The BBNJ Agreement and the role of science and its stakeholders: perspectives on the sustainable use and conservation of marine biodiversity beyond national jurisdiction

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Online

VTA Tassin – Public international law firm dedicated to Ocean & Seas.

Presentation Plan

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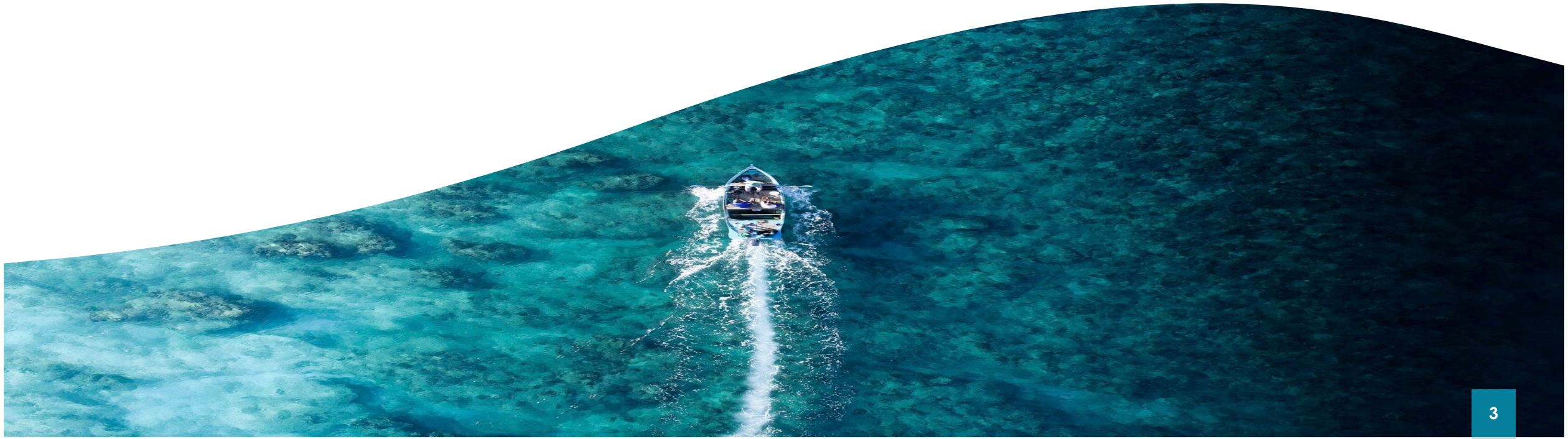
1 – The context: the UN Convention on the Law of the Sea

2 – The specific case : The BBNJ Agreement, pillars and main objectives

3 – The importance: the role of science and its stakeholders in the implementation of the BBNJ Agreement

1. The context: the United Nations Convention on the Law of the Sea (UNCLOS)

Specificity and challenges, dynamics of evolution and latest additions



1982 UN Convention on the Law of the Sea 'UNCLOS' - Basics

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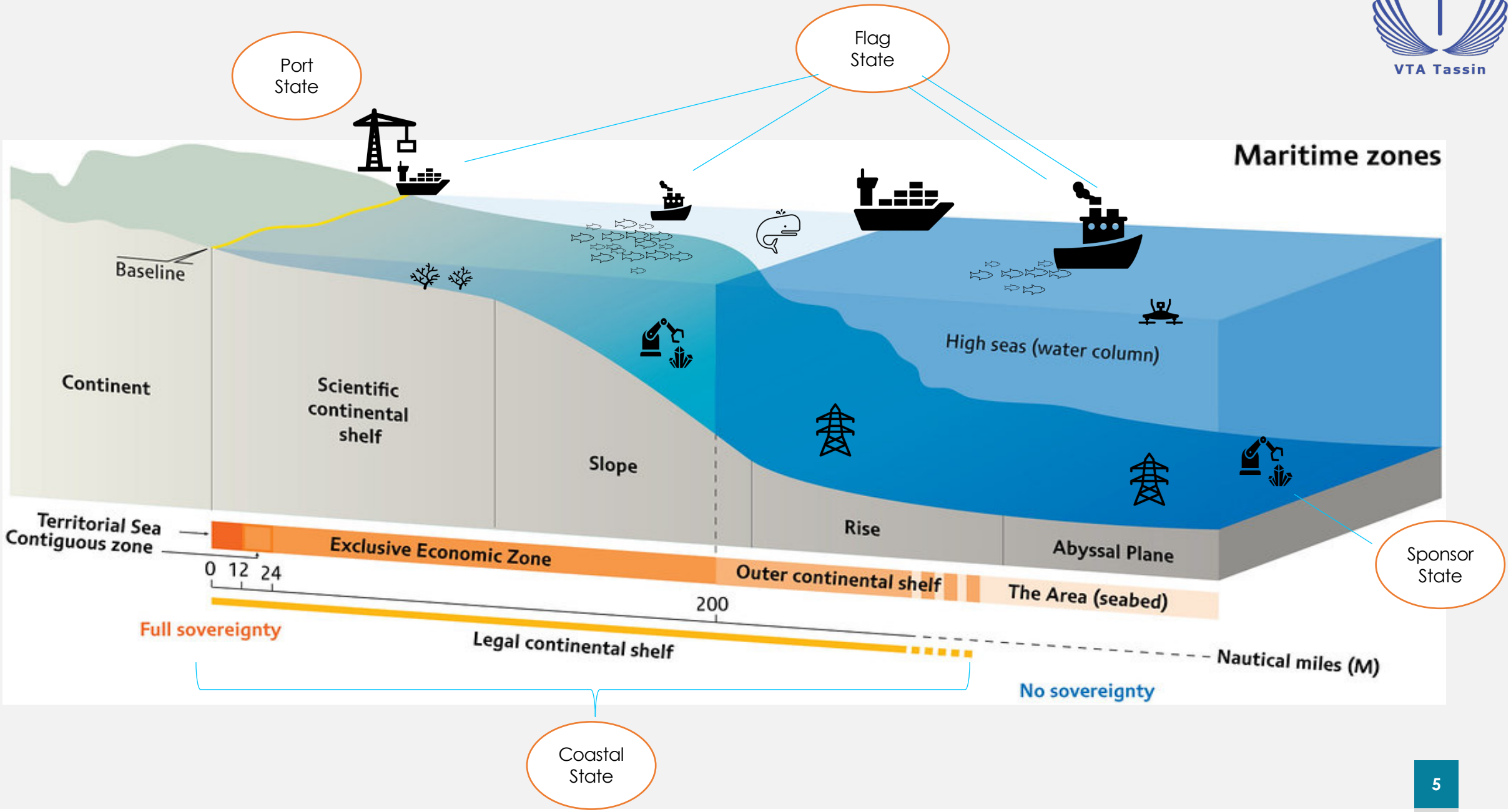
- **All in one :** First international convention aiming to regulate all marine spaces and activities
  - ➢ Universality
  - ➢ Unity
  - ➢ Fair level playing field among all States (coastal and landlocked, developping and developped)
- **State-centered convention** providing rights & duties to various levels of State authority
  - Coastal States
  - Port States
  - Flag States (coastal or even landlocked State)
  - Sponsor States (outside national jurisdiction for exploration/exploitation deep sea minerals)
- **Main goals of UNCLOS**
  - ✓ Maintenance of peace, justice and progress for all peoples of the world
  - ✓ Creation of a **legal order for the seas and oceans** creating a balance between facilitation of international communication, peaceful uses of the sea, equitable utilization of resources andconservation & protection of the marine environment

