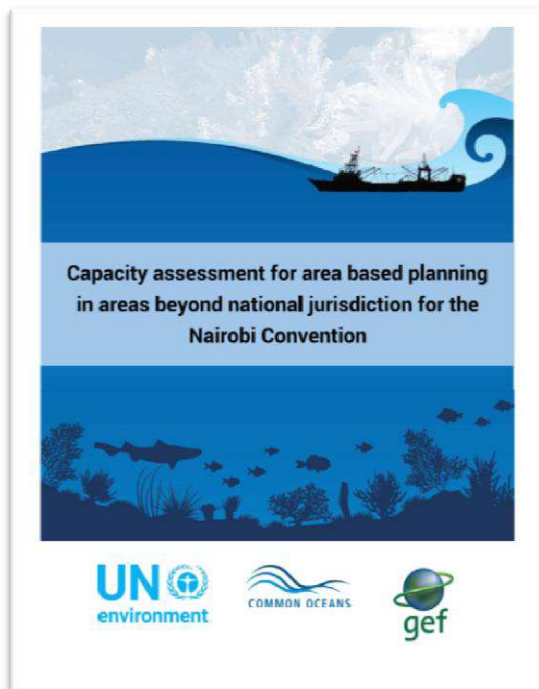
Data on key species and biodiversity available at global resolution, & ideally at regional & ecosystem resolution.

Existing Capacity → Capacity development needs & actions





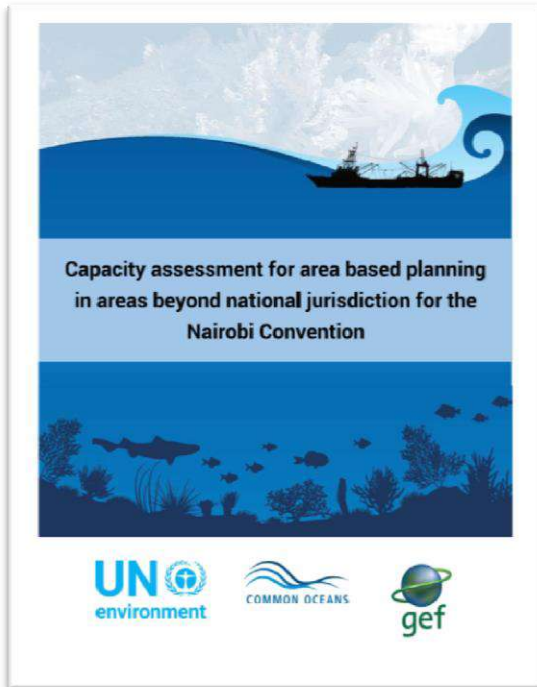
# Workshop Session



Desired Capacity	Existing Capacity → Capacity development needs & actions
<p><b><i>Data &amp; Information</i></b></p> <p>Data on key species and biodiversity available at global resolution, &amp; ideally at regional &amp; ecosystem resolution.</p>	<p>Relevant data exist for the region, but are not being shared between organisations in the network. No shared data repository for ABNJ data for the region.</p>



# Workshop Session



## Desired Capacity

### *Data & Information*

Data on key species and biodiversity available at global resolution, & ideally at regional & ecosystem resolution.

## Existing Capacity → Capacity development needs & actions

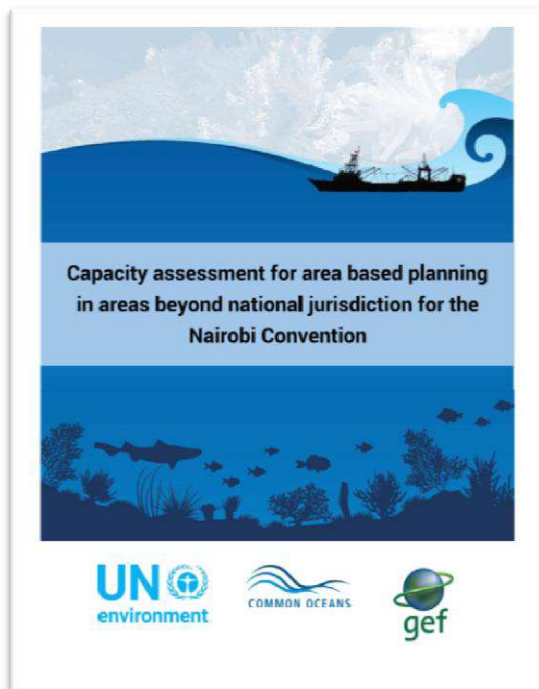
Relevant data exist for the region, but are not being shared between organisations in the network. No shared data repository for ABNJ data for the region.

### *Need:*

- Data collation & shared data store



# Workshop Session

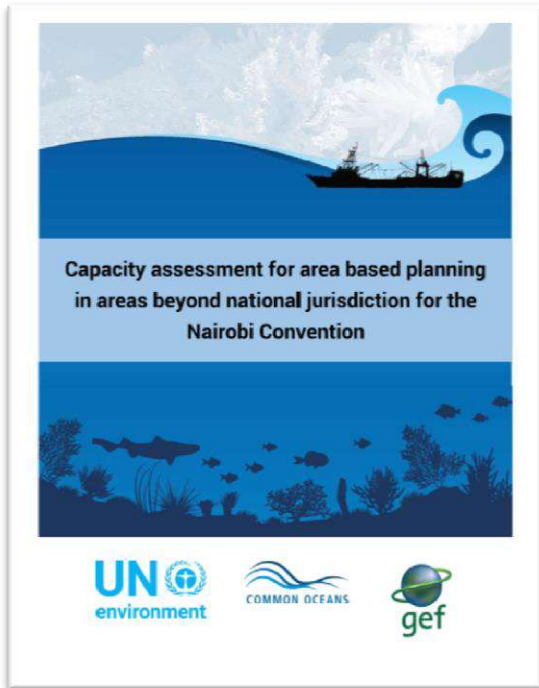


Desired Capacity	Existing Capacity → Capacity development needs & actions
<p><b>Data &amp; Information</b></p> <p>Data on key species and biodiversity available at global resolution, &amp; ideally at regional &amp; ecosystem resolution.</p>	<p>Relevant data exist for the region, but are not being shared between organisations in the network. No shared data repository for ABNJ data for the region.</p> <p><i>Need:</i></p> <ul style="list-style-type: none"> <li>- Data collation &amp; shared data store</li> </ul> <p><i>Action (by project):</i></p> <ul style="list-style-type: none"> <li>- Assist with data collation and create a data store</li> </ul>





# Workshop Session



Internal Attributes	Resources	Enabling Environment
<p><b>Internal Attributes</b></p> <p>Structure &amp; Procedures</p> <p>Organisational Capacity</p> <p>Goals</p>	<p><b>Resources</b></p> <p>Data &amp; Information</p> <p>Finance</p> <p>Tools/Technology</p>	<p><b>Enabling Environment</b></p> <p>Authority</p> <p>External Relationships</p> <p>Legal &amp; Policy Framework</p>

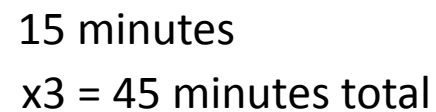
Internal Attributes

Resources

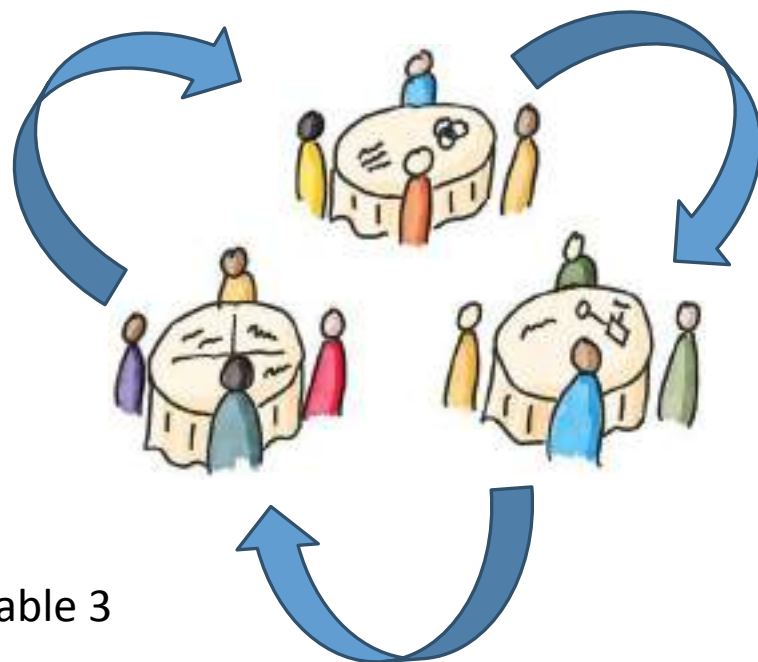
Enabling Environment







## Enabling Environment → Table 3





# Review 2016-2017 assessment

- Is it still accurate today?
- What is missing, what has changed?
- What are the capacity development needs now?







**Before we start...**  
**Any questions about the workshop session?**









# Review 2016-2017 assessment

- Is it still accurate today?
- What is missing, what has changed?
- What are the capacity development needs now?









The background is a stylized illustration. The top half shows a dark blue silhouette of a fishing boat with two masts and cranes, positioned on a light blue wavy line representing the water's surface. Above the boat is a large, bright, textured white shape resembling a splash or a large wave. The bottom half of the image is a darker blue, representing the underwater environment. It features several dark blue silhouettes of fish of various sizes swimming in different directions. At the bottom, there are silhouettes of various underwater plants and coral structures.

**Bringing it home ...**





- What are the 3 main capacity development needs now?
- What are the 3 most important actions to take next?  
(what, who, when...)
- What are the main capacity development achievements of the ABNJ Deep Seas Project?











# Thank you Merci Obrigado

Louise Lieberknecht, GRID-Arendal  
[Louise.Lieberknecht@grida.no](mailto:Louise.Lieberknecht@grida.no)





# ECOLOGICAL BASELINES

## Why, how, and progress to date

**Ross M. Wanless**



# Outline

1. Why an Ecological Baseline
2. What it looks like
3. What we've done so far





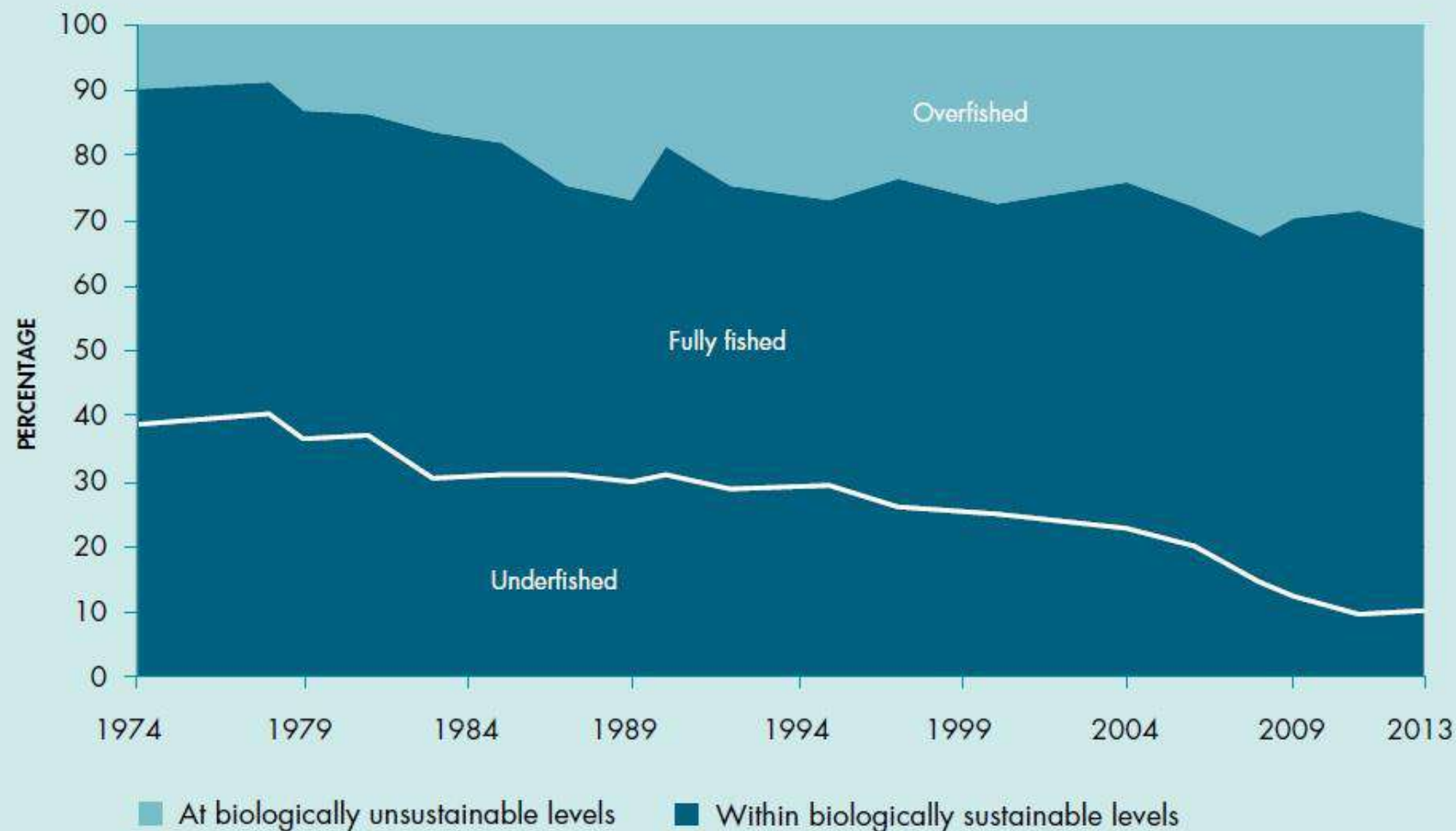
The single biggest impact that humans have on the ocean is...



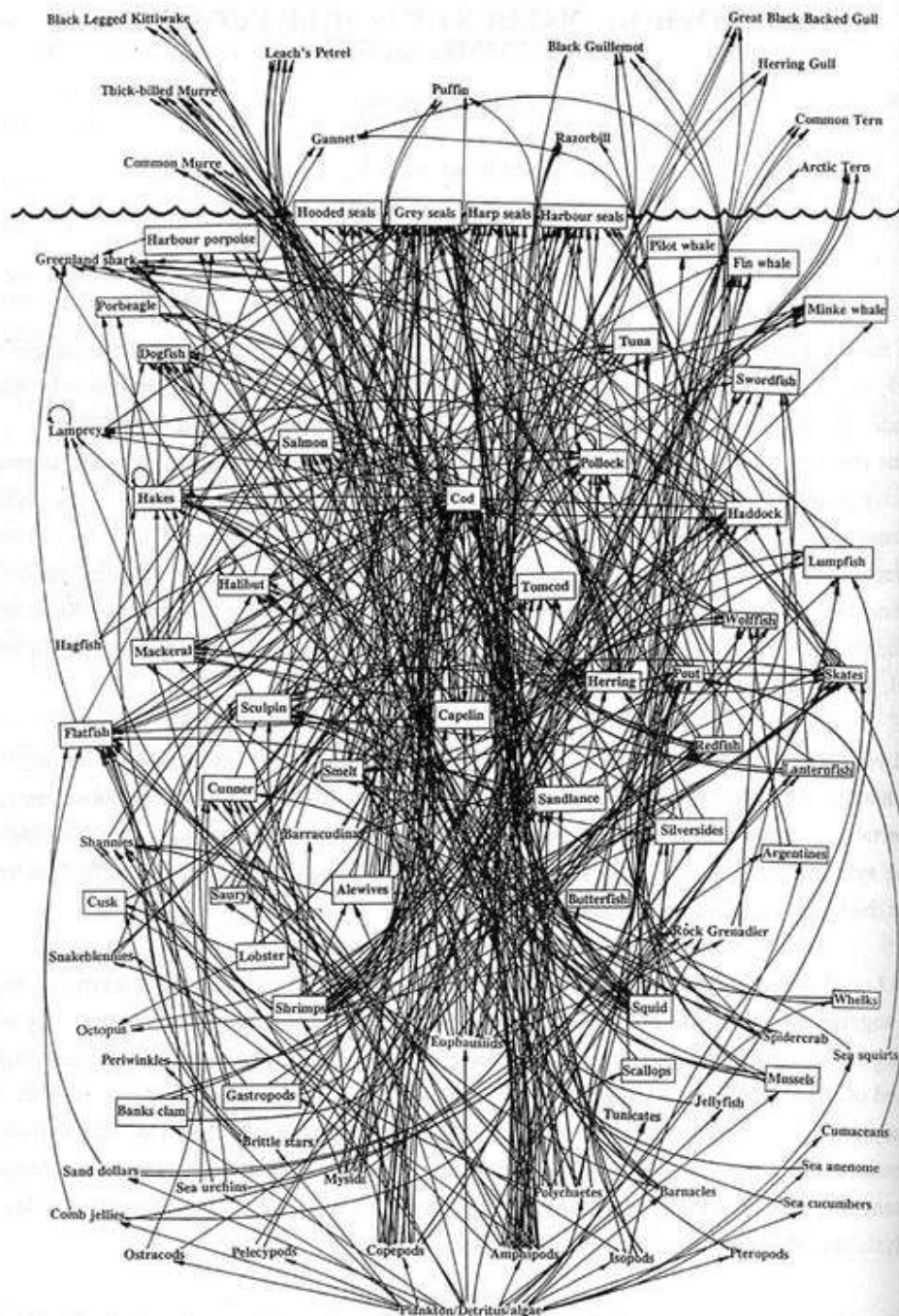


Source: FAO SOFIA 2016: <http://www.fao.org/3/a-i5555e.pdf>

## GLOBAL TRENDS IN THE STATE OF WORLD MARINE FISH STOCKS SINCE 1974









# WHY?

1. Develop ecosystem-based approaches to managing High Seas (Ben Boteler: Monday)
2. Particular focus – developing an integrated (multi-agency) approach to establishing protected areas on the high seas





# Ecosystem-based approaches to managing High Seas



1. What is out there (or what do we know)?
2. What do we know we don't know (but can make an educated guess at)?
3. We have to ignore things that we have no knowledge of



# Can you conserve areas in the high seas

...if you don't know what  
is out there?

