



Legal obligations to protect the marine environment & the precautionary approach

Dr Marie Bourrel-McKinnon

ADSR Workshop, Abuja – 5 to 7 October 2022

Mandate of ISA



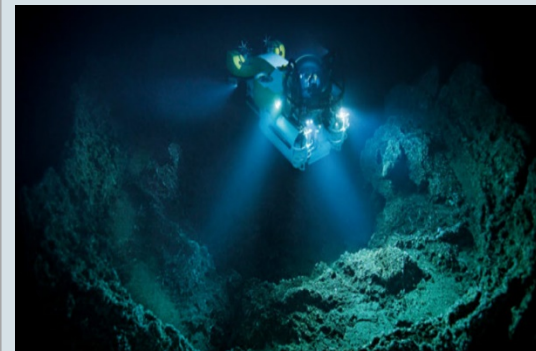
MANAGE

Exploration and Exploitation



PROTECT

Environment and Biodiversity



PROMOTE

Marine Scientific Research



SHARE

Monetary and non-monetary
Benefits

The Area is the only example of a global commons that is regulated through a consensus-based international organization for the common benefit



Legal framework

Basic legal framework

- UNCLOS Part XII – Protection and Preservation of the Marine Environment
 - ❖ Art. 192
 - ❖ Art. 209
- UNCLOS Part XI – The Area
 - ❖ Art. 145
- 1994 Agreement
- Rules, Regulations and Procedures of ISA

Article 145 requires that ‘necessary measures shall be taken in accordance with [UNCLOS] to ensure effective protection for the marine environment from harmful effects which may arise’ from activities in the Area. To this end, the ISA is required to adopt appropriate rules, regulations and procedures for, inter alia:

(a) the prevention, reduction and control of pollution and **other hazards** to the marine environment, including the **coastline**, and of **interference with the ecological balance of the marine environment**, particular attention being paid to the need for protection from harmful effects of such activities as drilling, dredging, excavation, disposal of waste, construction and operation or maintenance of installations, pipelines and other devices related to such activities;

(b) the protection and conservation of the natural resources of the Area and the prevention of damage to the flora and fauna of the marine environment.

ISA to adopt rules, regulations and procedures on all aspects of activities in the Area.

➡ **binding on all ISA Members** without requiring individual consent and without the possibility of opting out.

➡ **exceptional law-making competence** for an international organization and salient features of the DSM legal regime

Environmental regulations

Adopted by the Council on the recommendation of the Legal and Technical Commission.



Under the 1994 Agreement the adoption of rules, regulations and procedures for environmental protection is one of the issues for **priority consideration prior to approval of the first plan of work for exploitation**

Three sets of exploration regulations adopted

- ✓ Polymetallic nodules (2000, 2013)
- ✓ Polymetallic sulphides (2010)
- ✓ Cobalt-rich crusts (2013)

Advanced draft of Exploitation code under discussion

Legal and Technical Commission **must** formulate environmental regulations and **must**:

- Make recommendations to the Council on *'the protection of the marine environment, taking into account the views of recognized experts in that field.'*
- Prepare EIAs of activities in the Area,
- Make recommendations to the Council concerning a monitoring programme,
- Ensure that existing regulations are adequate and complied with, and
- Coordinate the implementation of the monitoring programme



Precautionary approach



Context & Definition

- The precautionary approach is a key tool to address the environmental protection challenges posed by activities in the Area.
- widely incorporated in international environmental agreements and further developed in national law.



Rio Declaration 1992, Principle 15

“In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”

Convention on Biological Diversity 1992, Preamble

“Where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat.”



**Convention on
Biological Diversity**



precautionary approach is a tool to be deployed in situations where there is:

- uncertainty,
- a threat of environmental damage,
- damage is of serious or irreversible nature

All of these are likely to be relevant considerations, albeit to different degrees, in the case of DSM.

Rio Principle 15 → **ISA Exploration Regulations** (following from UNFSA)

→ **ISA Draft Exploitation Regulations.**

Substantive content of precautionary approach primarily intended as framework
for action

that allows activities to proceed in a way that prevents environmental harm but
that is also flexible and adaptive to changing circumstances as the level of
uncertainty increases or decreases



Implementation & enforcement



Application

From: Guidelines for application of precautionary approach, IUCN (2007)

Establish a framework

- Incorporate
- Integrate
- Operationalize
- Include stakeholders
- Use best information available

Define potential threats, options and consequences

- Characterize uncertainty
- Assess options (measures to anticipate, prevent and mitigate threats)

Devise precautionary measures

- Be explicit about the precautionary measures and the uncertainties they are responding to (because as uncertainty is removed, preventive measures should be taken)
- Be proportionate (cost benefit analysis)
- Consider social and economic costs

Implement effectively

- Be adaptive (promote monitoring, research and evaluation of measures)
- Adapt measures as uncertainty increases or decreases

Efficient compliance system

All these features are **present** in ISA's regulatory regime



ISA Exploration Regulations

Most exploration activities have little or no impact on marine environment. Emphasis is on precaution and establishment of an environmental baseline which will be fundamental to EIA for exploitation.