« the acheivements of these goals will contribute to the realization of a just and equitable international economic order which takes into account the interests and needs of mankind as a whole and, in particular, the special interests and needs of developing countries, whether coastal or land-locked » (Preamble)

UNCLOS Legal Zoning, diversity of activities and stakeholders



UNCLOS Legal Zooning: overlaps

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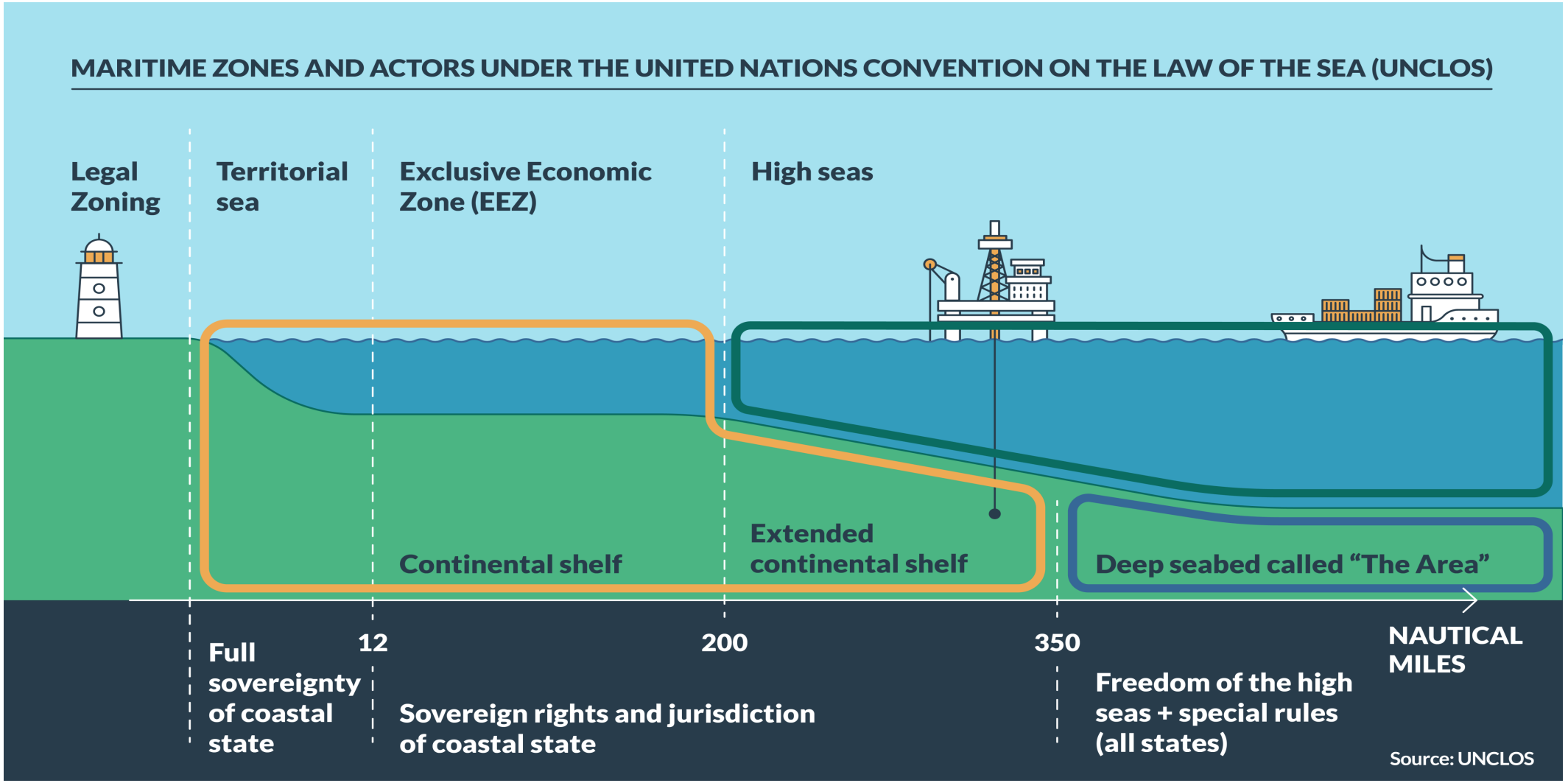

* UNCLOS= United Nations Convention on the Law of the Sea

Challenges associated to UNCLOS

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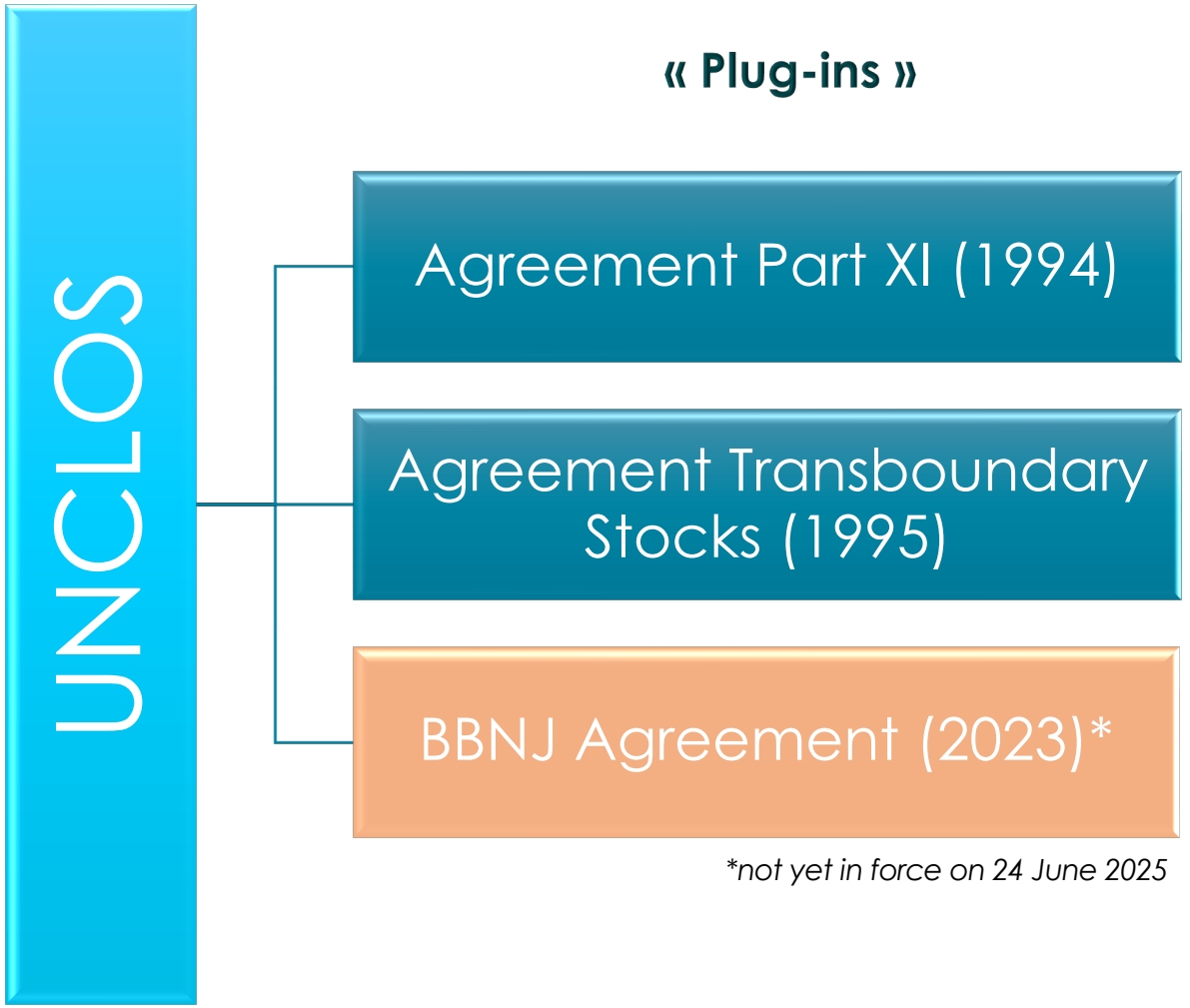
- **Ratification of UNCLOS**
  - 9 years of negotiations, 160 States involved, 320 articles negotiated and drafted !!!
  - Adoption of a 'package' treaty = all or nothing approach (package deal)
  - Important disagreements of industrialised States despite adoption. Why?
    - Balance of interests between developped and developing States questioned
      - Balance between investors, risks of investments and return of investments vs. Mandatory transfer of technology
      - Trade and market oriented approached changed between 1970's and 1980's.
      - Threats to not ratify UNCLOS if UNCLOS not adapted to their concerns
      - Potential collapse of ocean governance if no ratification of industrialised States