EBSAs, VMES, IBAs,  
PSSAs, etc...



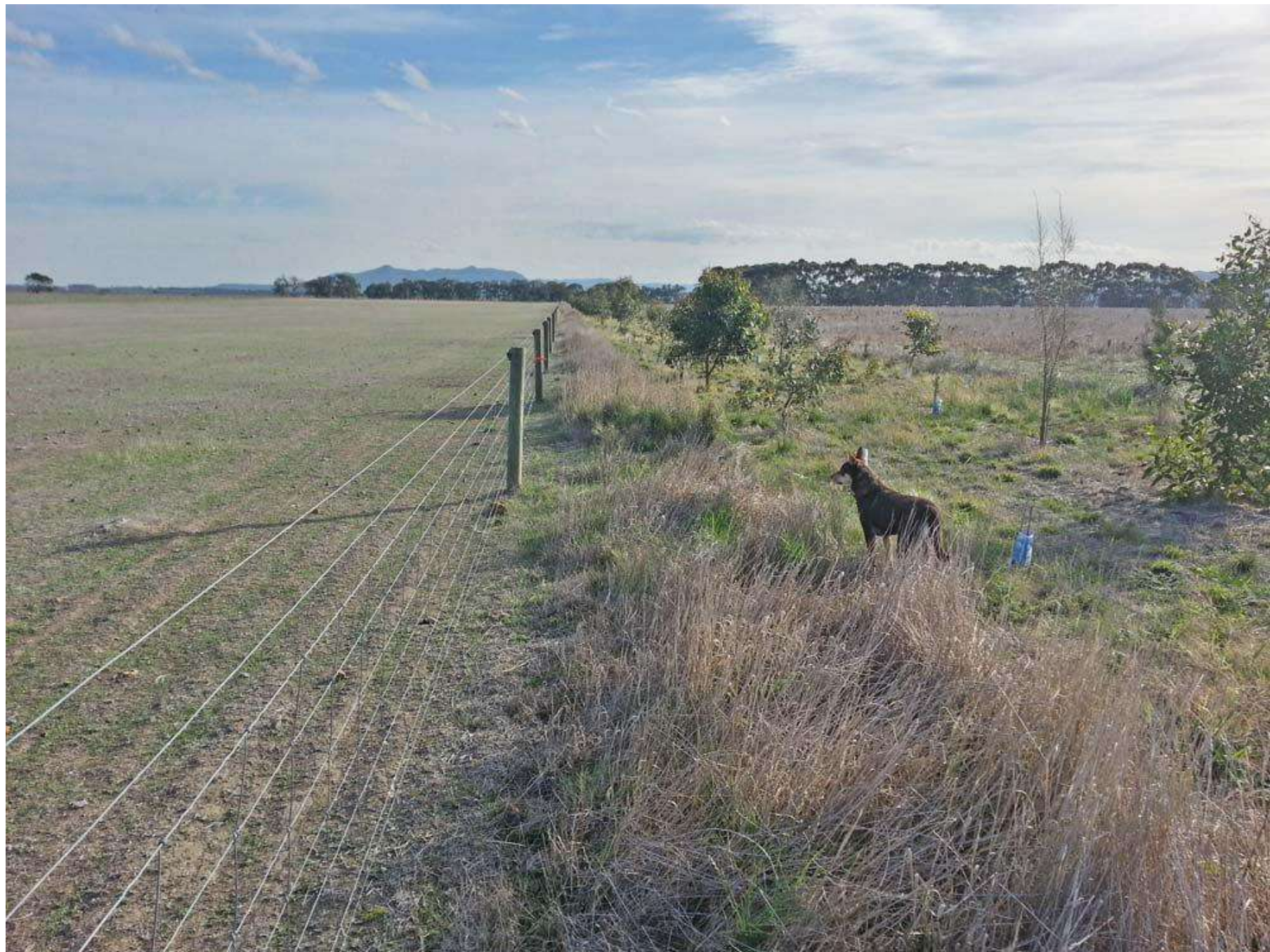


# Ecological Baselines Report



1. Desktop review of major themes, collating 'what is known' and 'what is not known'
2. Experts within the project team doing the drafting – for each region
3. No time or budget to develop new analyses or conduct primary research
4. Major themes
  - a. Pattern: sections covering geophysical and biodiversity
  - b. Process: threats

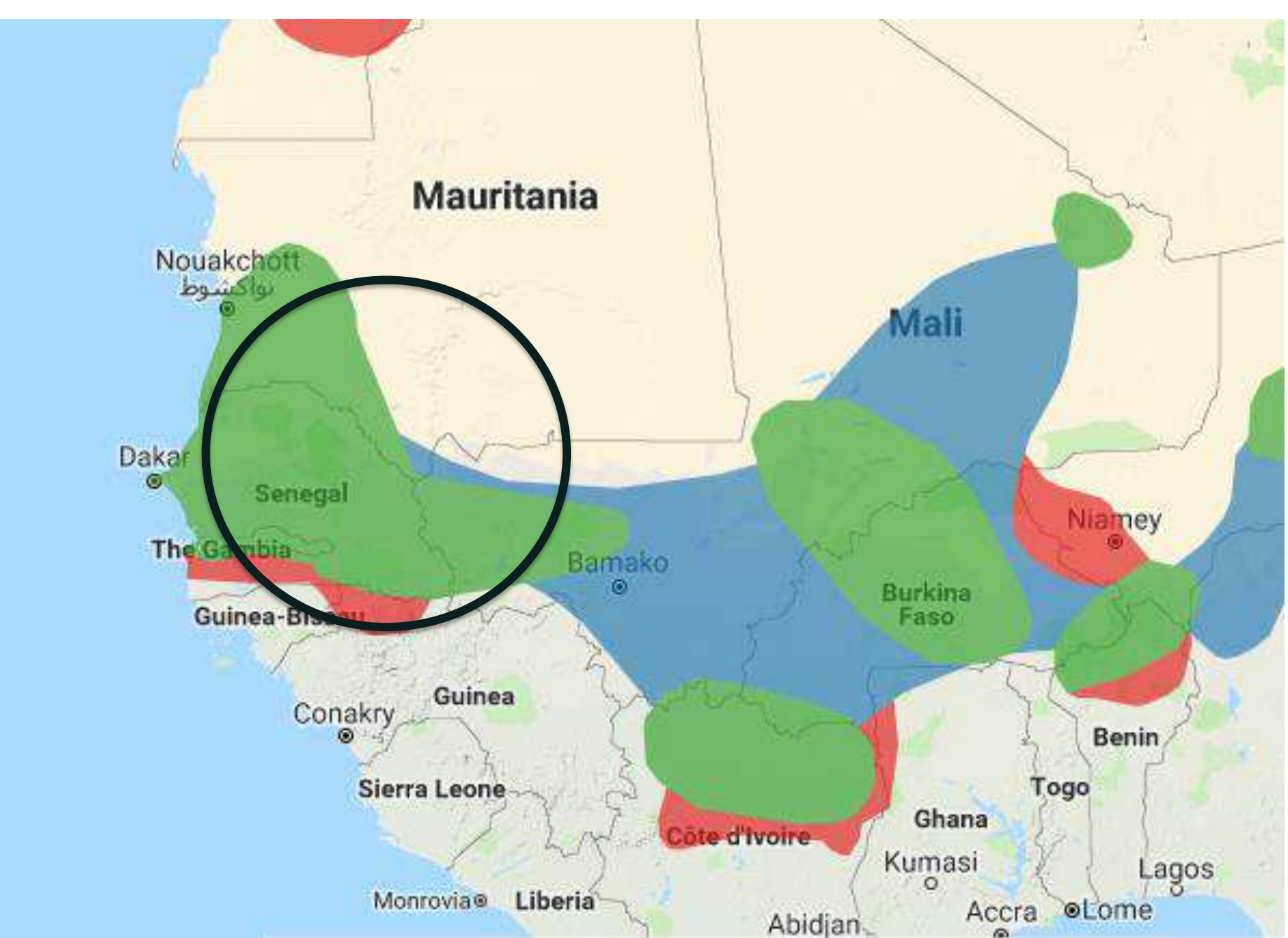




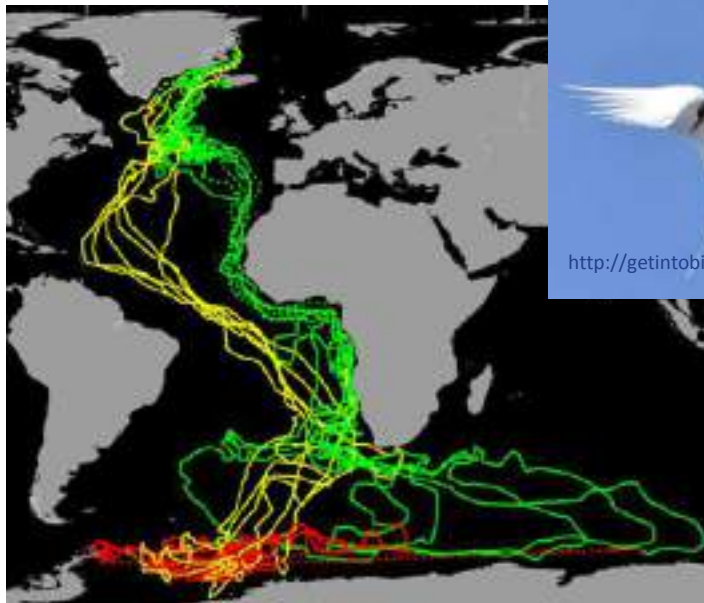
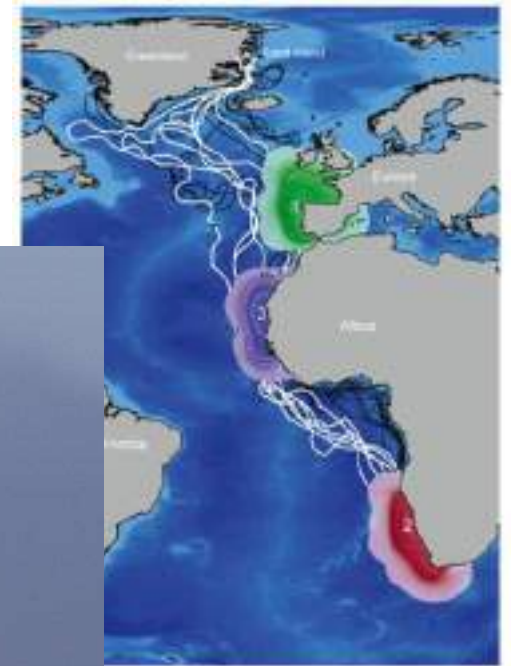
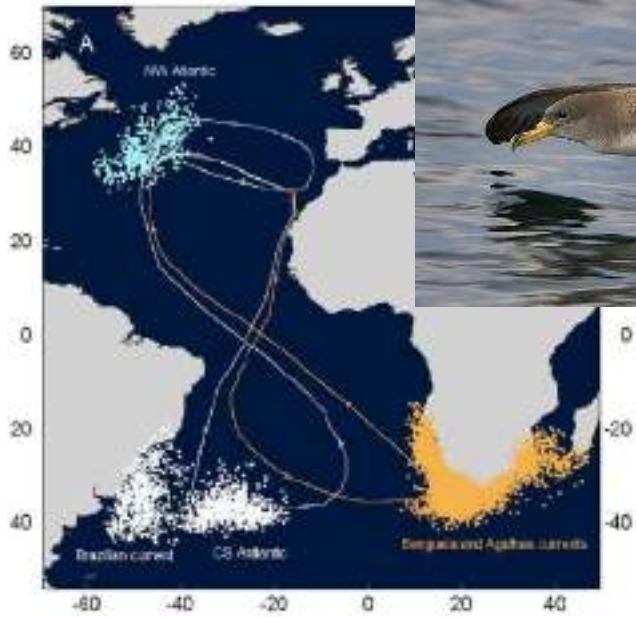




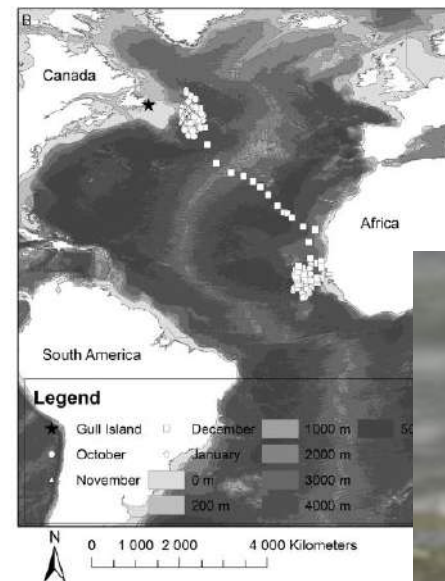








<http://getintobirds.audubon.org>



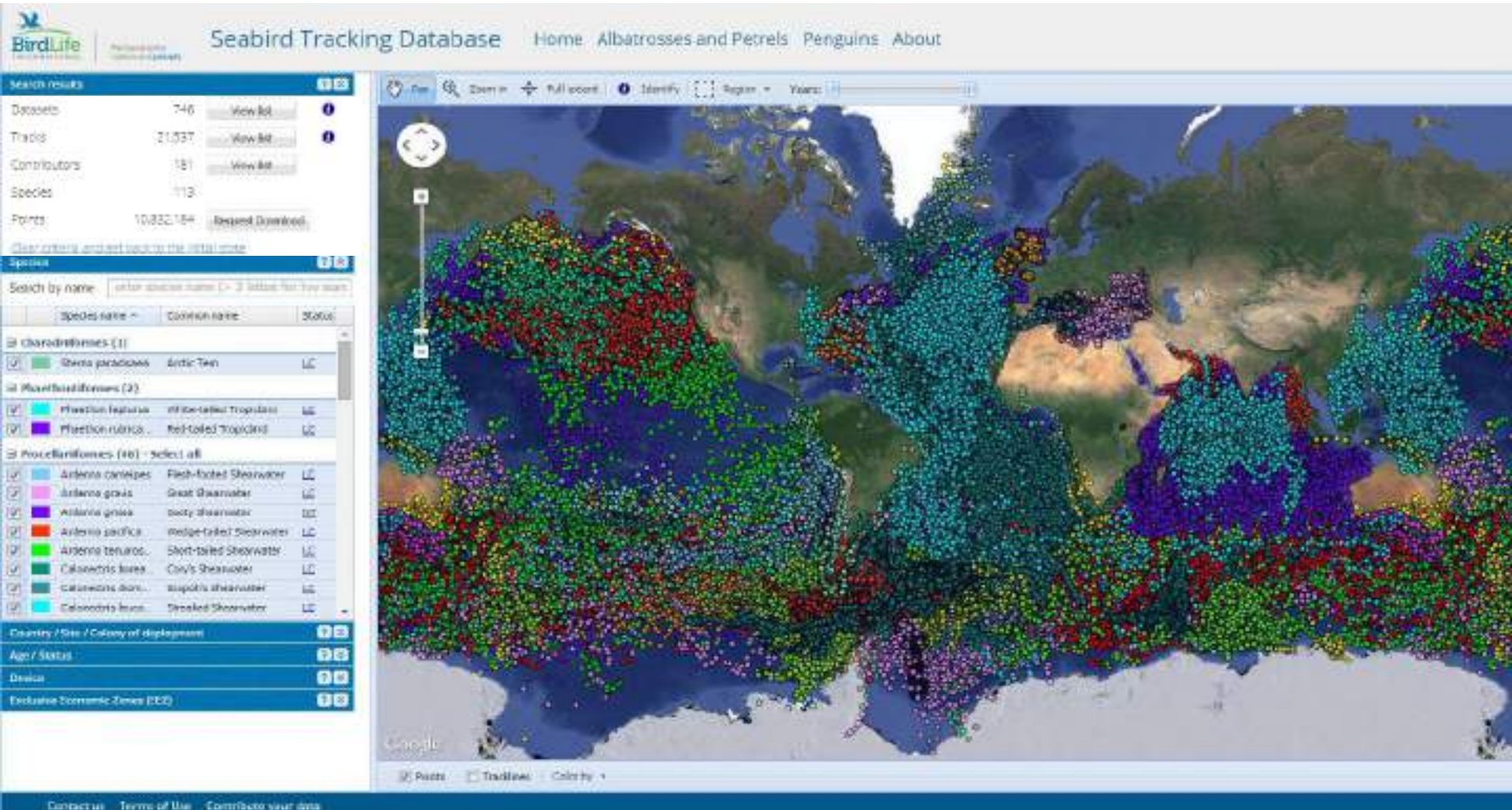


# Connectivity...

...between ABNJ and EEZs

- a. How biodiversity and habitats straddle boundaries
- b. How activities in ABNJ can directly threaten activities in EEZ
- c. Why protecting biodiversity, habitats, and ocean ecosystems is critical to secure national interests within EEZs





> 11 million positions; 113 species;  
180 contributors



# Process

1. Draft concept presented at 2018 Dialogue WS in Abidjan (and from S America Dialogue WS)
2. Comments and inputs taken onboard, and revised EBR report being finalised