ISA

Responsibility is to establish and keep regulations under review and make environmental data available

ISA & Sponsoring States

Must apply the precautionary approach to all activities

Contractors

Must take measures to prevent pollution and hazards from activities.

Conduct preliminary EIA

Collect baseline data and submit to ISA

Monitor impacts and report

In practice, this feedback loop is achieved through annual report process. Reports are analyzed by Secretariat, shared with Legal and Technical Commission, and comments sent back to contractors through Secretary-General.



Implementation

Different responsibilities on different actors

ISA

Responsibility is to **regulate**, taking into account best scientific information, approve contracts, monitor activities and enforce

Sponsoring States

Required to **cooperate** with ISA in implementing regime, establish national regime and ensure that sponsored entities meet their obligations under contract

Contractors

Responsible to carry out activities **in compliance** with contract and the regulations



Seabed Disputes Chamber, Advisory Opinion 2011

- Precautionary approach integral part of the 'due diligence' obligations on sponsoring States
- Emphasis on application of 'best environmental practices'
- Recognition that obligation to conduct an EIA is 'a general obligation under customary law'



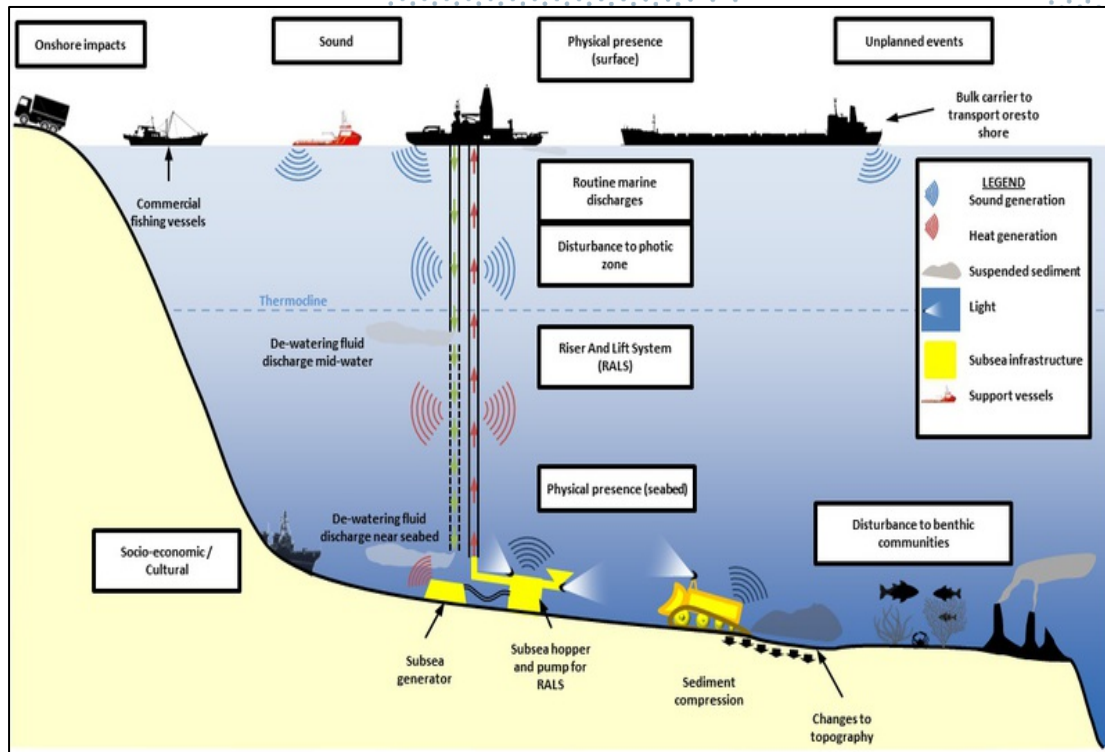
Recommendations for guidance

Not binding, but reflect best environmental practice, which contractors are bound to apply

Environmental recommendations issued in 2001, revised 2010, 2013, 2019 and 2020

Important for defining baseline data requirements

Most exploration work does not require additional EIA & understood to have **no adverse impact on marine environment**



Prior EIA required for

- sediment disturbance systems that create artificial disturbances and plumes on the sea floor,
- testing of mining components,
- test-mining,
- drilling, and
- large-scale sampling