- **How to adapt a Treaty already adopted?**
  - Challenge 1 : How to change the rules/mechanisms?
  - Challenge 2 : How to modernise the treaty with new concerns?
    - For example; new resources to regulate, new actors to take in consideration, new cooperation mechanisms, new environmental or societal concerns to integrate?

What do you think?

Evolution of UNCLOS: the role of Implementing Agreements



Deep sea mining beyond national jurisdiction

Straddling and highly migratory fish stocks

Sustainable use and conservation of marine biological diversity in areas beyond national jurisdiction

*not yet in force on 24 June 2025

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2. The specific case: the “BBNJ Agreement”

Timeline, pillars and selected features of interest

Implementing Agreement of UNCLOS on Marine Biodiversity of Areas Beyond National Jurisdiction
"BBNJ Agreement"

BBNJ Timeline: Fast tracked ratifications?

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2016-2017

PREPARATION
(Prep. Committee)

2017

UN General Assembly Resolution 72/249

2018

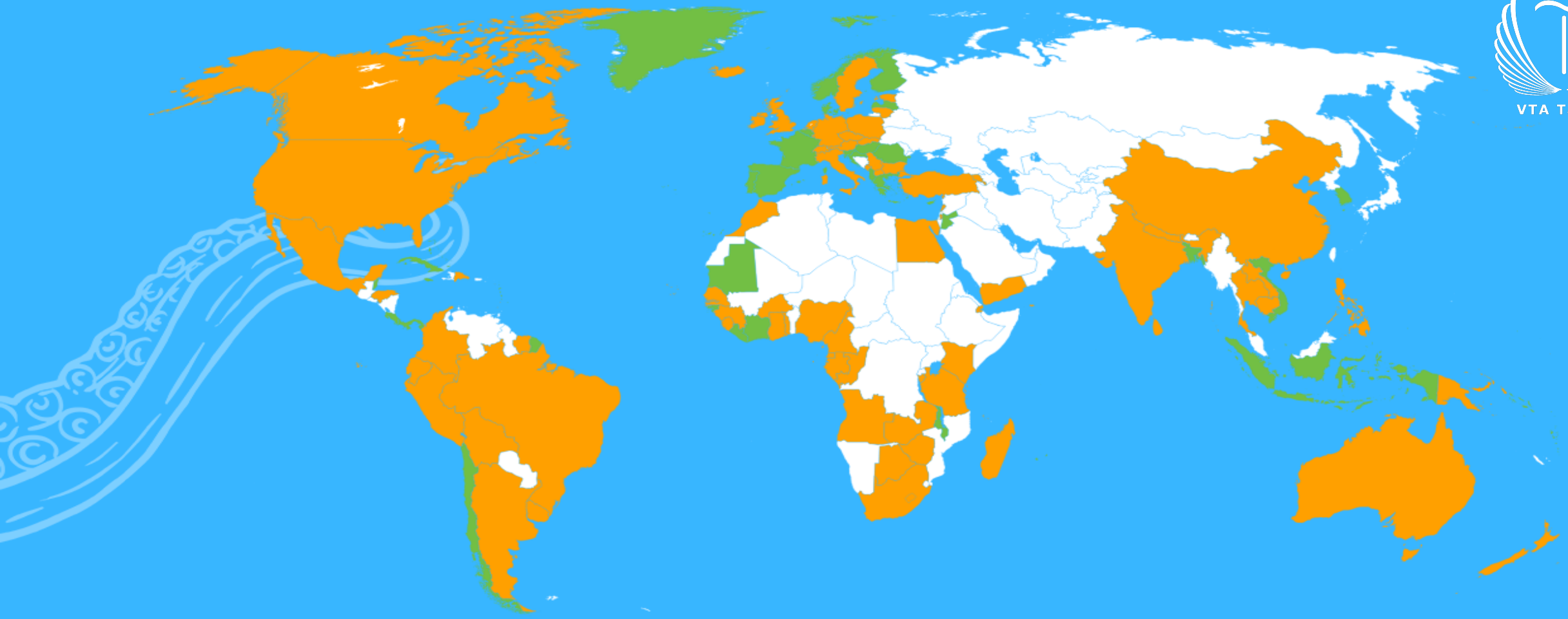
START of intergov. negotiations

2023

Adoption of BBNJ Agreement

2026 ?