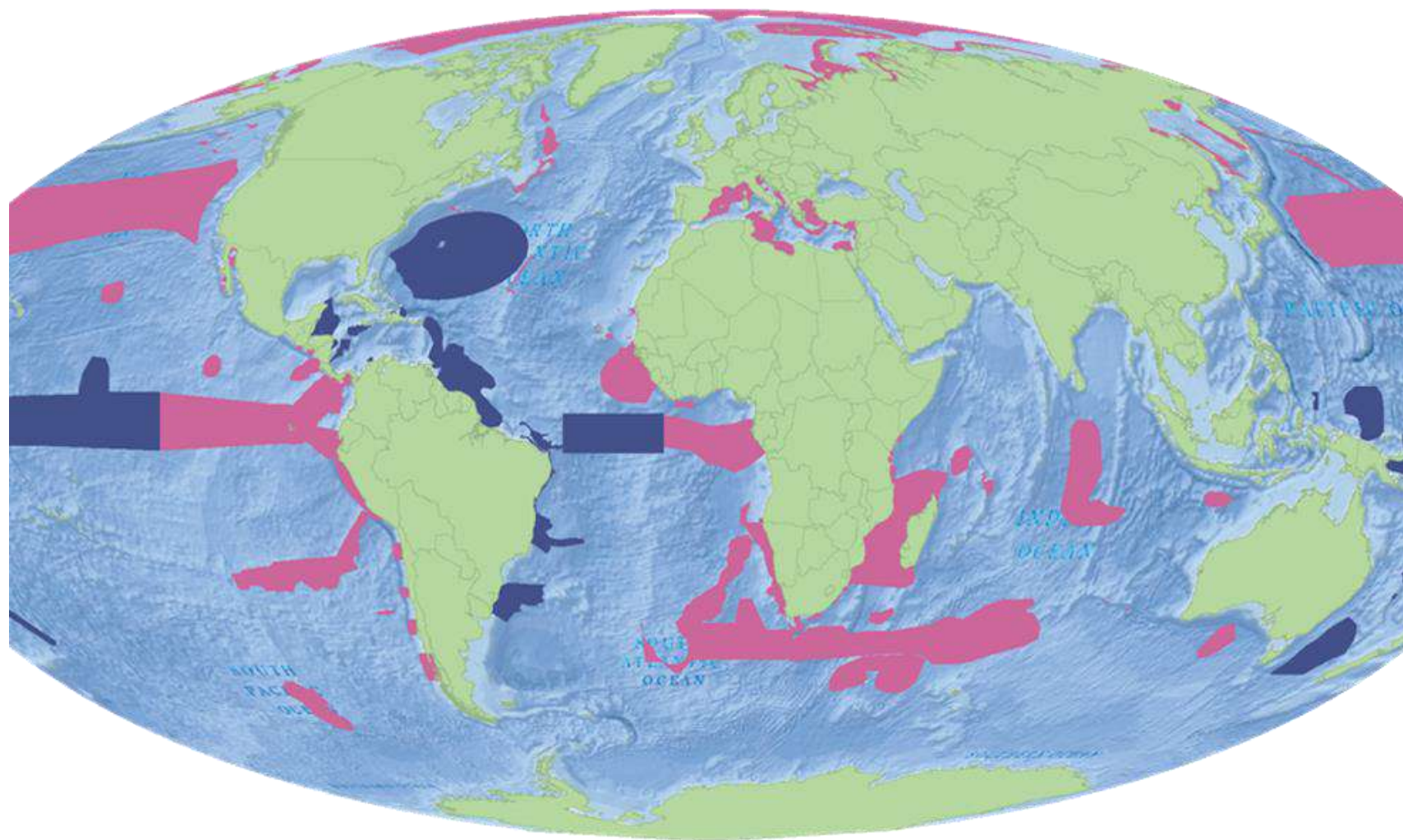
# What next?

1. EBR report serves as a benchmark for the current status of biodiversity: what we know (so that we can start to prioritise) spatial conservation
2. Highlighting areas of biodiversity and habitat mapping that we don't know, so that those can be filled
3. It details the major threats and processes ( to help address threats holistically, etc.)









Year adopted     2012     2014



# What next?

1. Used as a basis for initial recommendations for ABMT focal areas
2. Targeted towards decision-makers (incl BBNJ negotiations)
3. Identifies priorities for first pass of spatial conservation and other area-based management objectives
4. Identifies threats that cannot be easily addressed by ABMT – e.g. climate change, plastic pollution, etc, linking local effects from global processes
5. Links to socio-economic assessment work under the project – cost/benefits



**Thank you!**  
**email me for more info:**  
**[ross.wanless@Petrichor.com](mailto:ross.wanless@Petrichor.com)**



**Disclaimer – I've shamelessly stolen images from the internet for illustrating points**



# **Strengthening Regional Ocean Governance for the High Seas: Opportunities and Challenges in the Southeast Atlantic and Southeast Pacific**

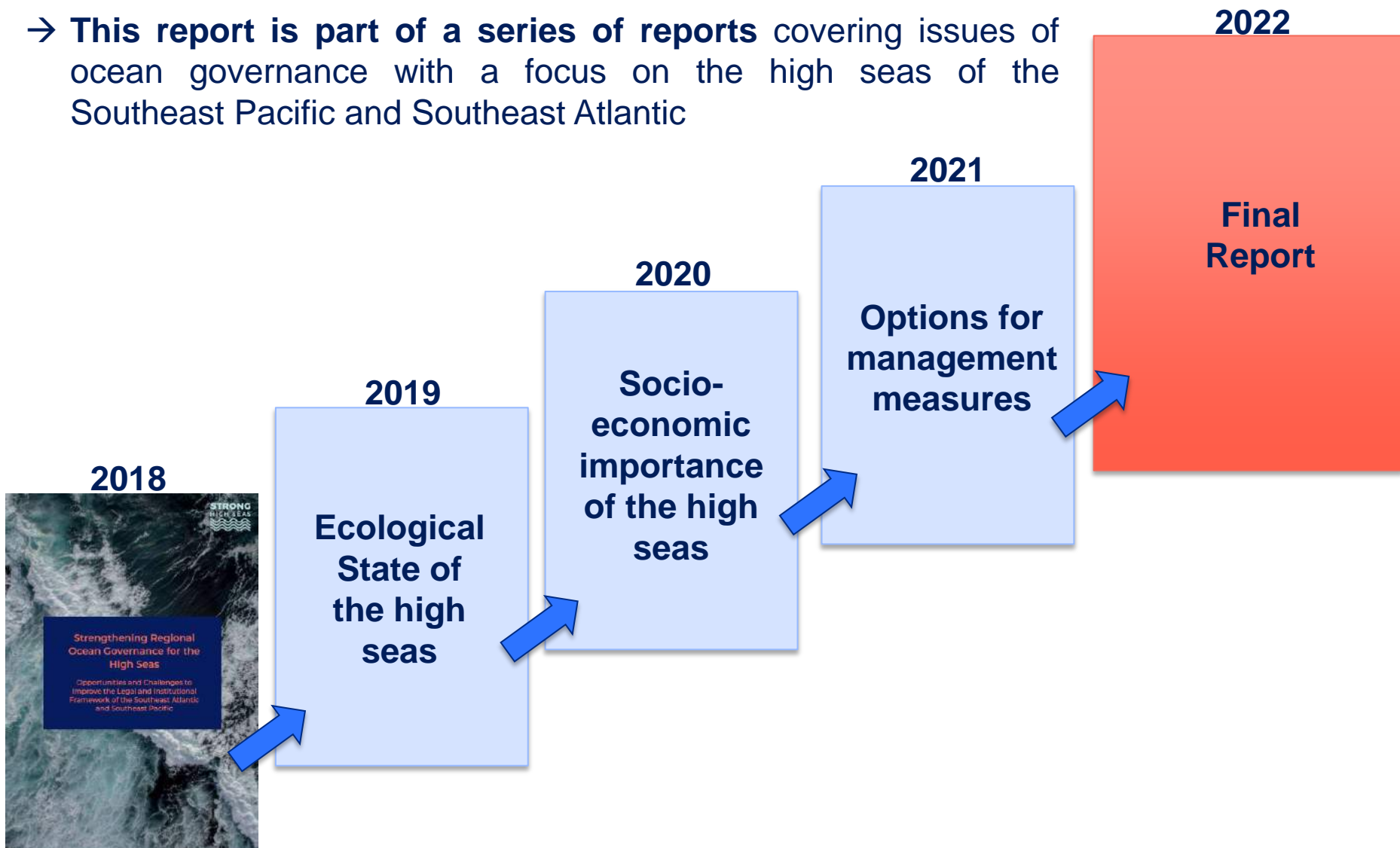
**Dr. Carole Durussel**

**Institute for Advanced Sustainability Studies (IASS)**



# STRONG High Seas Reports

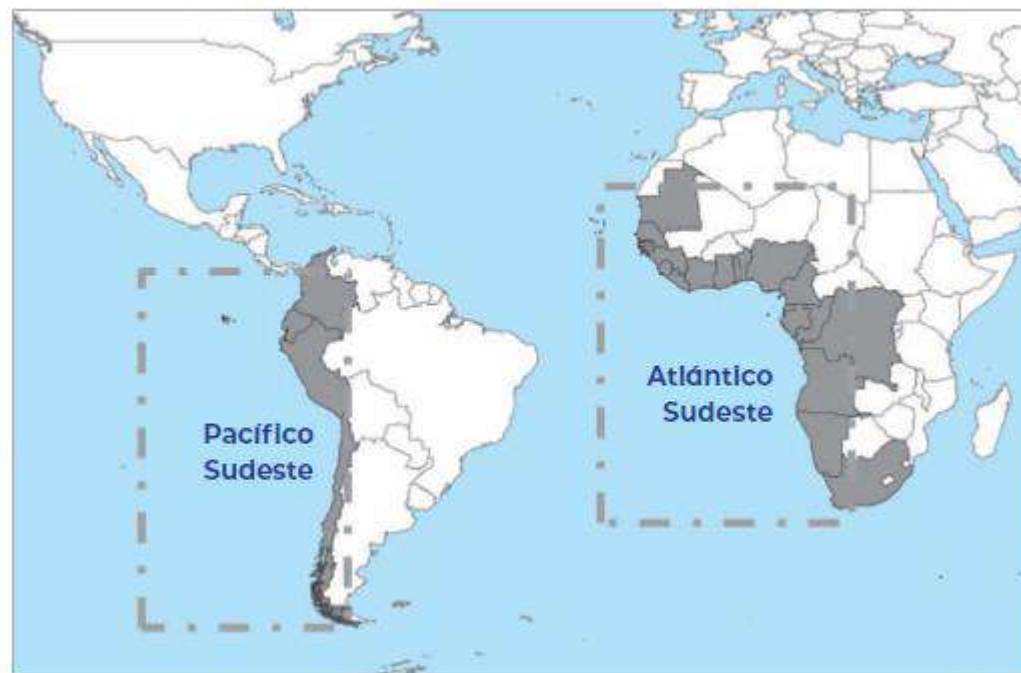
→ This report is part of a series of reports covering issues of ocean governance with a focus on the high seas of the Southeast Pacific and Southeast Atlantic





# Objectives of the Report

- **Assess the relevant governance frameworks** currently in place for the management of high seas biodiversity in the Southeast Pacific and Southeast Atlantic
- **Identify the challenges and opportunities** for advancing conservation and sustainable use of high seas biodiversity around two important ongoing international processes: the **BBNJ process** and **Sustainable Development Goal 14**
- **Identify possible options** for strengthening governance and regional cooperation

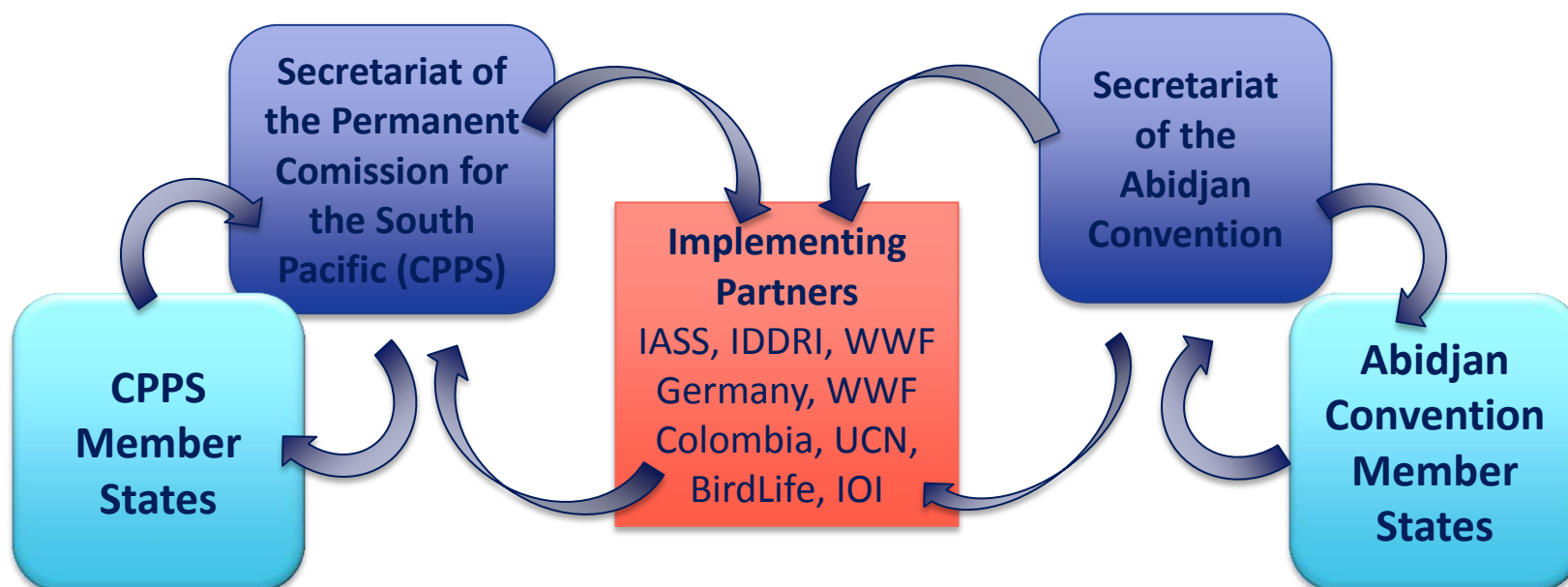


Focal regions of the STRONG High Seas project



# Methodology

- **Co-design** of scientific assessments with Secretariats in both regions and **involvement of stakeholders** through regional workshops and expert opinion
- Extensive **literature review** and detailed **analysis of legal and policy documents** (based on previous studies)
- **Review by ocean governance experts** and STRONG High Seas project advisory board members





# BBNJ Elements and Sustainable Development Goal 14



The discussion in this report is structured **around two important ongoing international processes:**

- The ongoing negotiations within the United Nations for an international legally binding instrument on the conservation and sustainable use of marine biodiversity beyond national jurisdiction (**BBNJ**); and
- **Sustainable Development Goal (SDG) 14**

## **BBNJ Elements:**

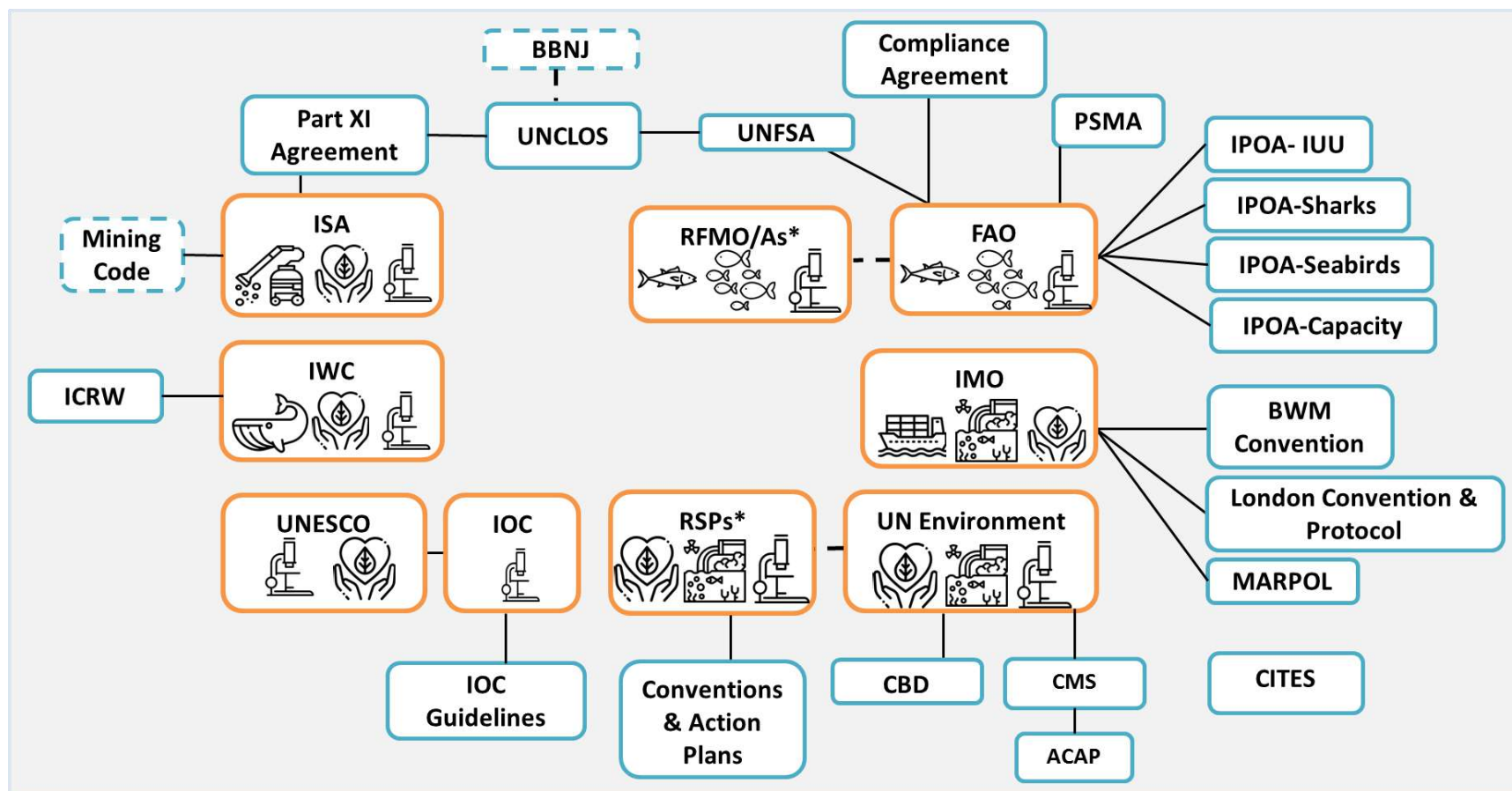
- **Area-based Management Tools (ABMTs)**
- **Environmental Impact Assessments (EIAs)**
- **Marine Genetic Resources (MGRs)**
- **Capacity Building and Transfer of Marine Technology**