Compliance and enforcement

Art. 153(4) – ISA to exercise such control over activities in the Area as necessary to secure compliance

Available measures include:

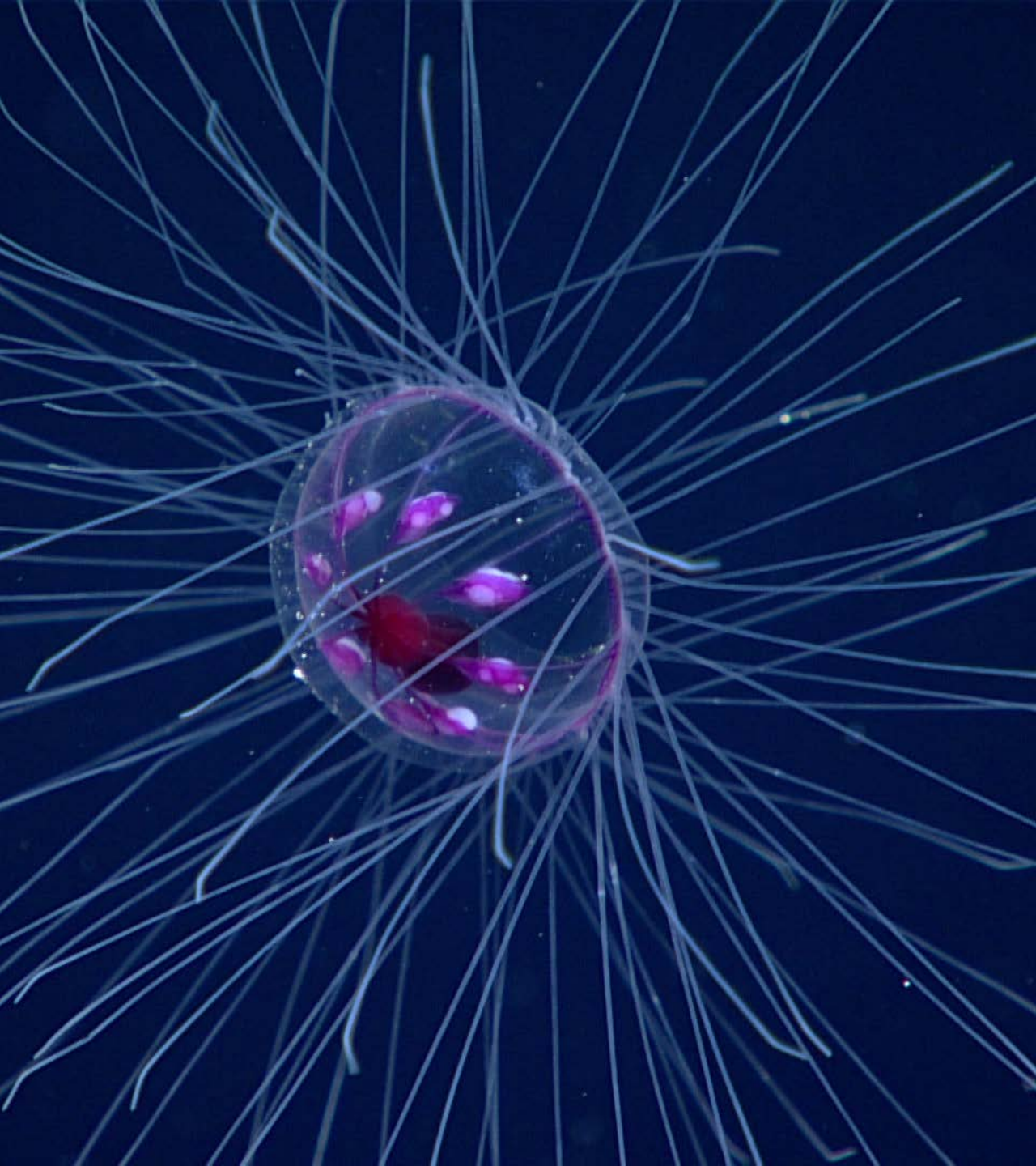
- Inspection
- Issue proceedings for non-compliance
- Mandatory contingency plans
- Emergency orders (including temporary measures to minimize harm)
- Suspend or terminate contract
- Monetary penalties

No cases of non-compliance to date.

But Council has issued decisions and resolutions relevant to activities of contractors based on reports from Legal and Technical Commission.

Establishment of an inspectorate and remote monitoring of operations by ISA will be critical during exploitation phase.