Entry into Force (60 ratifications)

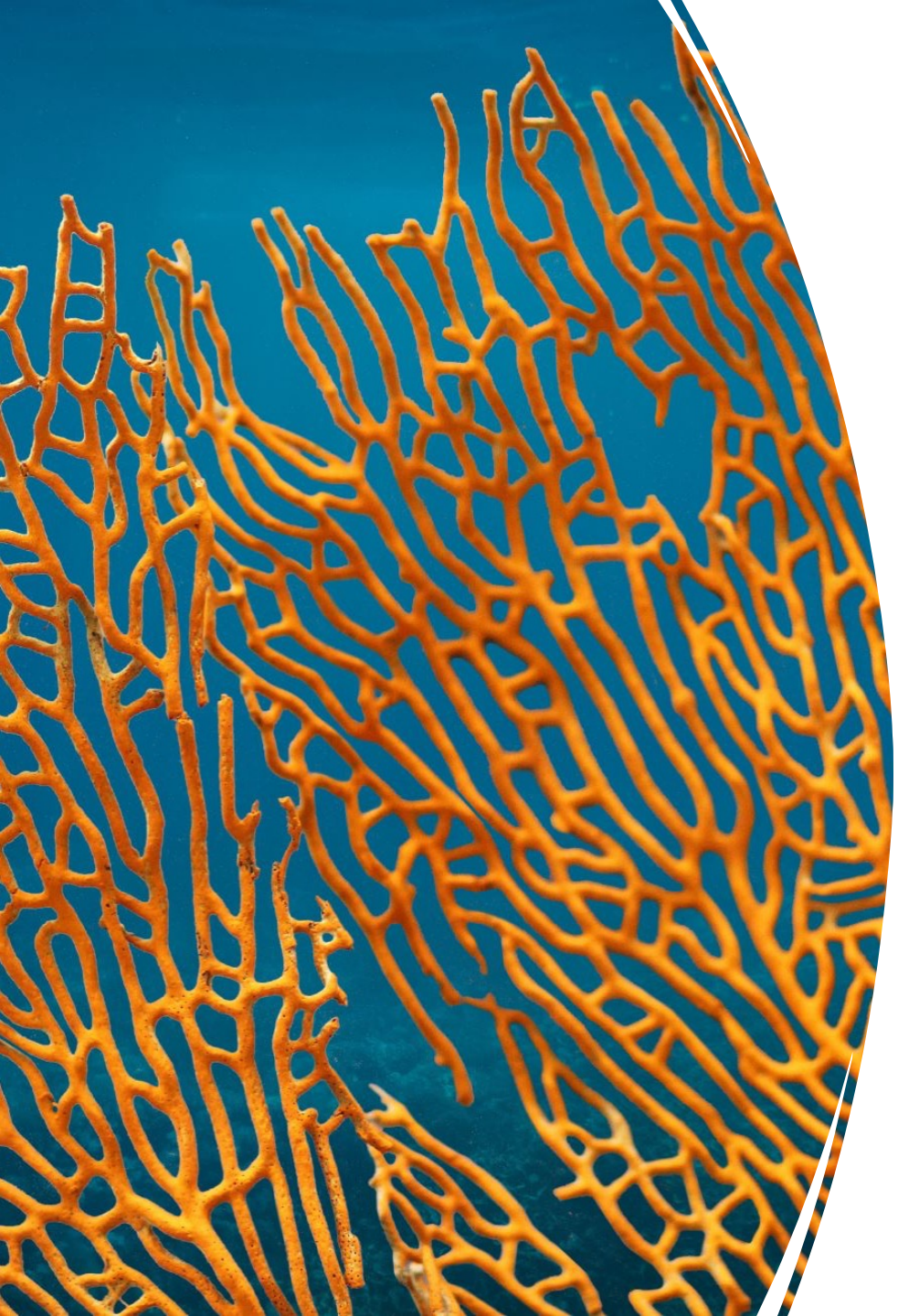


197 UN Member Countries: No Action: 60 Signed: 137 Ratified: 50

Note: Some of the 197 UN Member Countries are too small to be seen on the map.

LIST OF COUNTRIES TRACK PROGRESS

Graph Source: High Seas Alliance 2025



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BBNJ Agreement in Ocean Governance

- Difficult (and short) negotiations
  - 4 years with 2 years suspended because of Covid
  - Important oppositions of main maritime powers (Japan, China, Russia…)
  - Important worries due to the new international “umbrella” which might overlap / create tensions with existing bodies and framework (Antarctic Treaty, OSPAR, IMO….)
- BBNJ Agreement exists thanks to a compromise “do not undermine” principles”
- Adopted due to its importance with regards to
  - Tools dedicated to support developing countries to have a fair and equitable access and benefit sharing of resources
  - Solve important legal loopholes in UNCLOS with regards to sustainable use and biodiversity conservation of marine biodiversity
  - Modernise UNCLOS with new considerations such as : “sustainable use”, “all stakeholders” and strengthens ecosystem approach.

The 4 pillars of the BBNJ Agreement

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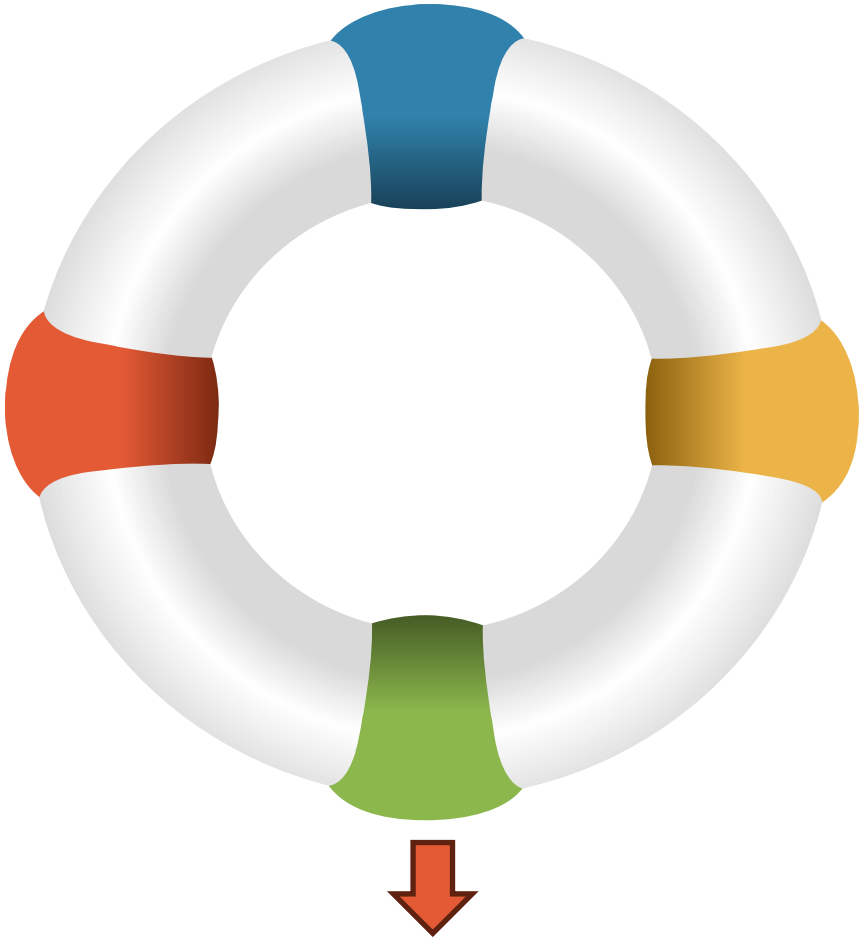
Environmental Impact Assessment