## **SDG 14:**

- **14.1** – Marine Pollution
- **14.2 y 14.5** – Management and Protection of Marine Ecosystems in ABNJ
- **14.4** – Illegal, Unreported and Unregulated (IUU) Fishing



# Global Governance Framework for BBNJ



## Legend

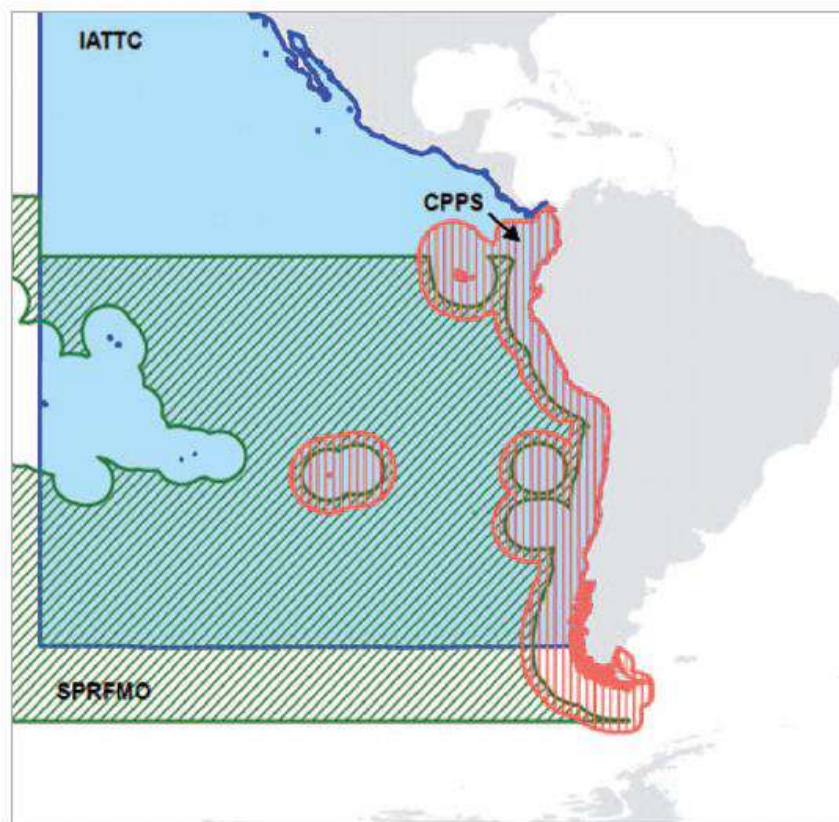


Depiction of main mandates/activities





# Regional Governance Framework for BBNJ

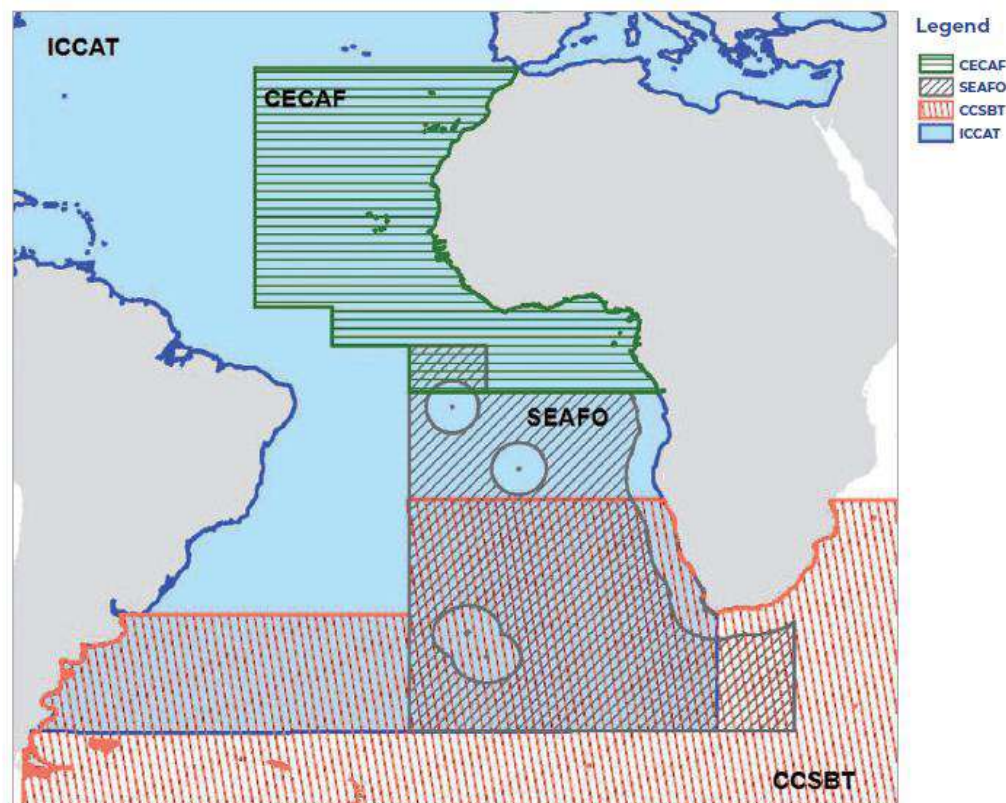


**Southeast Pacific**

## Legend



## Southeast Atlantic



## Legend





# Challenges in the Regions

- Organisations within the regions have **varying and non-comprehensive or limited mandates** to address issues related to BBNJ – in the Southeast Pacific, organisations have a **complementary mandate**;
- There is **limited cross-sectoral cooperation** within the regions, with individual organisations adopting their own principles, resolutions and recommendations for addressing BBNJ challenges;
- There exists **varied and uneven participation in regional and global agreements** within both regions, making it difficult to fully address issues related to biodiversity beyond national jurisdiction (BBNJ) without an adequate legal basis or, **in the case of the Southeast Atlantic, also an institutional basis**;
- Member States in the Southeast Atlantic are **diverse in terms of culture, language and available capacity**.



# Possible Options to Strengthen Regional Ocean Governance in the Regions



- **Cross-sectoral cooperation and coordination** to ensure the implementation of the ecosystem-based approach to the conservation and sustainable use of BBNJ:
  - can be eased if more States in the regions **become parties to key international and regional agreements** → shared basis for **common action**
  - through e.g. **joint programmes, Memoranda of Understanding, and participation in events;**
  - could support a coordinated, regional approach to conservation and sustainable management through e.g. the expansion of efforts to coordinate BBNJ issues by **empowering regional seas programmes to consider areas beyond national jurisdiction (ABNJ).**



# Possible Options to Strengthen Regional Ocean Governance in the Regions



- **States in the regions** could:
  - implement a **common approach or policy for the region** on conservation priorities **by championing flag State responsibility** to impose regulations regarding areas or activities that are not currently covered by a competent management authority;
  - **form coalitions to promote mutual interest** in specific BBNJ-related issues within existing processes;
  - promote conservation and sustainable use of BBNJ **by voicing their views and proposing management actions** at global and regional fora;
  - **support a robust scientific basis and the development of capacity** for taking action to ensure the establishment of conservation and management measures and ensure the complementarity of sectoral measures.



# Possible Options to Strengthen Regional Ocean Governance in the Regions

- States may also **consider the negotiation of a BBNJ agreement as an opportunity to give coherence** to a fragmented governance regime, **provide additional support to enhance intersectoral cooperation** and allow for the **establishment or strengthening regional integration mechanisms**;
- The negotiation of a new agreement therefore **offers a way to support and achieve many of the above-mentioned options** for strengthening regional governance of the oceans.

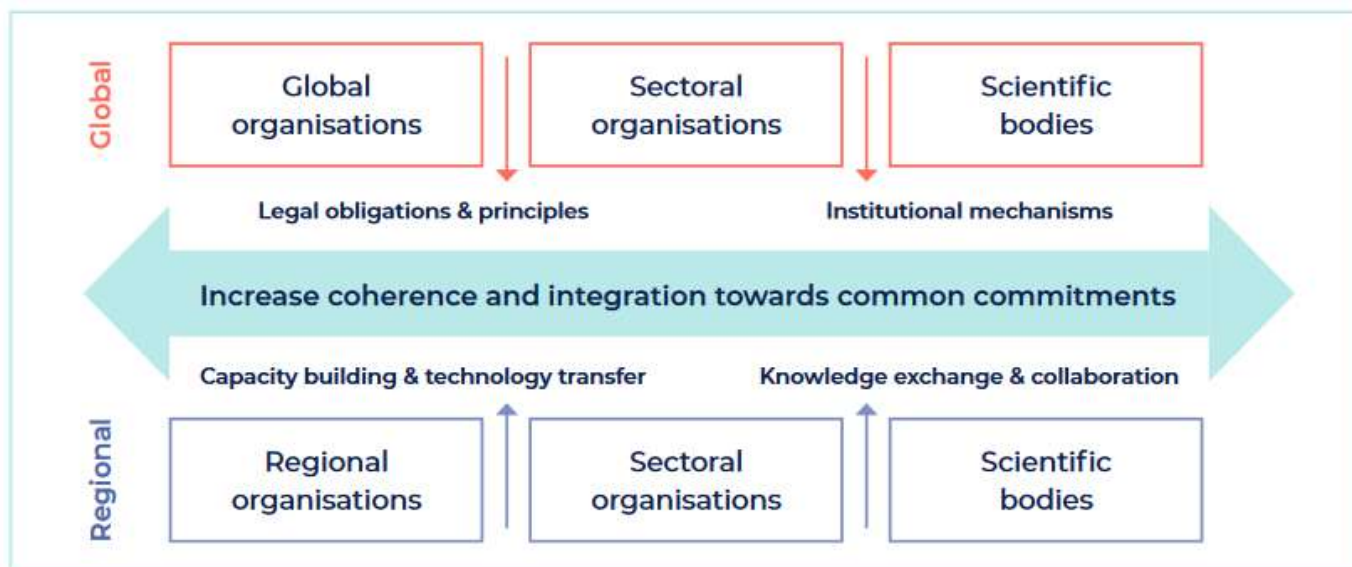
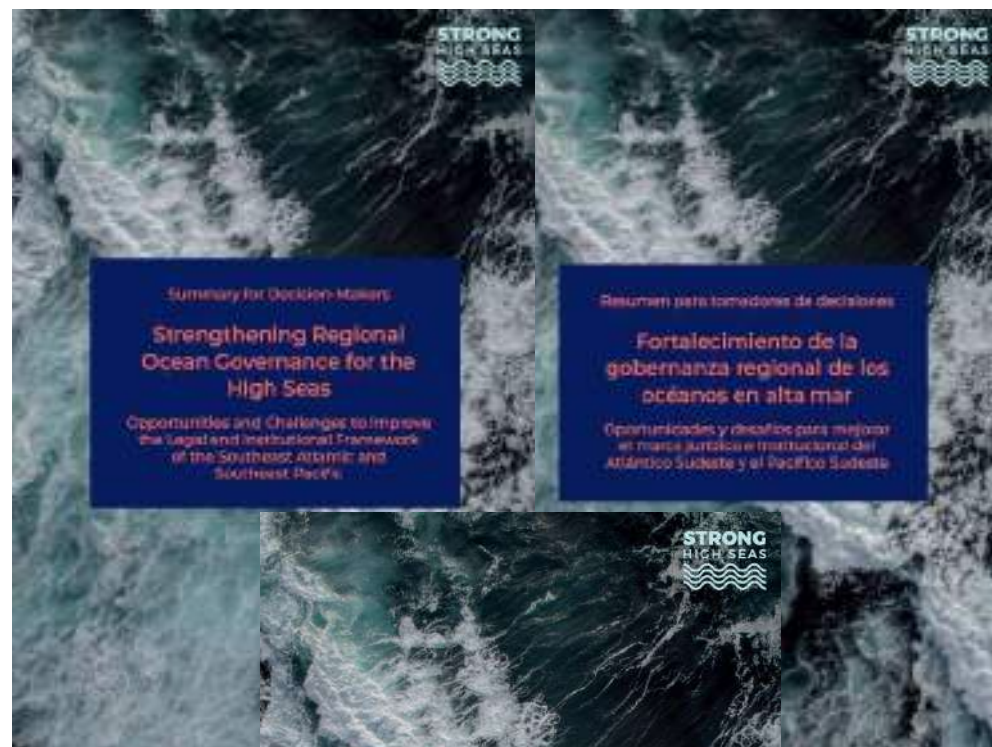
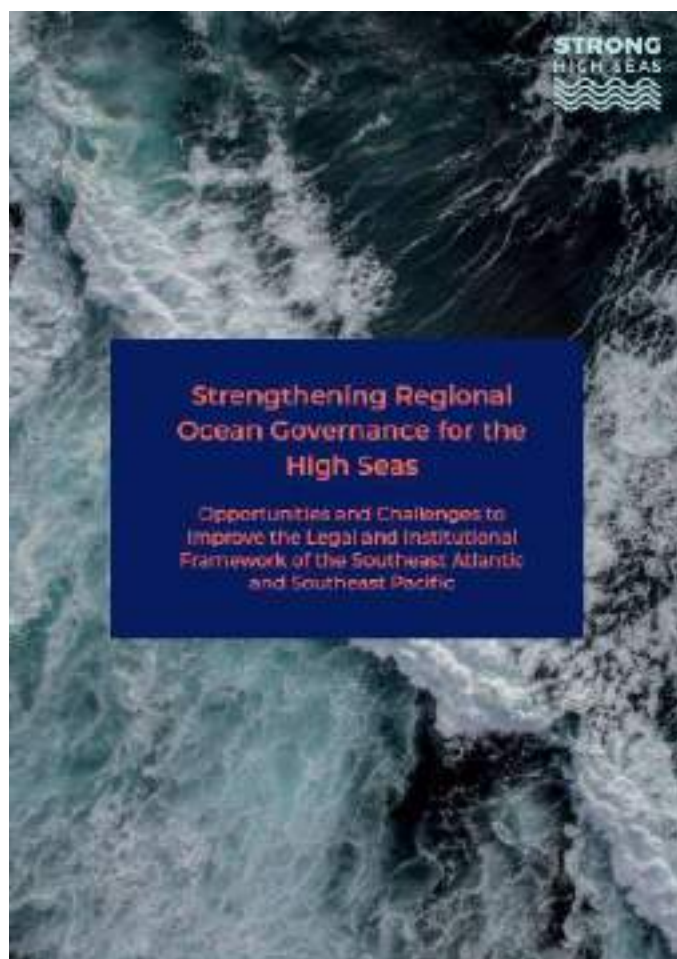


Figura: Un nuevo acuerdo deberá aumentar la coherencia y la integración entre las instituciones regionales y globales, tanto verticalmente como horizontalmente, para mejorar la conservación y el uso sostenible de la BBNJ (Gjerde et al. 2018)



# You can download the reports here:

<https://www.prog-ocean.org/our-work/strong-high-seas/strong-high-seas-resources/>





# Thank you!



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**PROG**

Partnership for Regional  
Ocean Governance

**Dr. Carole Durussel**

Co-Lead, STRONG High Seas

Email: [carole.durussel@iass-potsdam.de](mailto:carole.durussel@iass-potsdam.de)

Institute for Advanced Sustainability Studies e.V.