Environmental Management



Environmental management

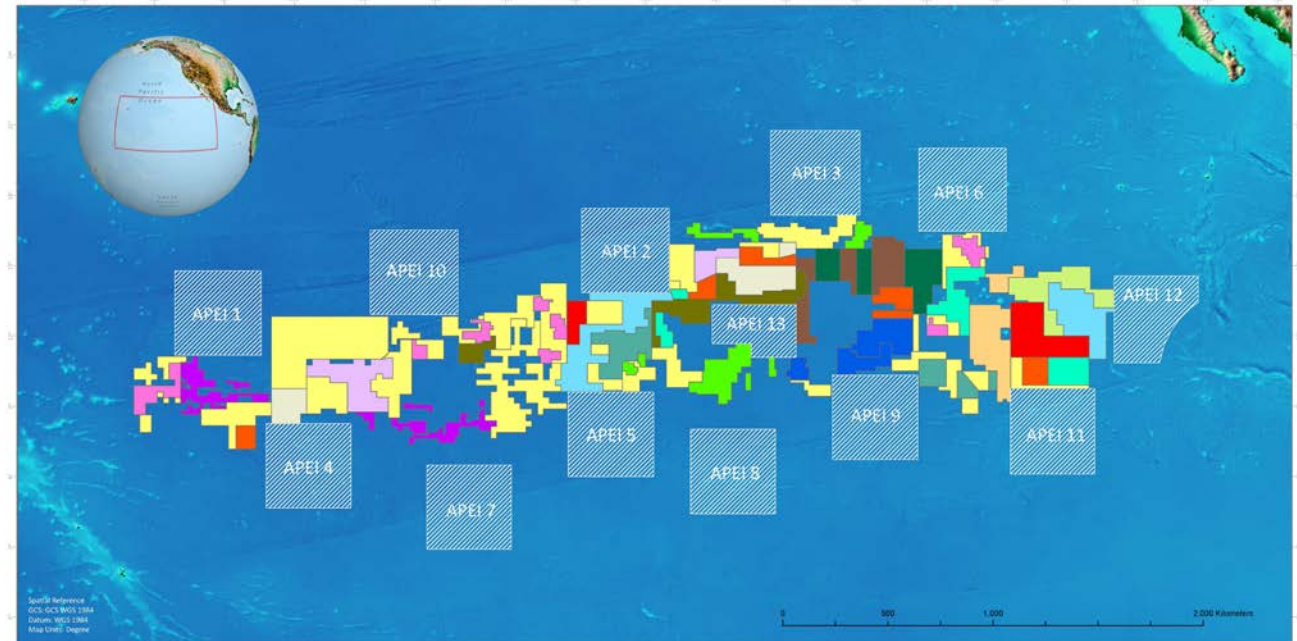
Going beyond regulation

CCZ Environmental Management Plan

- Proactive area-based management tool for ABNJ
- Approved 2012
- 13 APEIs (1.6m km²) (extended in 2021)
- Monitored and kept under review by LTC
- Consistent with international soft law instruments

Other REMPs

- Decision by Council 2018
- Under development in Western Pacific, N. Atlantic MAR, Indian Ocean
- ISA is collating scientific evidence and facilitating consistent and inclusive process



Clarion-Clipperton Fracture Zone Exploration and Reserved Areas for Polymetallic Nodules

Tonga Offshore Mining Limited (TOML); Tonga	Cook Islands Investment Corporation (CIIC); Cook Islands	Global Sea Mineral Resources NV (GSR); Belgium	Marawa Research and Exploration Ltd (Kiribati)	Reserved Areas
Federal Institute for Geosciences and Natural Resources of the Federal Republic of Germany (BGR); Germany	China Minmetals Corporation (CMC); China	Institut Français de Recherche pour l'Exploitation de la Mer (IFREMER); France	Nauru Ocean Resources Inc. (NORI; Nauru)	Areas of Particular Environmental Interest (APEIs)
Blue Minerals Jamaica Ltd (BMJ); Jamaica	China Ocean Mineral Resources Research and Development Association (COMRA); China	Interoceanmetal Joint Organization (IOM); Bulgaria, Cuba, Czechia, Poland, Russian Federation and Slovakia	Ocean Mineral Singapore PTE Ltd. (OMS; Singapore)	
Yuzhmorgeologiya (Russian Federation)	Deep Ocean Resources Development Co. Ltd. (DORD); Japan	Government of the Republic of Korea	UK Seabed Resources Ltd. (UKSRL; UK)	

Basemap Source: GEBCO, NOAA





Concluding Remarks

ISA mandated by UNCLOS to develop the resources of the Area while at the same time protecting the marine environment.

To that end, UNCLOS equips ISA with unusually broad competences to allocate rights, legislative competence and enforcement powers.





International Seabed Authority

14 - 20 Port Royal Street Kingston, Jamaica

Phone: +1 (876) 922-9105

Fax: +1 (876) 922-0195

isa.org.jm