Standards to ensure sustainable use and conservation of marine biodiversity beyond national jurisdiction



Area-based Management Tools

Framework to support the use of different tools such as marine protected areas, marine spatial planning, ecological corridors…

Capacity Building & Transfer of Technology

Strengthening of existing UNCLOS roles and adaptation to challenges of biodiversity sustainable use and conservation

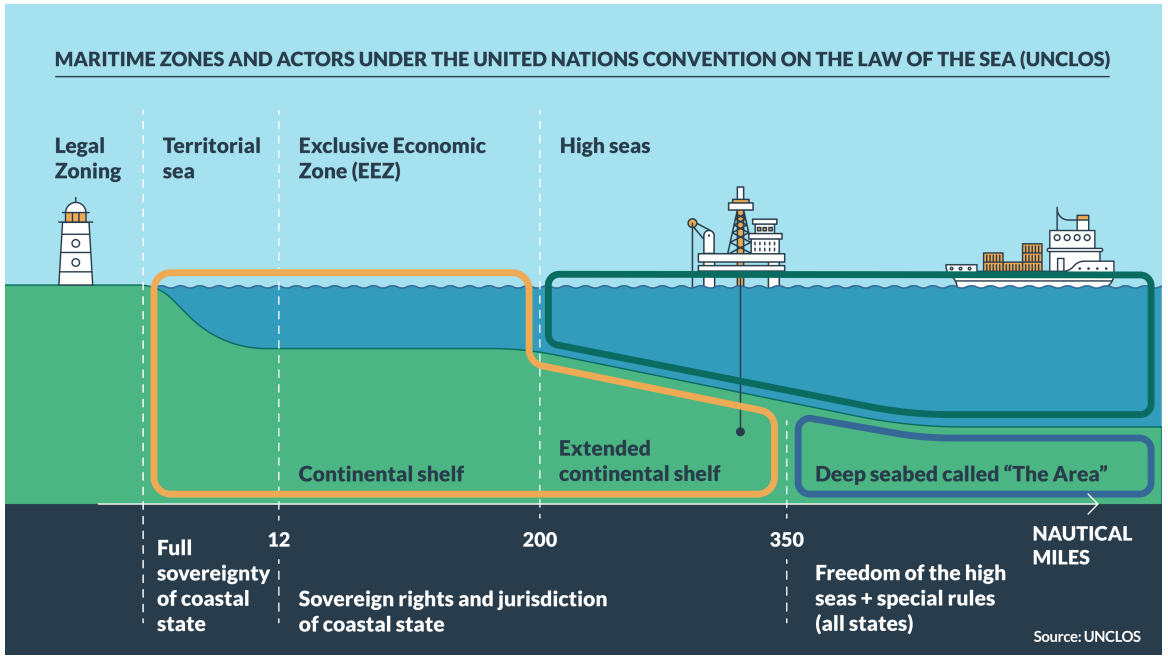
Marine Genetic Resources

Regulation of new resources under UNCLOS taking in consideration all stakeholders

Require

Robust scientific knowledge, ocean data sharing and new technological tools to observe, collect and share scientific data & information for the management of marine biological diversity

What does « sustainable use » and « conservation » mean ?



Regulation of the sustainable use and conservation of biodiversity beyond national jurisdiction

"Sustainable use" of marine biodiversity

- Never mentioned in UNCLOS
- Agenda 2030 « SDG 14.C *"enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS…."*
- Definition under BBNJ Agreement " *means the use of component of biological diversity in a way and at a rate that does not lead to a long-term decline of biological diversity ; thereby maintaining its potential to meet the needs and aspirations of present and future generations*" (Art. 1.13)

"Conservation" of marine biodiversity

- Term used in UNCLOS (conservation of living resources) but not defined
- No definition provided by the BBNJ Agreement
- Term used in Convention on Biological Diversity and UN Sustainable Development Goals :
  - See also Agenda 2021 (Chapter 15.3) and 1994 UICN Guide Convention on Biological Diversity,
  - Agenda 2030 (SDG 14.C)

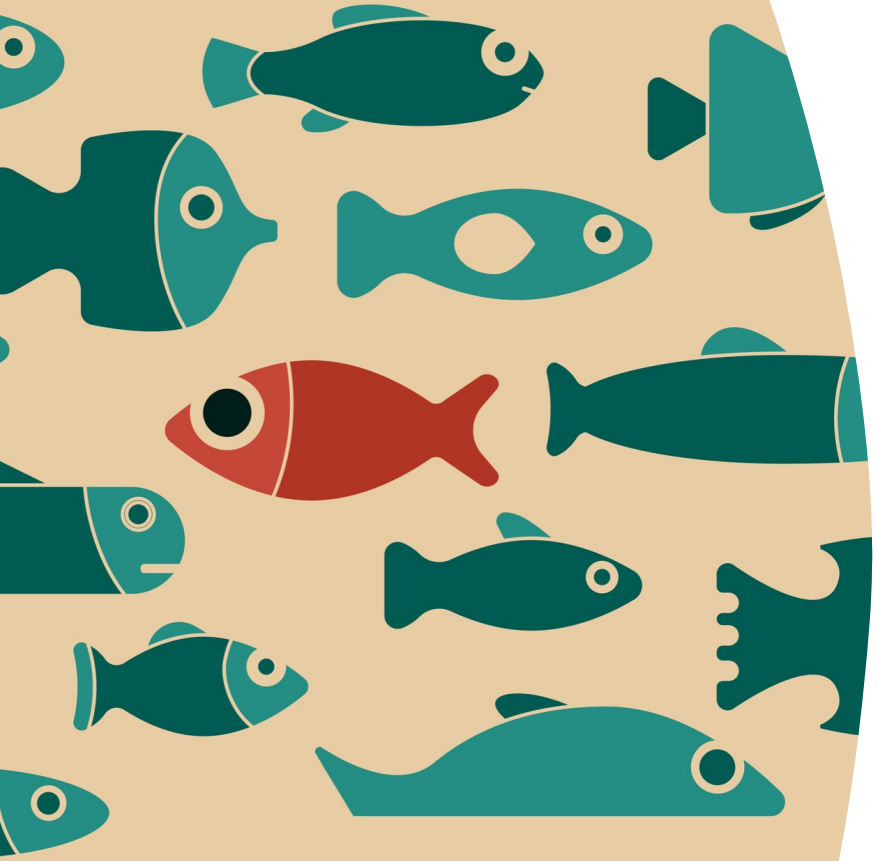
Beyond national jurisdiction includes two types of maritime areas

- High Seas = patchwork of governance frameworks that overlaps (sectorial, regional and international)
- The Area (international seabed)
  - International Seabed Authority but limited mandate
    - For ex: laying of submarine cables and pipelines, carbon storage…

Reminder:

- BBNJ: Implicit need of scientific research to implement sustainable use and management of marine bioligical diversity
- Builds upon UNCLOS : Freedom of marine scientific research at sea when conducted beyond national jurisdiction
  + duties of States to promote and facilitate the development and conduct of marine scientific research
  But freedom subject to some limitations: limited to peaceful purposes, subject to the rights and duties of other States under UNCLOS

Which « marine biodiversity » under the BBNJ Agreement ?