Berliner Strasse 130

D – 14467 Potsdam

Web: [www.iass-potsdam.de](http://www.iass-potsdam.de) & [www.prog-ocean.org/](http://www.prog-ocean.org/)



ABIDJAN CONVENTION  
CONVENTION D'ABIDJAN



IDDRI



International Ocean Institute  
African Region





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and Nuclear Safety

based on a decision of the German Bundestag



# Monitoring, Control and Surveillance (MCS) of Human Activities in ABNJ

**Klaudija Cremers**  
*Research Fellow International Marine Policy at IDDRI*

**Cape Town, 12 June 2019**



ABIDJAN CONVENTION  
CONVENTION D'ABIDJAN



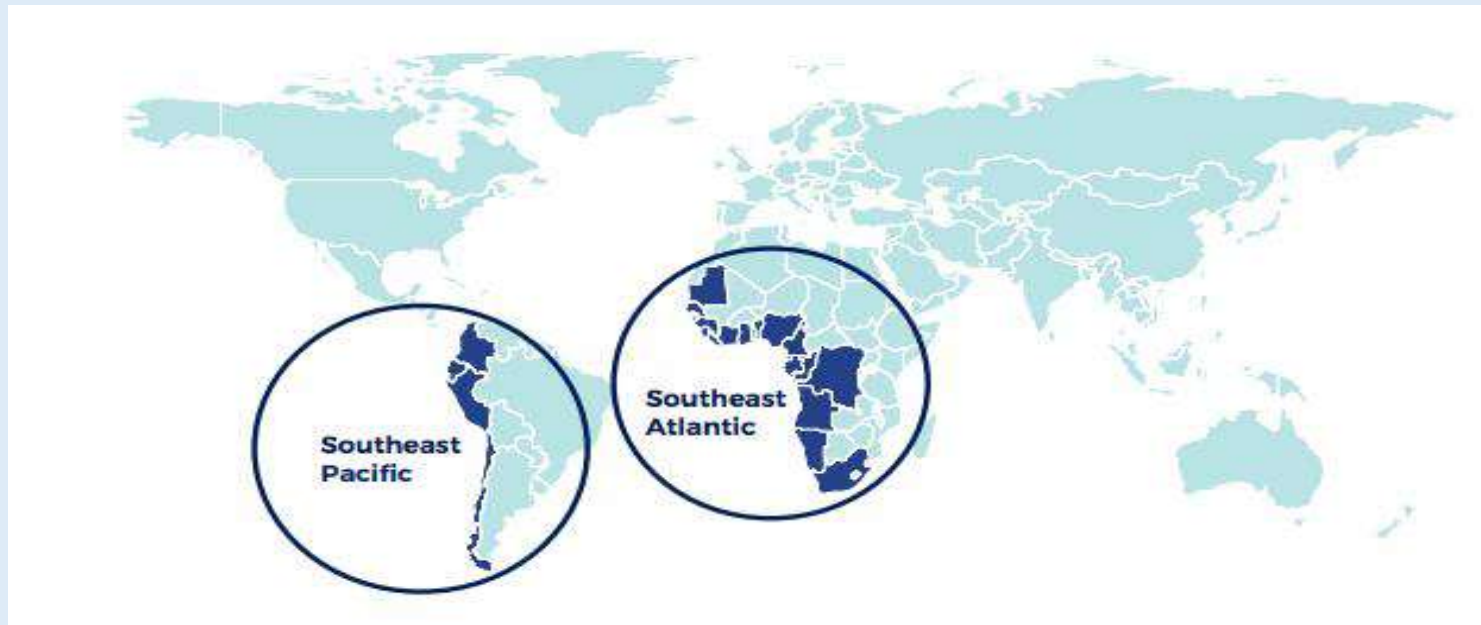
IDDRI



International Ocean Institute  
African Region







- MCS expert workshop I (technological tools) – Paris, July 2018
- MCS expert workshop II (policy options) – Paris, April 2019
- Regional MCS workshop CPPS – November 2019
- Regional MCS workshop Abidjan – 2020





# Contents

1. What is MCS and why is it important?
2. An overview of MCS tools
3. Best MCS practices
4. MCS challenges
5. How to strengthen MCS?
6. Conclusion
7. Questions





# 1. What is MCS and why is it important?

- a) **Monitoring** - the continuous requirement for the measurement of fishing effort characteristics and resource yields;
- b) **Control** - the regulatory conditions under which the exploitation of the resource may be conducted;
- c) **Surveillance** - the degree and types of observations required to maintain compliance with the regulatory controls imposed on fishing activities.

Source: FAO, 1981



# 1. What is MCS and why is it important?





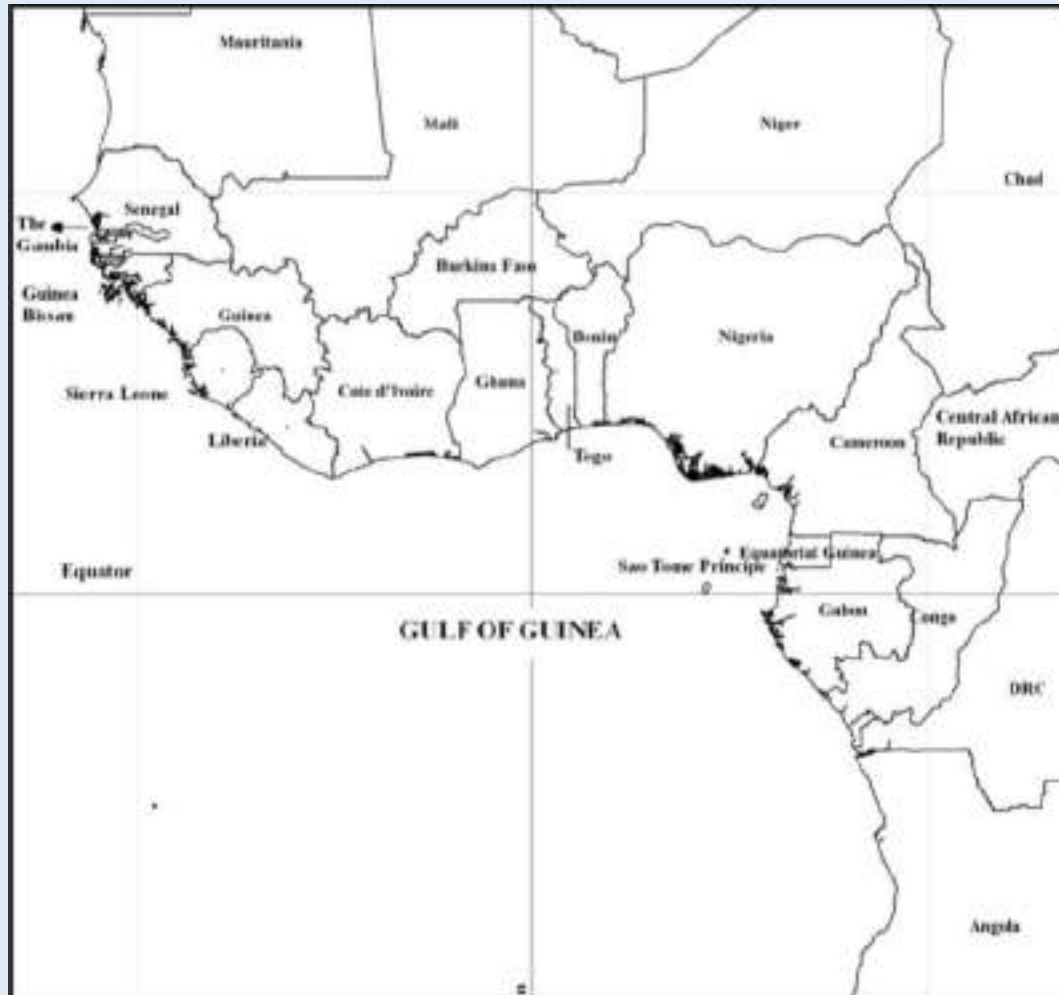
# 1. What is MCS and why is it important?

**West Africa** (Belhabib et al, 2019; Doumboya et al, 2017)

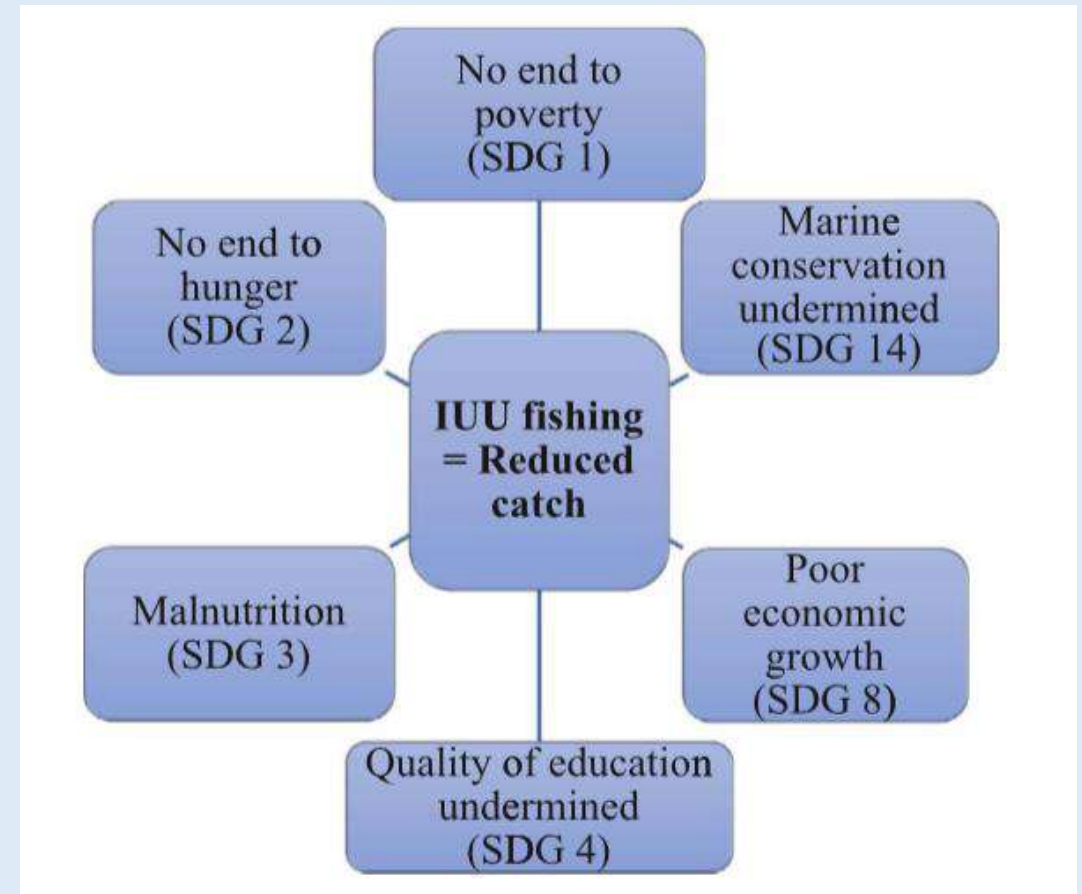
- Governance issues and high monitoring costs
- Illegal fishing is responsible for a loss of US\$2.3 billion a year, of which only US\$13.8 million a year is recovered through MCS
- Strengthening of the legal system → higher fines + increased resources for MCS → reducing incentives for IUU fishing + higher chance to catch offenders



# 1. What is MCS and why is it important?



**West Africa (Okafor-Yarwood, 2019)**





## 2. An overview of MCS tools

*What factors need to be taken into account when choosing MCS tools?*

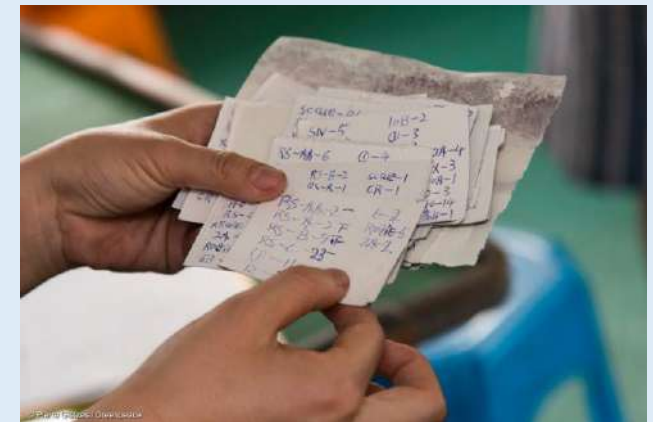
- Purpose
- Costs
- Access
- Reliability
- Coverage
- Cross-checking data
- Ease of manipulation
- Privacy considerations
- Capacity to analyse data
- Different actors/stakeholders





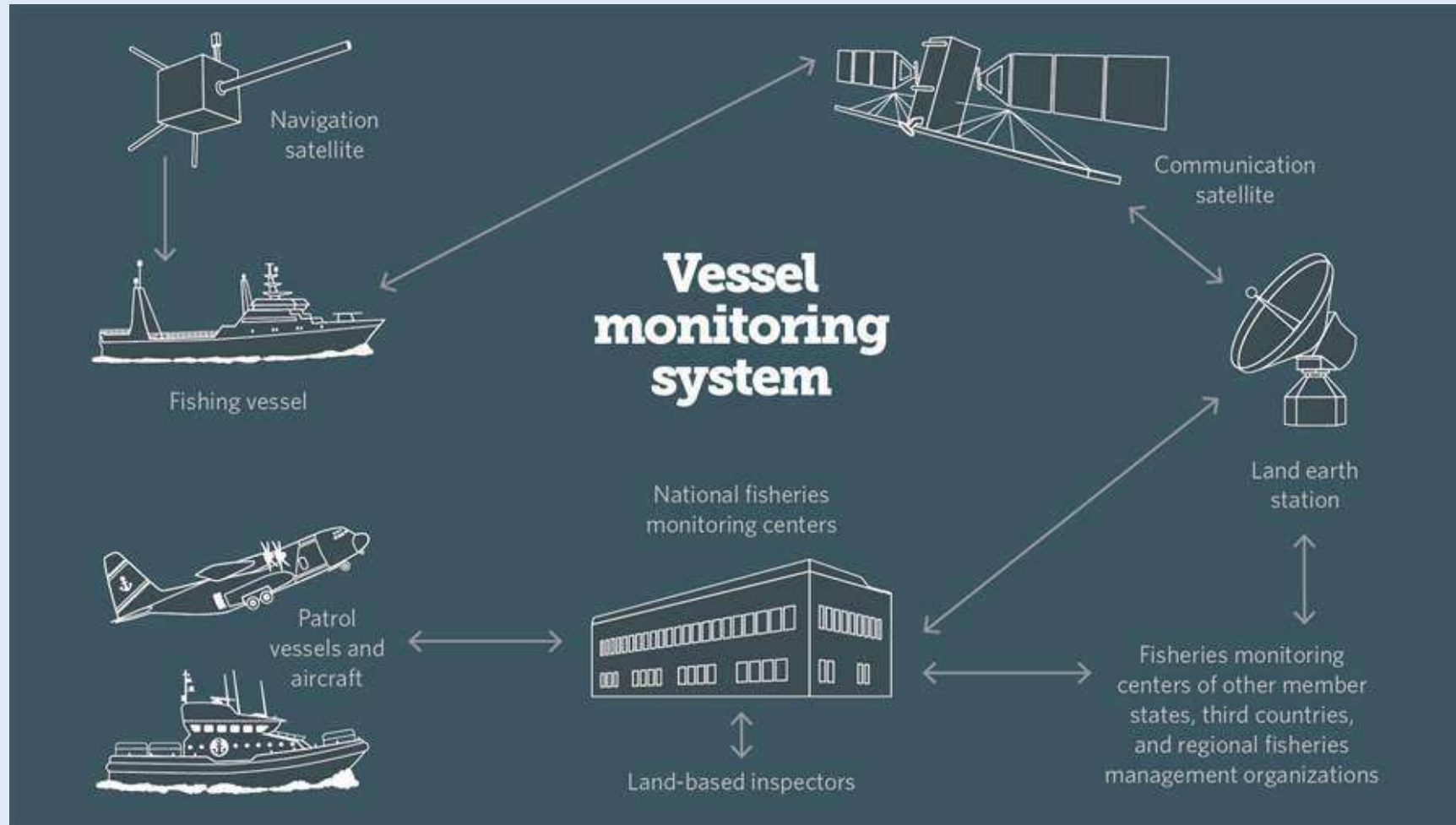
## Traditional MCS tools:

- Inspectors at sea
- Logbooks
- Naval and aerial surveillance at sea





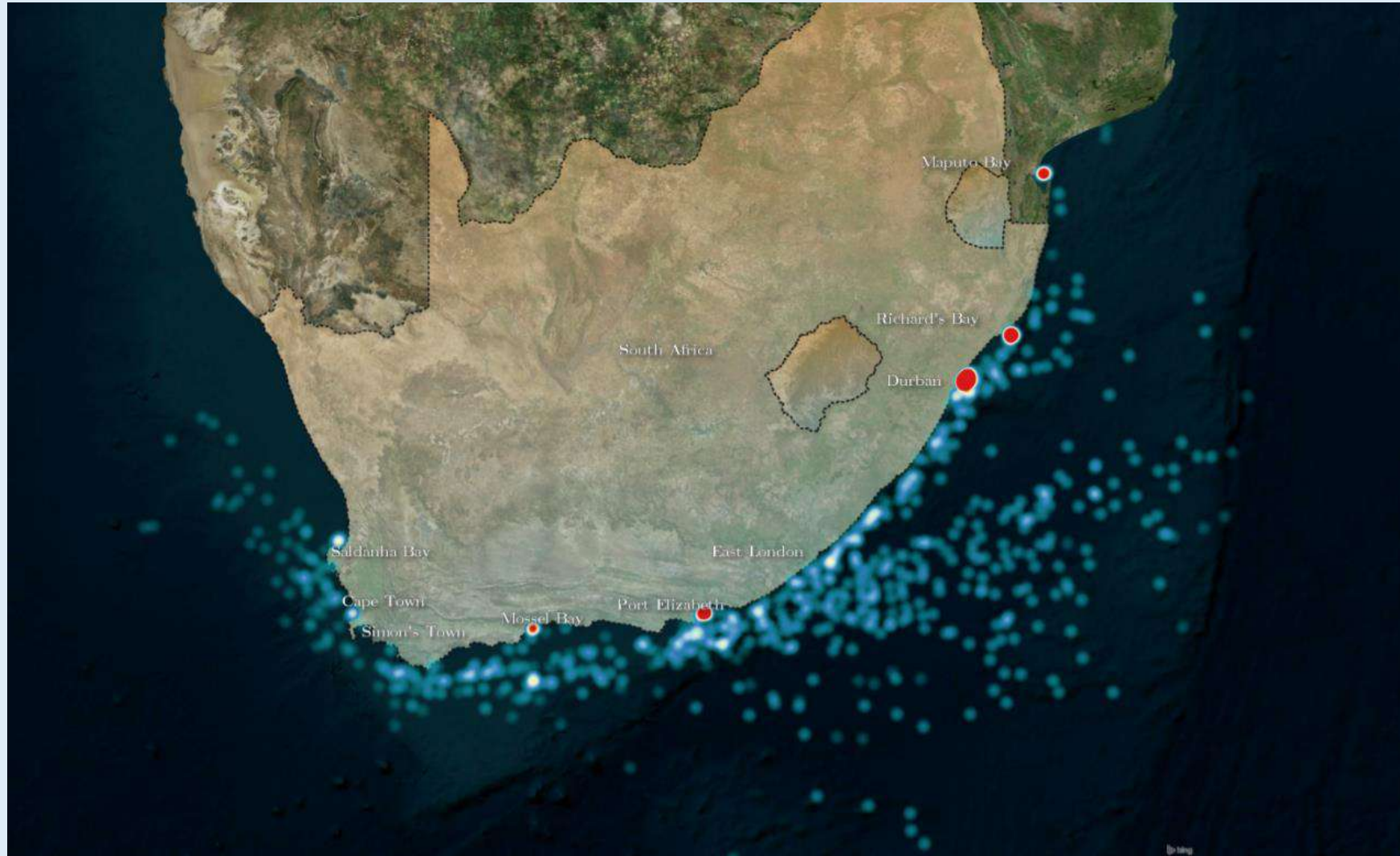
# Automatic Identification Systems (AIS) Vessel Monitoring System (VMS)