- No definition of « marine biodiversity » in BBNJ Agreement

- Intense debates on the inclusion of fisheries (due to existing 1995 straddling Fish Stock Agreement of UNCLOS)

- Marine genetic resources : *« any material of marine plant, animal, microbial or other origin containing functional units of heredity of actual or potential value »* (Art. 1.8)

- Biotechnology *« means any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use »* (Art. 1.3)

- Exclusion of scope of BBNJ Agreement for marine genetic resources
  - Fishing and fishing related activities
  - Fish or other living marine resources known to have been taken in fishing and fishing related activities from areas beyond national jurisdiction (with an exception though).

- Inclusion into the scope of BBNJ Agreement
  - Environmental impact assessment required for all planned activities *BEFORE* they are authorised

Focus 1: Area based management tool

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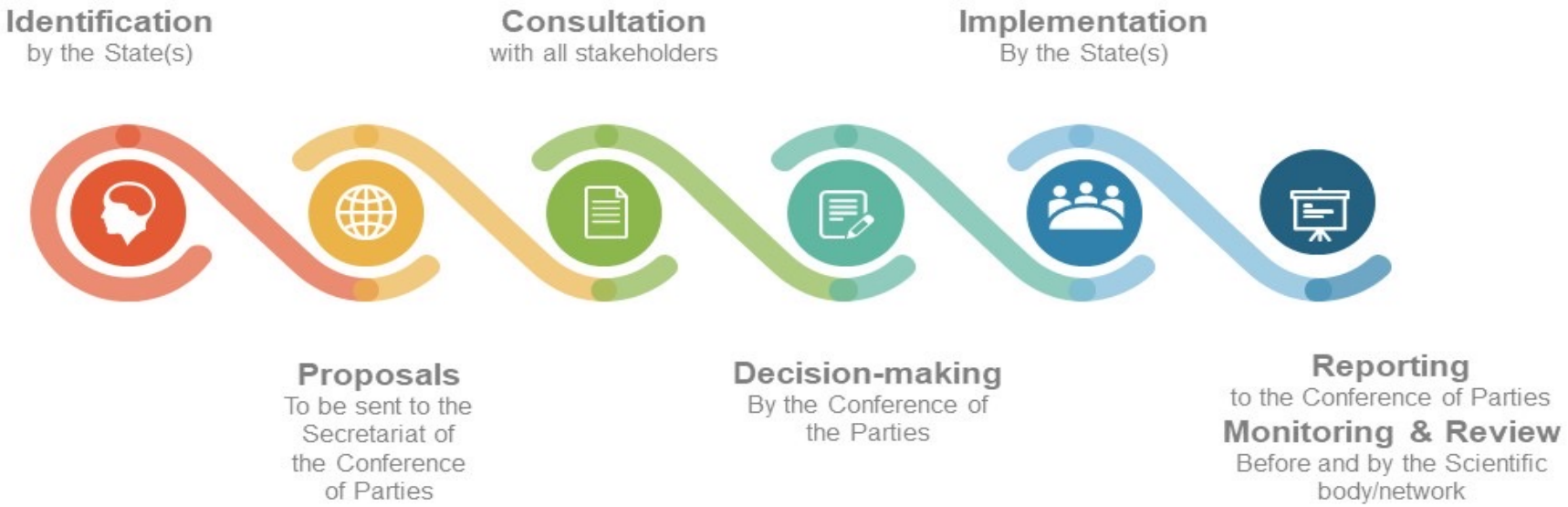
BBNJ Implementation Cycle (MPA)



Focus 1: Area based management tool

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Proposals made on the basis of **best available science & scientific information**, and, where available, relevant traditional knowledge of Indigenous Peoples and local communities

Take into consideration various elements, including

- human activity in the area, incl. by Indigenous Peoples and local community,
- description of the state of marine environment; biological diversity, conservation and sustainable use objectives
- draft management plan (monitoring, research, review of activities to achieve objectives…)
- Information on any consultation undertaken with States and/or global, regional, subregional and sectoral bodies
- Economic and social factors
- Relevant scientific input

Consultation and assessments: include feedback on the merits and any other relevant information

- *Criteria for identification include cultural, economic and social factors*
- *All Stakeholders can participate:* ***includes scientific expert and institution***

Establishment decided by COP but taking in consideration other frameworks, potential overlaps

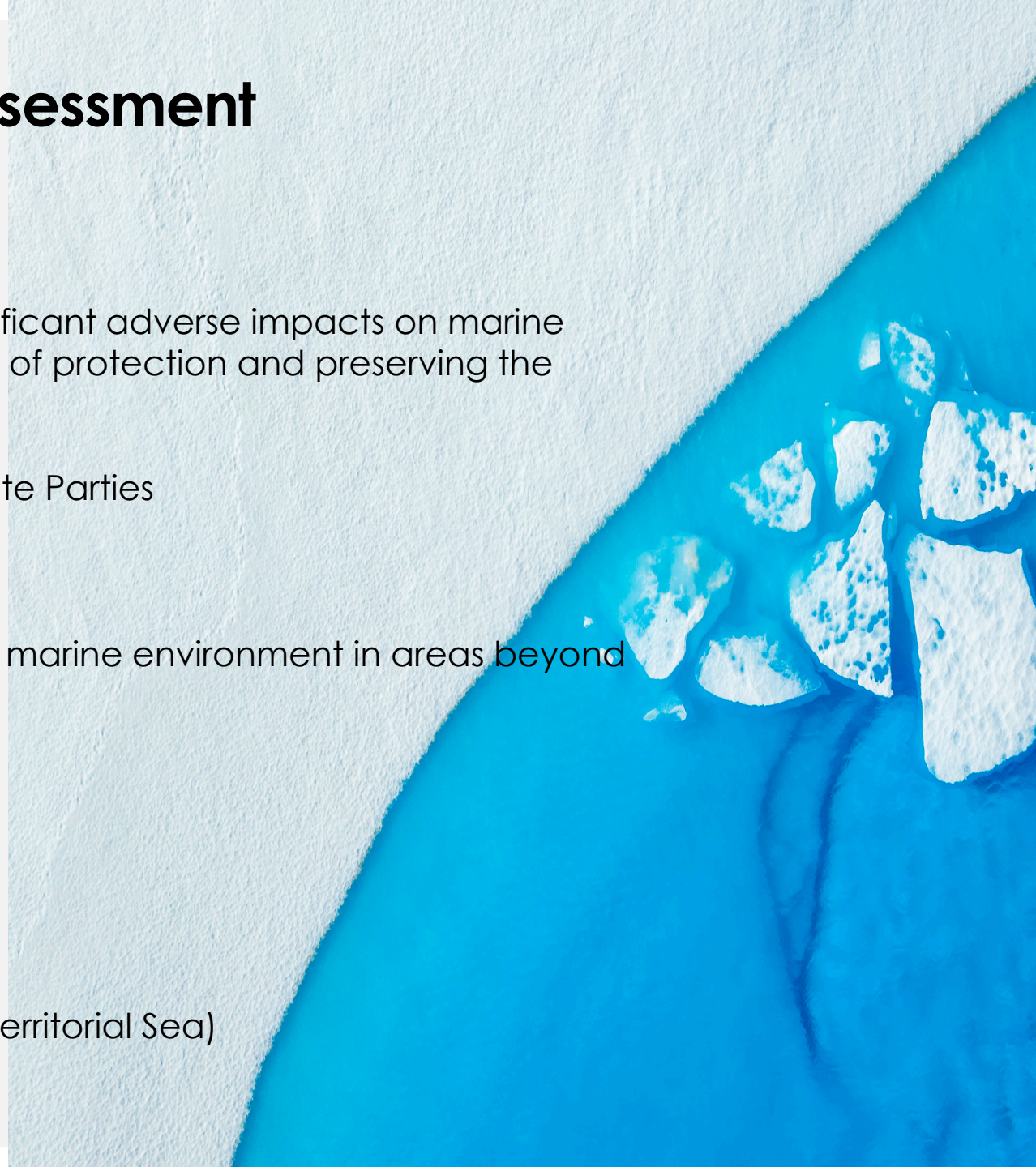
- Require regular consultations to enhance cooperation and cooperation with and among other instruments, frameworks, bodies
- Can include not only new management tools but also cover existing management tools in force and managed by other instruments, frameworks and bodies

Decision *by consensus*, objection possible on three basis

- Inconsistency with existing rights, obligations or the BBNJ Agreement
- Unjustifiable discrimination in form or fact against the objecting party
- The objecting party cannot practicably comply after making all reasonable efforts to do so

Focus 2: Environmental Impact Assessment

- **Strengthens existing UNCLOS Obligation (Art. 206)**
- **Goal :** prevention, mitigation and management of significant adverse impacts on marine biodiversity beyond national jurisdiction for the purpose of protection and preserving the marine environment
- **Type of obligation:** Binding – obligation to ensure by State Parties
- **Type of impact: an activity**
  - may cause substantial pollution of, OR
  - may cause significant and harmful changes to the marine environment in areas beyond national jurisdiction
- **Which activities?** All planned activities
- **When?** Before the activity is conducted
- **Where?** In two areas
  - Outside national jurisdiction (High Seas & Area)
  - Within national jurisdiction (EEZ, Continental Shelf, Territorial Sea)



Focus 2 : Environmental Impact Assessment & knowledge systems

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- **BBNJ: Main Factors to consider in the environmental impact assessment**
  - Type of *activity* and *technology* used
  - *Ecosystem and site characteristics*, including areas of ecological or biological significance or vulnerability
  - *Types of potential impacts*:
    - Direct impacts
    - Cumulative impacts
    - Impacts that may occur within national jurisdiction (ecosystem approach)
    - Reference to "associated impact": such as economic, social, cultural and human health
  - Degree of *scientific uncertainty* about potential effects (precautionary approach)
  - Other relevant *ecological or biological criteria*

Types of Knowledge to consider: more than hard science!

- *Best available science and data*
- Where relevant and available, *traditional knowledge* of Indigenous Peoples and local communities

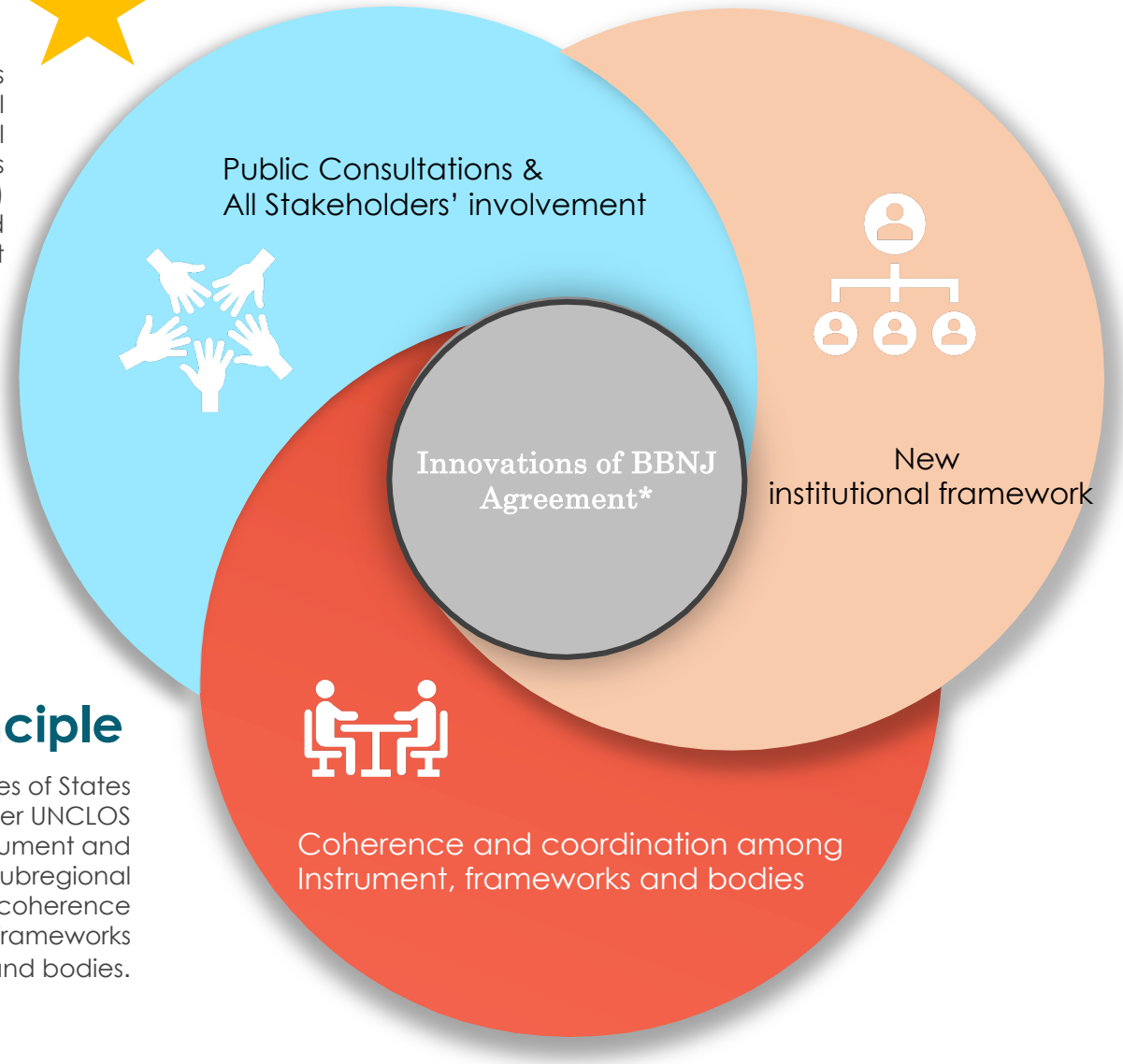
Knowledge Diversity and challenges in integrating knowledge systems:

- Knowledge is not limited to **"hard science"** — it also includes **traditional and cultural knowledge**
- **Key Questions:**
  - How can we **integrate** / **reconcile** scientific and traditional knowledge systems?
  - Should modern science **integrate traditional knowledge** within its research & development activities ?
  - Or should the two systems remain **distinct**, brought together only during assessment/**consultation/decision-making**?