Source: Pew Charitable Trusts, 2016



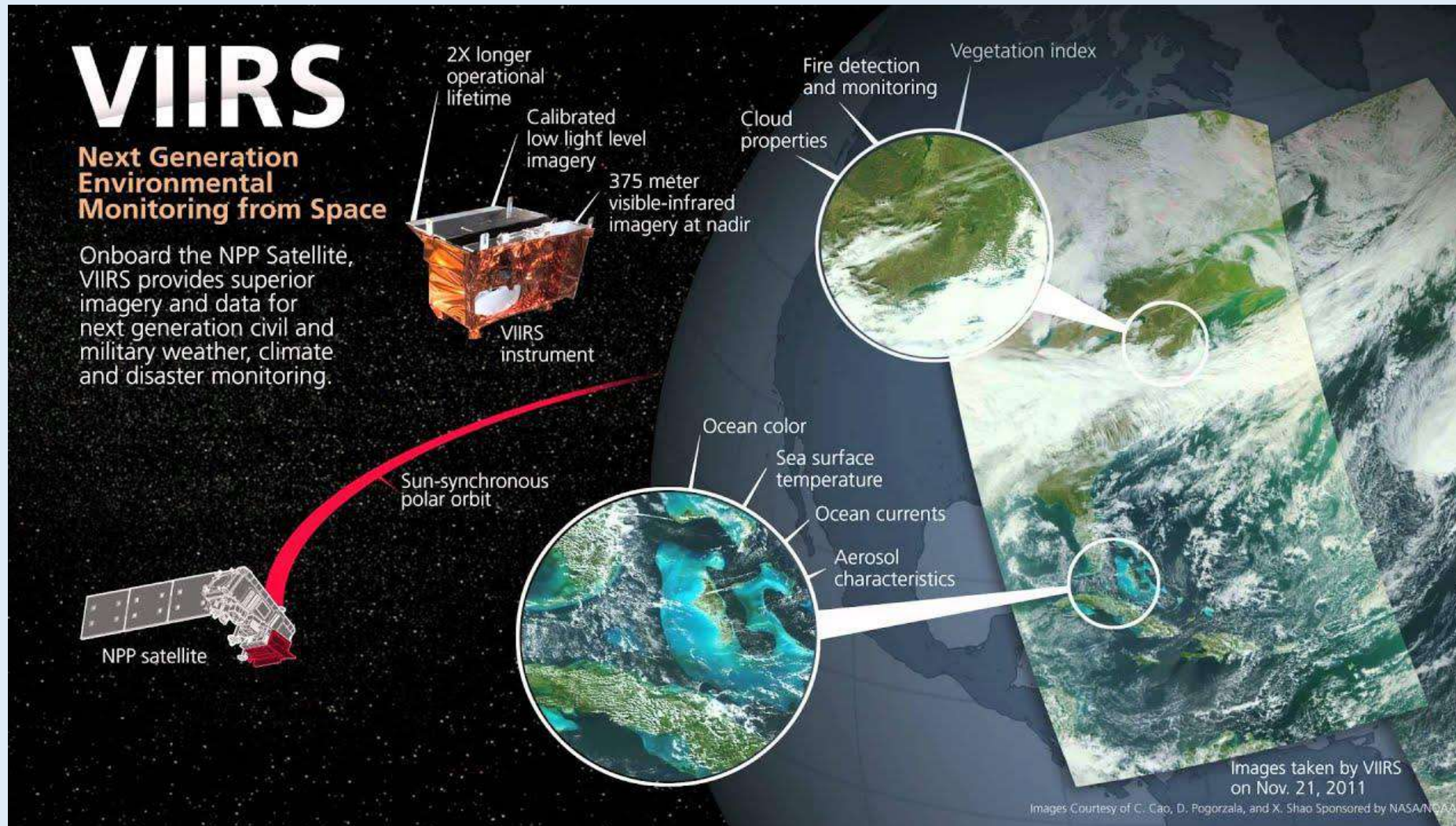
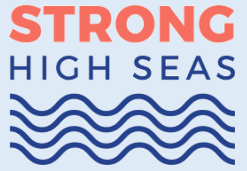
# Synthetic Aperture Radar (SAR)



Source: Schwegmann et al, 2016



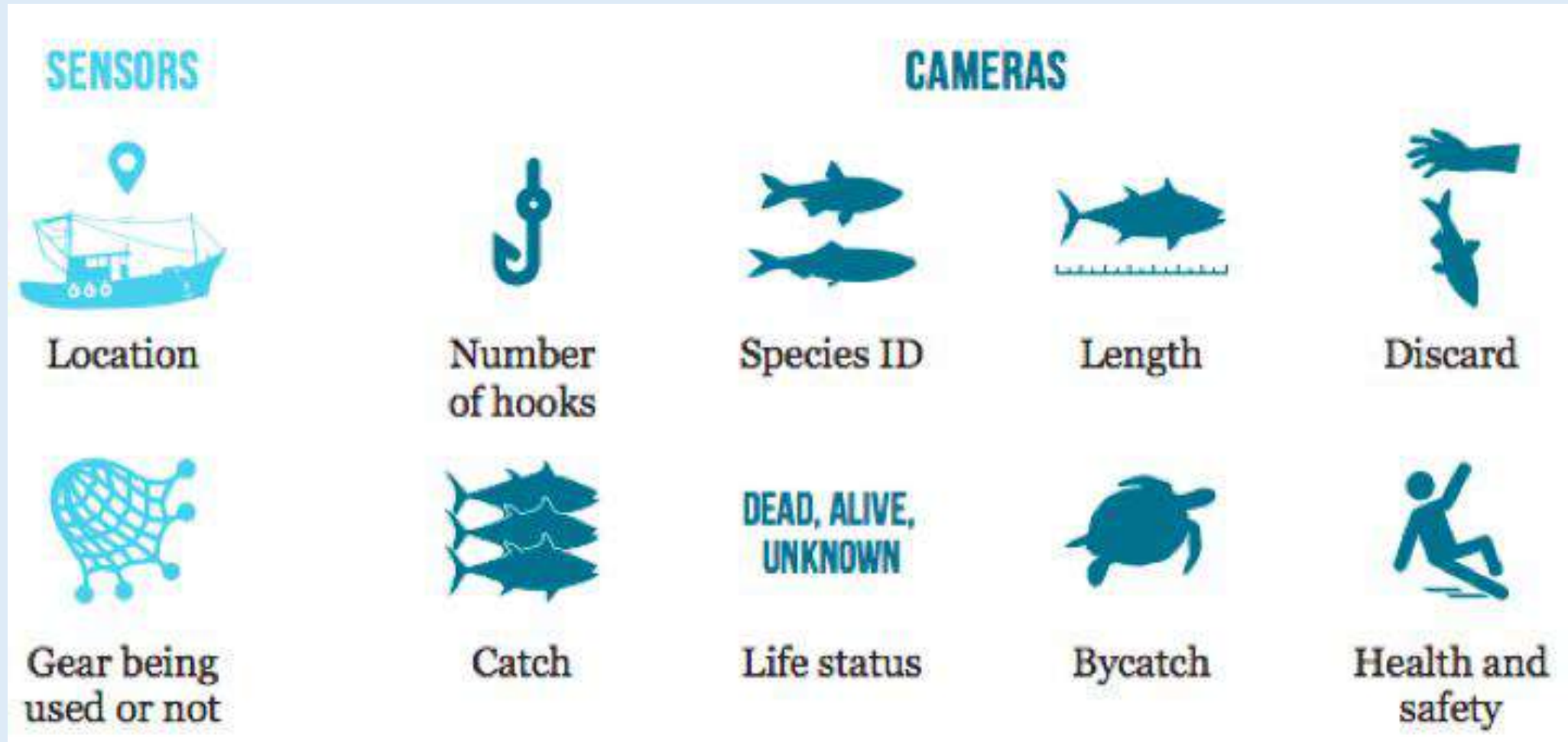
# Visible Infrared Imaging Radiometer Suite (VIIRS)



Source: National Snow & Ice Data Center



# E-monitoring





# E-reporting





# Drones





### 3. Best MCS practices

- 1) RFMOs
- 2) International MCS platforms and networks (e.g. IMCS network, Southern African Development Community MCS Center)
- 3) Transnational partnerships (e.g. Global Fishing Watch, FISH-I Africa Task Force)



# RFMOs

**Table 2.1. MCS standards established by RFMOs**

RFMO	Lists of authorised vessels	Catch reporting/CDS	VMS	Inspections at sea	Observer programmes for fishing	Transshipment monitoring	Inspections in ports	Designation of landing ports
CCSBT	✓	✓	✓		*	✓	✓	✓
GFCM	✓	#	✓	✓**		✓	✓	✓
IATTC	✓	✓ <sup>2</sup>	✓		*	✓		
ICCAT	✓	✓ <sup>3</sup>	✓	✓	✓	✓	✓	✓
IOTC	✓	✓ <sup>4</sup>	✓		*	✓	✓	✓
NAFO	✓ <sup>1</sup>	#	✓	✓	✓	✓	✓	✓
NEAFC	✓ <sup>1</sup>	#	✓	✓		✓	✓	✓
NPFC	✓		✓	***	✓	✓		
SEAFO	✓	#	✓	✓	✓	✓	✓	✓
SIOFA	✓	#	✓	***	*	✓	✓	✓
SPRFMO	✓	#	✓	✓		✓	✓	✓
WCPFC	✓	#	✓	✓	✓	✓	✓	
CCAMLR	✓	✓	✓	✓	✓	✓	✓	

*Note:* \* Observer programme limited to scientific purpose; \*\* spatially limited; \*\*\* measure implementation in progress (proposal or implementation plan available); # limited to standards on catch reporting. 1. List of authorised vessels not publicly available; 2. limited to bigeye statistical documentation programme with some elements of CDS (Res. C-03-01); 3. limited to Atlantic bluefin tuna, for bigeye tuna and swordfish, there are statistical document programmes in place (ICCAT, 2016[7]); 4. limited to statistical document programme for bigeye tuna with some elements of a CDS (communication with the IOTC Secretariat).

*Source:* Based on the review of relevant documents and communication with relevant RFMOs.

Source: Hutniczak, B., C. Delpuch and A. Leroy (2019-02-14), “Intensifying the Fight Against IUU Fishing at the Regional Level”, OECD Food, Agriculture and Fisheries Papers, No. 121, OECD Publishing, Paris. <http://dx.doi.org/10.1787/b7b9f17d-en>

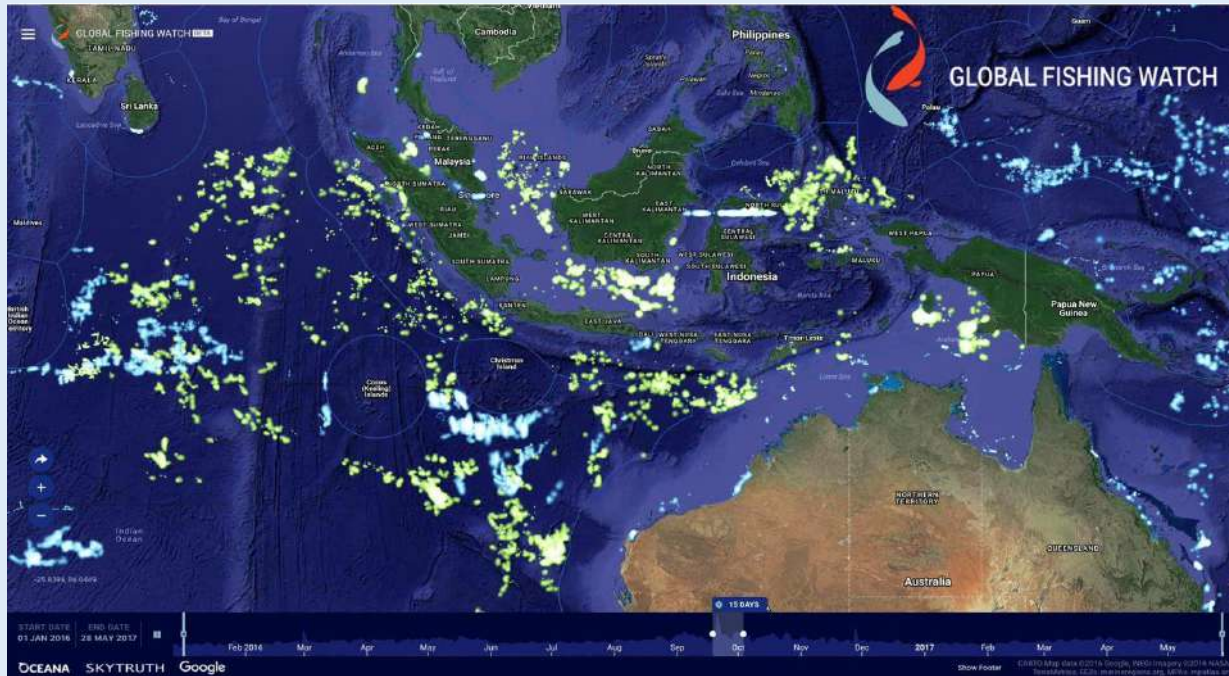


# International MCS platforms and networks





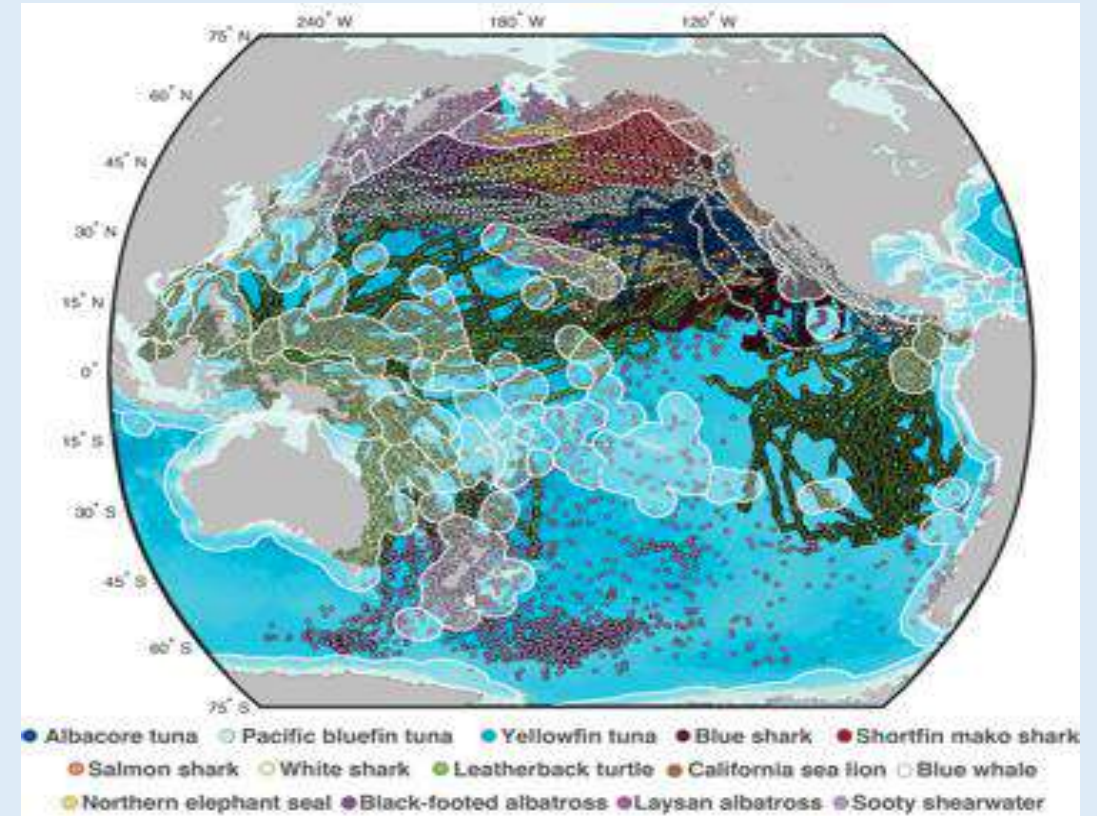
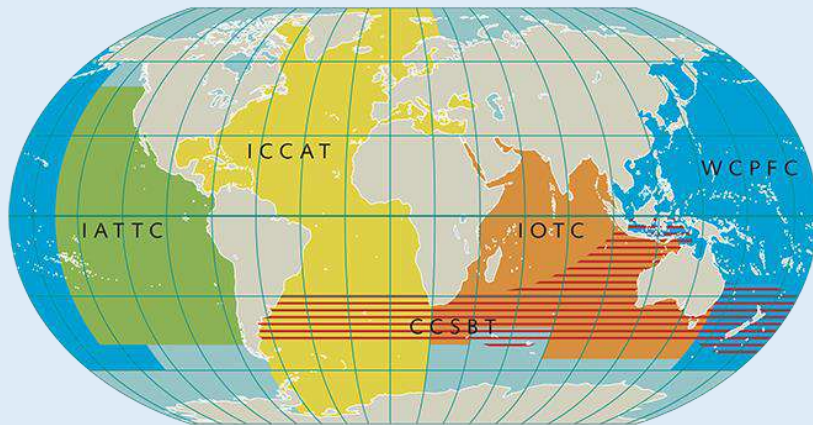
# Transnational partnerships





## 4. MCS Challenges

- 1) A patchwork of MCS rules
- 2) Lack of capacity
- 3) Governance gaps





## 5. How to strengthen MCS?

- 1) Technological tools
- 2) Policy options
- 3) Market measures





## 5. How to strengthen MCS?

### Treaty on ABNJ

- No global MCS system, but MCS as cross-cutting issue in negotiations
- Two-way relationship between MCS and the agreement
- Package deal components
- Incorporate guiding principles
  - Cooperation and coordination
  - Transparency
  - Reporting





## 6. Conclusion

- Many MCS tools available, but problem of implementation gaps and lack of capacity
- No one-size-fits-all approach to MCS
- Cooperation and coordination is key:
  - Chair of the FISH-i Africa Task Force: “the cheapest tool in fighting IUU fishing is the sharing of information and intelligence through cooperation among all MCS practitioners”
- Future high seas treaty: global vs regional MCS standards



## 7. Questions

- What are your experiences with MCS in your country/region?
- Could you share some examples of MCS challenges or best practices in your country/region?
- How do you think MCS could be strengthened in your country/region?
- Are you or someone in your area working on something related to MCS?