Focus 3: Main innovations of the BBNJ Agreement

Public Consultation

- At the national, subregional and regional levels
- Open to all stakeholders (States, global regional subregional or sectoral bodies, as well as civil society, scientific community, Indigenous Peoples and local communities)
- Required for area-based management tools and environmental impact assessment



Conference of Parties

First Institutional structure of this kind in UNCLOS

- New bodies
- Science-Law nexus
- 2 dimensions to consider
  - within UNCLOS and other implementing agreements with no COP
  - Outside UNCLOS

(existing frameworks, bodies and institutions)

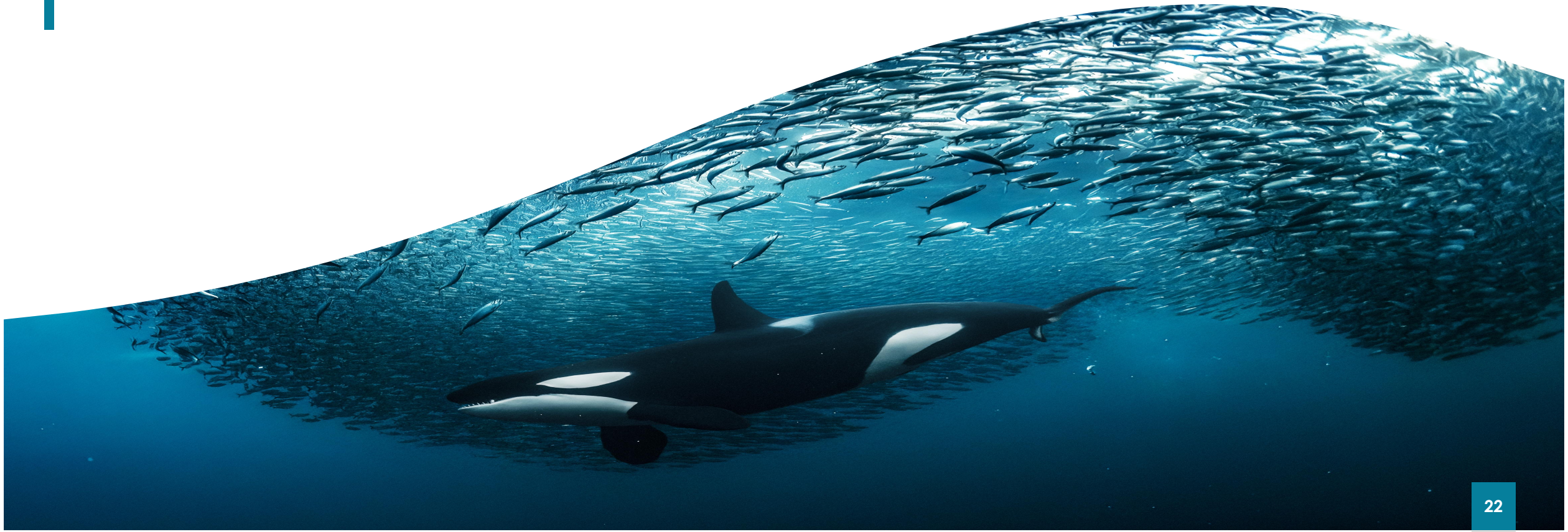
"Do not undermine" Principle

- No prejudice of rights, jurisdiction and duties of States under UNCLOS
- Not undermine relevant existing legal instrument and frameworks and relevant global, regional subregional and sectoral bodies and that promote coherence and coordination with those instruments, frameworks and bodies.

* Not exhaustive

2. The importance: the role of science and its stakeholders in the BBNJ Agreement

Main contributions & associated implementation challenges



The role of science and its stakeholders in the BBNJ Agreement (summary)

1. Supporting Decision-Making for Biodiversity Sustainable Use and Conservation

- Conservation measures, MPAs, and EIAs must be based on *best available science &scientific info*
- Supports tools like *protected areas*, incl. *ecologically representative and connected networks of protected areas, and environmental impact assessments*
- Enables the application of the *precautionary approach* when data is uncertain
    - Scientific uncertainty leads to different levels of risk (harm) and management responses

2. Promoting Scientific Research, Knowledge and Data Generation

- BBNJ reinforces the importance of the **freedom of marine scientific research** under UNCLOS
- BBNJ encourages more research to enhance **biodiversity identification** and understanding of **ecosystem functions**
- BBNJ goes beyond hard science and includes traditional and cultural knowledge, which should be integrated into scientific research
- BBNJ allows new scientific input through the consultation mechanism

3. Actively participates in Scientific Data Sharing and Governance

- BBNJ Establishes of a **clearing-house mechanism** for sharing data on
    - marine genetic resources;
    - establishment and implementation of area-based management tools (protected areas),
    - environmental impact assessment,
    - requests for capacity building and transfer of marine technology (donors and know how)
    - Other databases and repositories…
- State Parties must ensure **public access to scientific data**, preferably via open-access platforms
    - Scientific institutes, operators, actors should use these platforms and actively participates
    - Pro active role in garanteeing quality, standards, relevance, cooperation…

What is at stake ?

- Biological diversity is res communis= it belongs to all and is the responsibility of all States
- Ensure that all States can be involved and participate in the management of marine biological diversity beyond national jurisdiction
- Ensure Access and Availability of all data & information to all States (developed, in development, landlocked)

Implementation challenges

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Funding Issues
- Limited public funding for marine scientific research in ABNJ
- High costs of deep-sea infrastructure, vessels, and long-term monitoring
- Need for sustainable financing models and international support mechanisms (blue finance and blue economy)

Data Access & Ownership
- Most data beyond national jurisdiction is held by the private sector
- Barriers to data sharing due to commercial competition and high R&D investment
- Sensitive information tied to new (bio)technologies and intellectual property
- Existing framework (a model to follow?): ISA Mining Code – Deep sea Mining contractors to publicly release environmental data after 3 years of collection

Diverse Stakeholders
- Involves both public and private actors, including:
  - Biotech companies
  - Infrastructure developers
  - Developers of observation, prediction, modelling tools (e.g., Digital Twins)
  - International and regional organisations, States…

Need for Global Data Governance
- Essential to establish an ocean data-sharing framework
- Must address: Who, what, where, and when? Who will do it, with who and for who (public and private)?
- Require common global standards and quality control mechanisms as well as liability mechanisms all along the value chain of actors

Commercial Interests vs. Public Good
- Respect for private sector investment is essential
- New commercial uses of ocean data (e.g., eDNA monitoring) increase complexity since new actors are entering the field of blue economy
- Public access to data must balance innovation incentives
- Public good and interest in participating to the management of biodiversity is recognised by the insertion of the consultation mechanism = how to ensure its effectivity without open access standardised quality data and information?

Merci!

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