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**Thank you!**

**klaudija.cremers@iddri.org  
@CremersK**

**IKI STRONG High Seas project  
@PROG\_ocean  
prog-ocean.org/our-work/strong-high-seas**



ABIDJAN CONVENTION  
CONVENTION D'ABIDJAN



**IDDRI**



International Ocean Institute  
African Region





# **STRONG High Seas Project: Next Steps and Outlook**

Ben Boteler  
Institute for Advanced Sustainability  
Studies (IASS)

12 June 2019  
Cape Town , South Africa



## Some general reflections

- Recognition of the **importance of conservation and sustainable use of marine biodiversity in ABNJ**.
- **Engagement in further debates and negotiations at the national, regional and global level** is important for ABNJ. Call to action – Africa Position Paper?
- The projects are initiating some research (and addressing early capacity issues) in both regions, however attention should be paid to establishing strong connections to policy platforms, and ensuring a robust science to policy process to ABNJ, as well as coastal waters.
- **Cross-sectoral collaboration/communication/coordination** is needed at both the national, regional and global level.
- A regional (or inter-regional) **mechanism or platform for sharing knowledge and data** is needed to support collaboration.



# Some general reflections

- Area-based management tools, such as MSP, are appropriate for use in ABNJ, and - extension/expansion of the emerging capacity for the implementation from coastal areas.
- **Capacity building and the transfer of marine technology** are required to ensure the full implementation of BBNJ objectives.
- Activities such as (fishing, shipping, offshore oil and gas, etc.) and MGRs are of particular interest.
- Improved tools and policy support for **monitoring, control and surveillance** are needed.
- **A sustainable blue economy is important to ensure the socioeconomic development** as well as into future.
- Ecological connectivity! **Biodiversity loss in the high seas threatens coastal livelihoods and activities in the EEZ.**

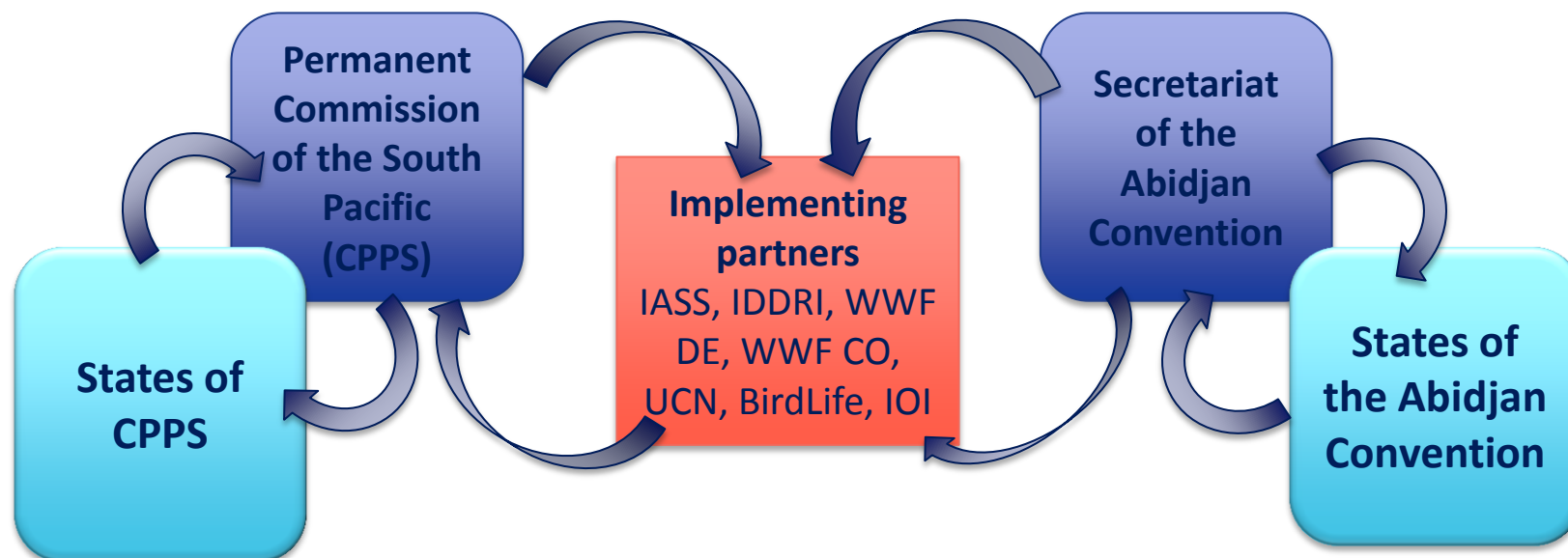


# What will STRONG High Seas do?

- Support the joint **summary of the Workshop Summary**, including ppts and pictures.
- Publication of the **ecological baselines** report.
- **Policy brief** to be published in preparation of IGC3 in New York.
- **Capacity building event on MGRs** at IGC3 in New York.
- Report on technical **technological tools and policy needs** relevant for the **monitoring, control and surveillance** of human activities in ABNJ
- Regional workshop on MCS in 2020
- Report on **capacity building needs** for the region
- **Capacity building workshop** to be held later this year
- Development of an **initial stakeholder platform** , hosted by the Abidjan Secretariat website.
- Begin work on a **socioeconomic assessment** – to be a focus of next regional workshop.



# Collaborative approach



## Collaboration with the regions

- Identification of topics for in-depth assessment
- Co-design of regional specific scientific assessments (project outputs)
- Data and information exchange
- Review and evaluation of project relevant outputs
- Co-development of joint workshops and trainings
- Ongoing exchange (stakeholder platform)



# What can you do?

- **Apply for the DOALOS trust fund by 28 June** and join STRONG High Seas in New York for IGC3 – **Capacity Workshop on 25 August.**
- Look for **emails from the Abidjan Secretariat** (Ms Binta Toure ) from the STRONG High Seas project and other information on BBNJ/ABNJ.
- Join STRONG High Seas at the **next Dialogue Workshop in 2020**– Date and location TBD.
- Be **champions for ABNJ** in your national governments or organisations and in the region.
- **Engage with the STRONG High Seas team.**
- Sign up for the **newsletter**, follow on **social media**.



# Regular updates

- Project website

<https://www.prog-ocean.org/our-work/strong-high-seas/>

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## LATEST NEWS



High-Level Expert Meeting –  
Building a Strong High Seas Treaty:  
What is the Role for Regional Ocean  
Governance?  
October 2, 2018



STRONG High Seas Biodiversity  
Beyond National Jurisdiction  
Capacity Building Workshop  
September 18, 2018

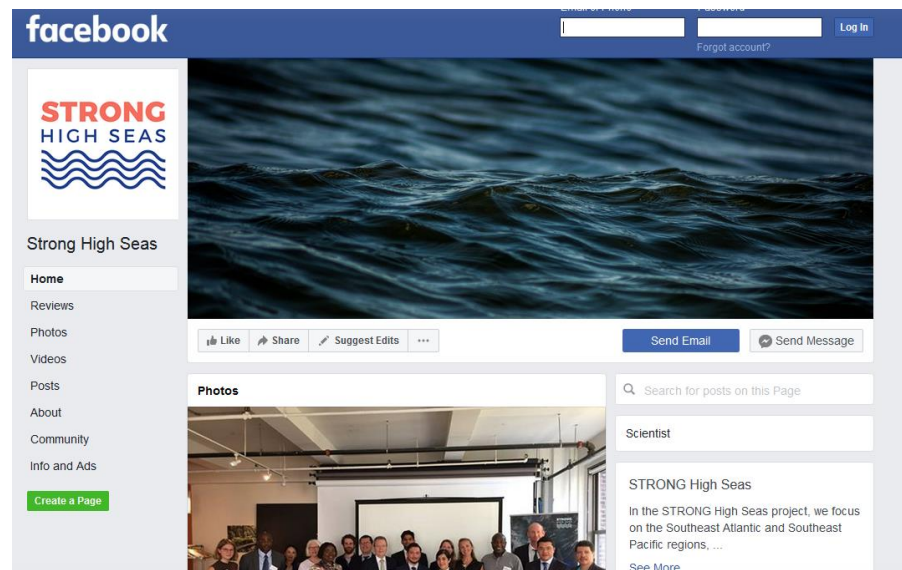
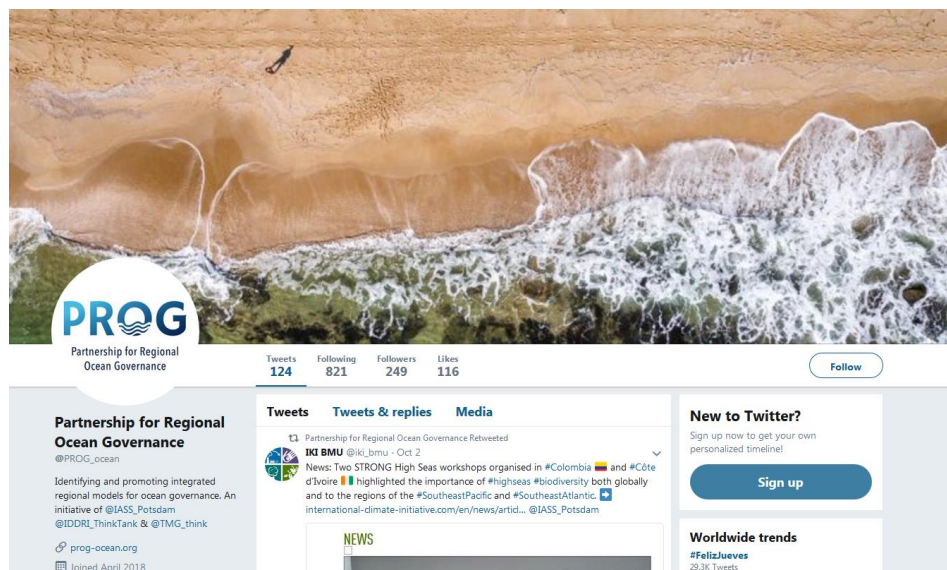


# Social media

- **Twitter & Facebook:**

[\*https://twitter.com/prog\\_ocean\*](https://twitter.com/prog_ocean)

[\*https://www.facebook.com/Strong-High-Seas-1719871564774351\*](https://www.facebook.com/Strong-High-Seas-1719871564774351)





# Thank you!



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**Ben Boteler**

Co-Lead, STRONG High Seas

Email: [ben.boteler@iass-potsdam.de](mailto:ben.boteler@iass-potsdam.de)

Institute for Advanced Sustainability Studies e.V.

Berliner Strasse 130

D – 14467 Potsdam

Web: [www.iass-potsdam.de](http://www.iass-potsdam.de) & [www.prog-ocean.org/](http://www.prog-ocean.org/)





Food and Agriculture  
Organization of the  
United Nations



# ABNJ Deep Seas Project Next Steps



*Sustainable fisheries management and biodiversity conservation of deep-sea living marine resources and ecosystems in the Areas Beyond National Jurisdiction*

**Dr. Nina Bhola**

**Senior Programme Officer** UN Environment World Conservation Monitoring  
Centre



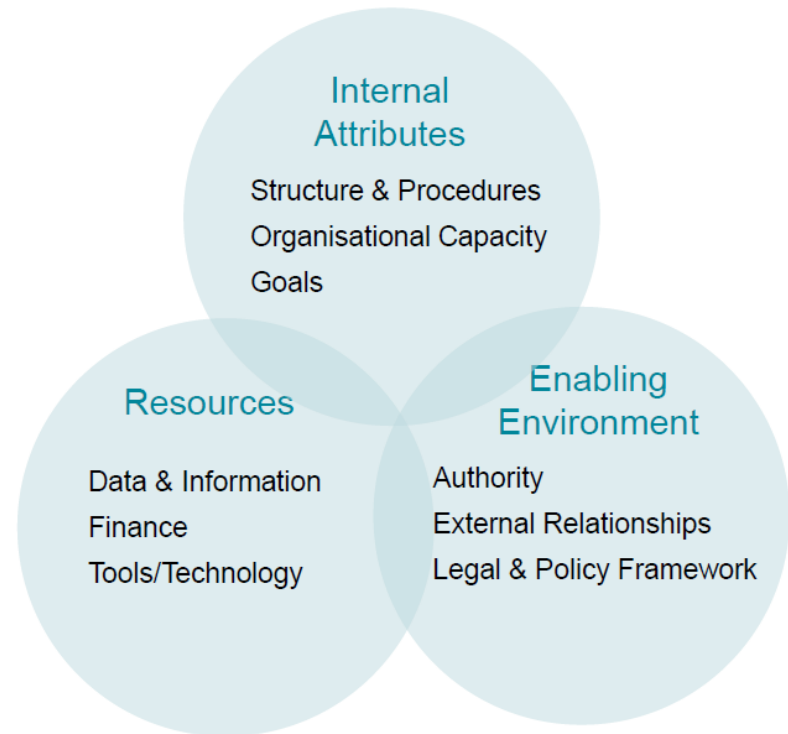
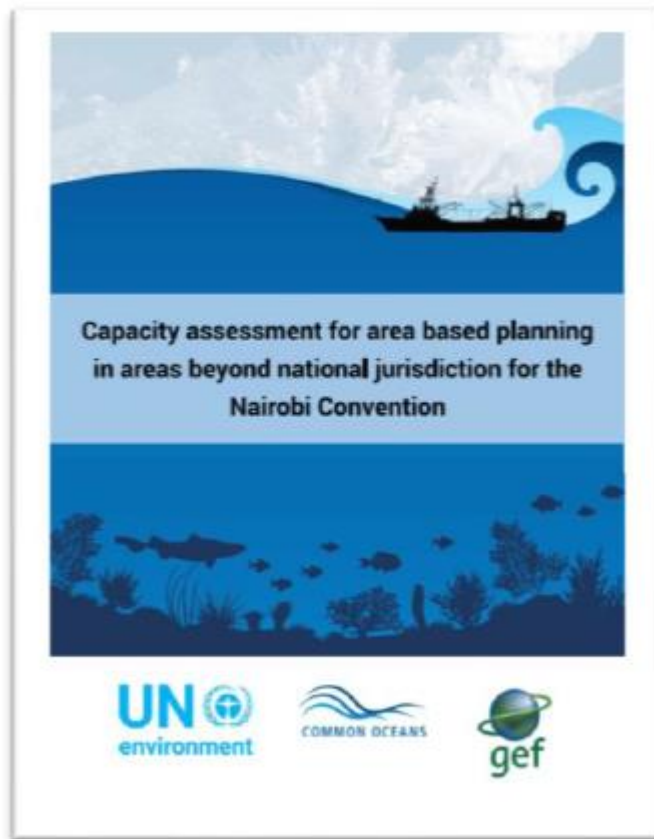
# Outputs

- **Synthesis report**
  - Key messages
- **Methodology for cross-sectoral planning in ABNJ**
  - Interactive sessions to test
  - Wider review
- **Online summary report**





# Capacity Assessment updated







## Vulnerable Marine Ecosystems Database

A global inventory of fisheries measures to protect vulnerable marine ecosystems in areas beyond national jurisdiction.



[Advanced Search](#) | [Legend](#) | [EmbedLink](#) | [X](#)

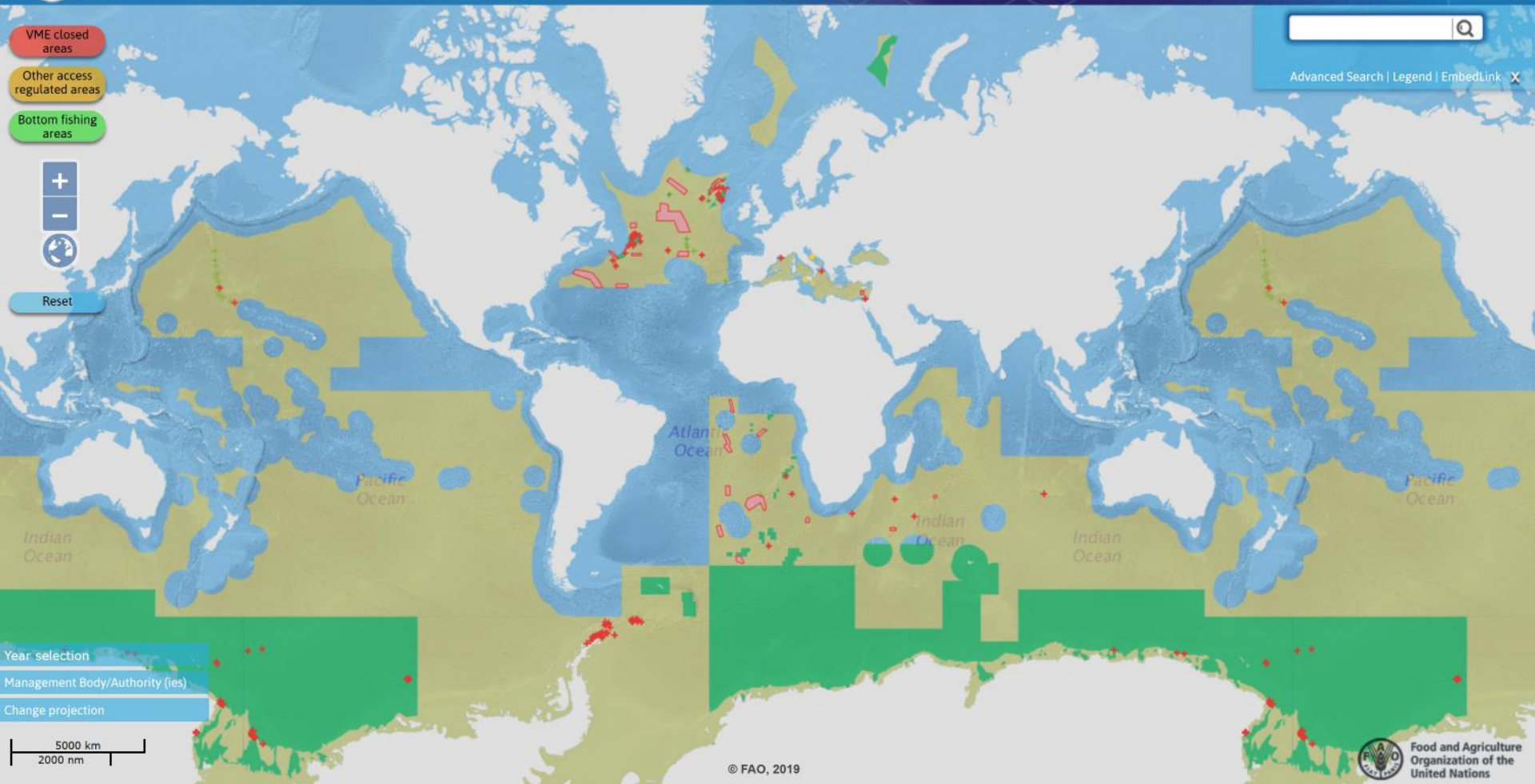
VME closed  
areas

Other access  
regulated areas

Bottom fishing  
areas



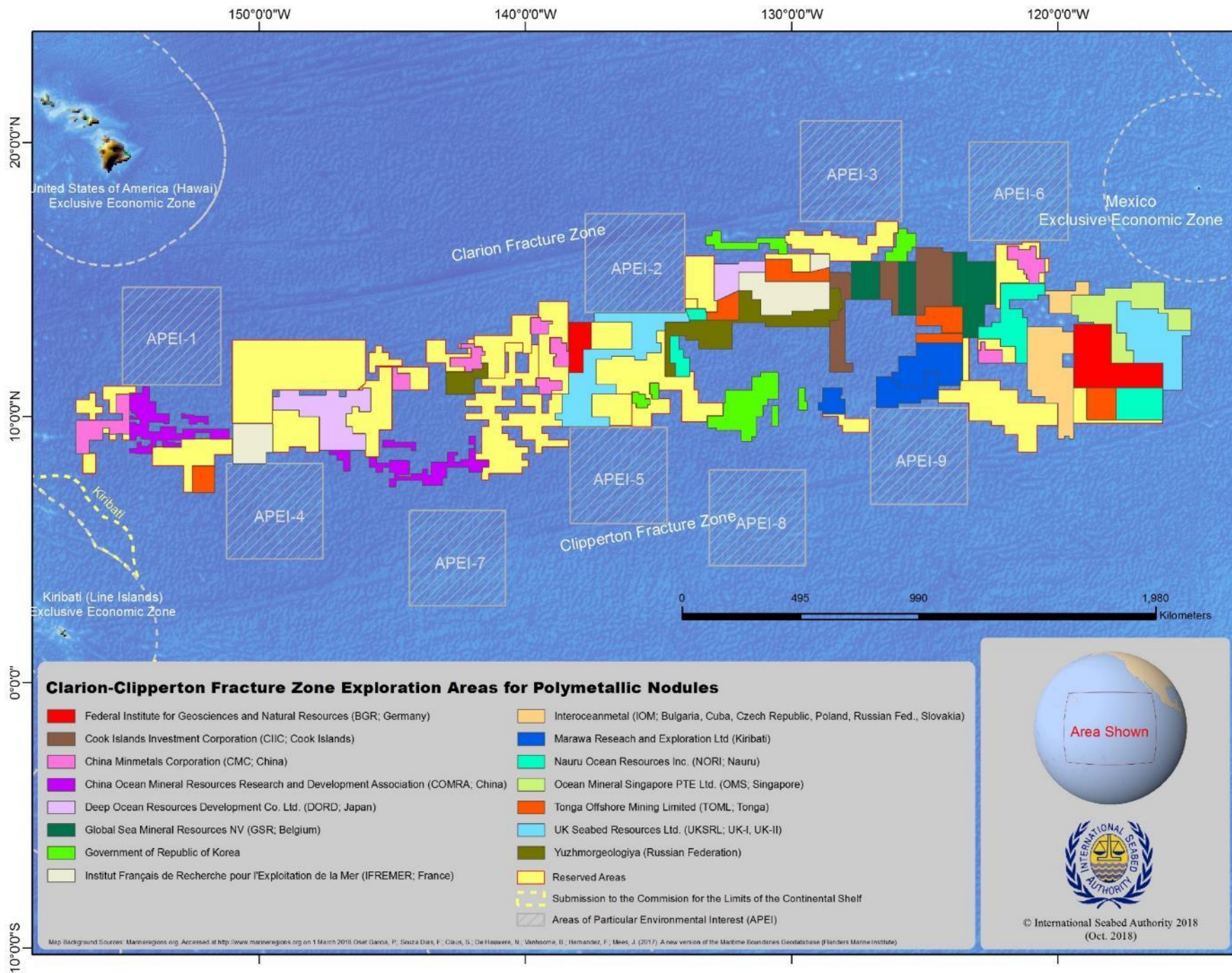
Reset



Year selection  
Management Body/Authority (ies)  
Change projection







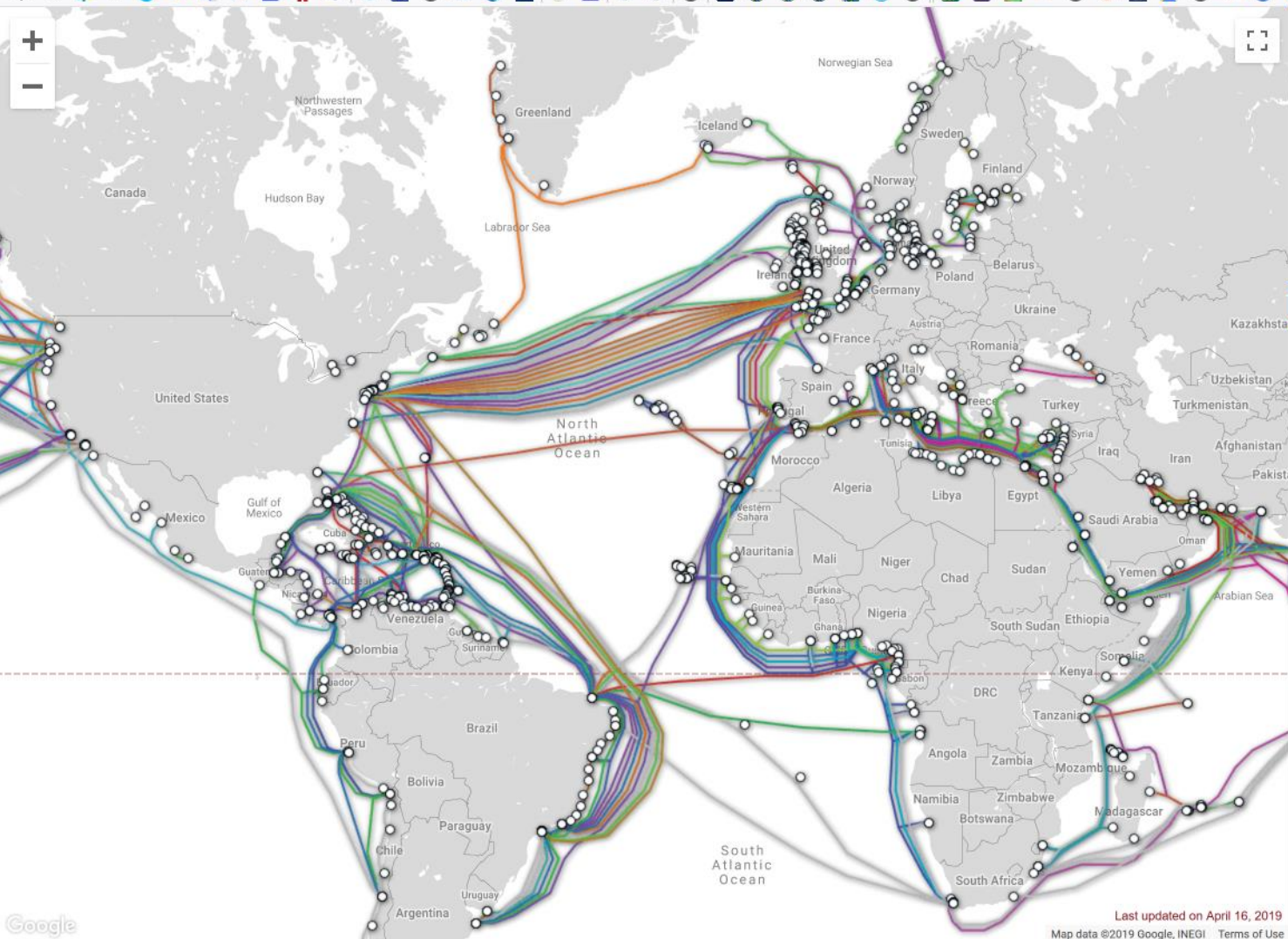


# Protected areas coverage in 2019



The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.





## TeleGeography Submarine Cable Map

The Submarine Cable Map is a free and regularly updated resource from TeleGeography.

Got a question about how we make this map? Or about how submarine cables work? Look no further.



Sponsored in part by Huawei Marine [Feedback](#) [github](#)

Q

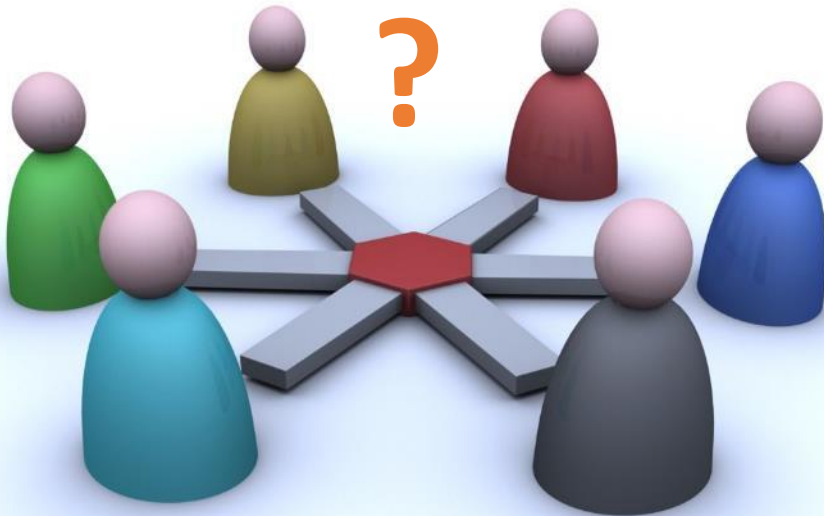
### Submarine Cables

- ACS Alaska-Oregon Network (AKORN)
- Aden-Djibouti
- Adria-1
- AEConnect-1
- Africa Coast to Europe (ACE)
- Africa-1
- Alaska United East
- Alaska United Southeast
- Alaska United Turnagain Arm (AUTA)
- Alaska United West
- ALBA-1
- Aletar
- Alonso de Ojeda
- ALPAL-2
- America Movil Submarine Cable System-1 (AMX-1)
- American Samoa-Hawaii (ASH)
- Americas-I North
- Americas-II
- Amerigo Vespucci
- Antillas 1
- APCN-2
- Aphrodite 2
- Apollo
- Aqualink
- ARBR
- ARCOS



# ABNJ Deep Seas Project Information Sharing Platform (*Prototype*)

Information  
exchange



Aim: to create a **prototype** of a user-friendly web platform that brings together information from **across all sectors** active in ABNJ



# Ocean + library

## Ocean+

Home to more than half of all life on Earth, the Ocean covers over 70% of the surface of the planet.

The ocean contains some of the most productive ecosystems, vast natural resources, and unique habitats on Earth. The ocean also plays a vital role in regulating the planet's climate. However, the marine environment is facing many pressures, from the impacts of climate change and overfishing to the effects of pollution from microplastics and marine litter.

Accurate and up-to-date data and information are required to support adaptive conservation and resource management that can help to mitigate these impacts, and to conserve marine species and habitats.

### Ocean+ Library

[Ocean+ Library](#) addresses this need for information by providing an overview of global marine and coastal datasets of biodiversity importance, including some datasets of regional interest.

### Ocean+ Habitats

[Ocean+ Habitats](#) aims to improve access to marine habitat data and information through partnerships, and will be evolving to include regional and national information.



[Protected Planet – Marine](#) presents the most recent official coverage statistics for marine protected areas, updated monthly from the World Database on Protected Areas.

### OCEAN DATA VIEWER

The [Ocean Data Viewer](#) offers users the opportunity to view and download a range of spatial datasets that are useful for informing decisions regarding the conservation of marine and coastal biodiversity.



# Deep Seas project: partners

## Funding:

US\$ 8 million  
from GEF for  
5 years



## Co-funding

estimate US\$ 79 million

## Executing Agencies



Food and Agriculture  
Organization of the  
United Nations



## Partners



Convention on  
Biological Diversity

Secretariat of the Convention on  
Biological Diversity (CBD)



Commission for the Conservation of  
Antarctic Marine Living Resources  
(CCAMLR)



Permanent Commission for the South  
Pacific (CPPS)



Duke University



General Fisheries Commission for  
the Mediterranean (GFCM)



Global Ocean Biodiversity Initiative

Global Oceans Biodiversity Initiative  
(GOBI)



A Centre Collaborating with UNEP

GRID-Arendal



International Coalition of Fisheries  
Associations (ICFA)



International Union for Conservation  
of Nature (IUCN)



Northwest Atlantic Fisheries  
Organization (NAFO)



Nairobi Convention



North East Atlantic Fisheries  
Commission (NEAFC)



National Oceanic and Atmospheric  
Administration (NOAA)

NPFC



South East Atlantic Fisheries  
Organisation (SEAFO)



Sealord Group



Southern Indian Ocean  
Deepwater Fishers Association  
(SIODFA)



South Pacific Regional Fisheries  
Management Organisation (SPRFMO)



[www.commonoceans.org](http://www.commonoceans.org)





# Possible Next Phase under GEF 7 (Draft)

## Immediate programme Outcomes and key elements (enabling environment)

### Outcome 1 – Frameworks and processes for more effective governance and management in ABNJ (including fisheries management) strengthened

1. Policy and legal frameworks to support sustainable use of ABNJ resources
2. Government and institutional mandates, roles and responsibilities related to governance of ABNJ
3. Fisheries management processes to enhance responsiveness to uncertainty strengthened
4. Incentives and deterrents to promote compliant behaviour

### Outcome 2 - Capacity for better implementation of ecosystem based management in fisheries management in the ABNJ strengthened

1. Capacity to apply EAM to ABNJ
2. Capacity to develop and enforce governance regimes related to ABNJ resources (e.g. addressing IUU fishing)
3. Data collection, compliance monitoring and reporting to support science-based decision making and implementation
4. Management solutions for sustainable use of ABNJ resources

### Outcome 3 – Participation in multi-sectoral coordination for more effective governance and management of ABNJ improved

1. Mechanisms, tools and resources to improve coordination between sectors and stakeholders with interests in ABNJ
2. Awareness and understanding of the role of all sectors in the sustainable use of ABNJ

### Outcome 4 – Knowledge and information exchange for more informed decision-making among stakeholders to support sustainable utilization of ABNJ improved

1. Technical/scientific information on ABNJ issues
2. Information exchange mechanisms to support decision-making and awareness-raising
3. Information on ABNJ issues available to inform choices of decision-makers and civil society

## Medium-term Outcomes (changes in systems and behaviour)

**Effective compliance and enforcement of fisheries regulations** by RFMO member states

**Widespread adoption of best practices for sustainable management of ABNJ resources** including consideration of impacts on the ecosystem and adaptation to climate change

**Comprehensive, well-informed BBNJ process** underway with coordinating mechanisms among sectoral users (including links to LMEs and RSOs) to achieve ecosystem goals in the ABNJ

**Increased market and political pressure for sustainably sourced ABNJ products** with greater transparency and traceability, reducing presence of IUU products in the markets

**Increased public and private sector support and investment for sustainable management of ABNJ**

Effective and sustainable cross-sectoral **governance** of natural resources in ABNJ

Adaptive, coordinated, **sustainable management** of ABNJ resources following Ecosystem Approach

**Sustainable/optimal use** of ABNJ resources and strengthened biodiversity conservation in face of a changing environment

## Intermediate states (improved environmental + social conditions)

### Environmental (GEB)

Reduced/minimized negative impacts on biodiversity and ecosystem services in ABNJ (e.g. reduced bycatch)  
Improved conservation status of key ABNJ species/ habitats

### Socio-economic

Improved livelihoods, food security for communities dependent on ABNJ resources  
Improved working conditions and gender opportunities in ABNJ  
Reduced vulnerability/improved resilience of communities reliant on ABNJ resources to CC impacts  
Equitable and managed access and benefit sharing of ABNJ resources including marine genetic resources

## Long-term impacts

Healthy ecosystem structure, function and processes in ABNJ improved and maintained  
Sustainable supply of ecosystem goods and services from ABNJ with long-term socio-economic benefits (both use and non-use values) to human populations (link with Blue Growth?)





# Thank you

- UNEP-WCMC:
  - [Nina.Bhola@unep-wcmc.org](mailto:Nina.Bhola@unep-wcmc.org)
  - [Rachael.Scrimgeour@unep-wcmc.org](mailto:Rachael.Scrimgeour@unep-wcmc.org)

<http://www.commonoceans.org/>