

INDIA NÚÑEZ PALAS - ECOLOGICAL TRANSITION AND LAW



Blueprint of the Sea

The nested legal frameworks protecting global marine biodiversity, from international waters to local reserves

Academic Year: 2025-2026

University of Palermo – Department of Law

Master's Degree Programme in Law – Course: "Ecological Transition and Law"

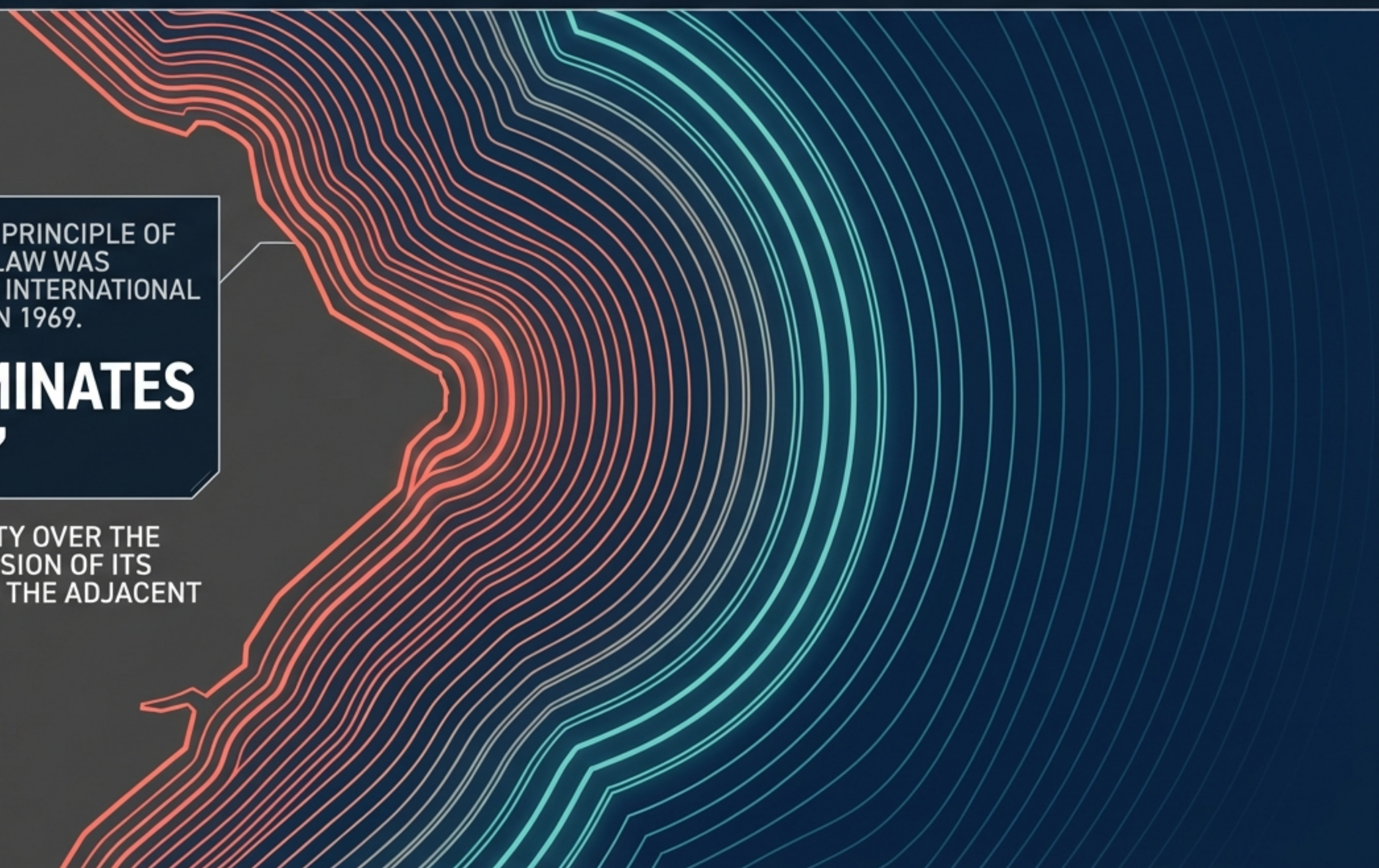
Module I: Prof. G. Torta – Module II: Prof. N. Gullo.

JURISDICTIONAL POWER RADIATES OUTWARD FROM THE COASTLINE

THE FOUNDATIONAL PRINCIPLE OF MODERN MARITIME LAW WAS ARTICULATED BY THE INTERNATIONAL COURT OF JUSTICE IN 1969.

“LAND DOMINATES THE SEA.”

- A STATE'S AUTHORITY OVER THE OCEAN IS AN EXTENSION OF ITS SOVEREIGNTY OVER THE ADJACENT LANDMASS.



The shift toward unified global ocean governance

1958: The Fragmented Framework



The Four Geneva Conventions

Evolution to Universal Rules

1982: The Unified Framework

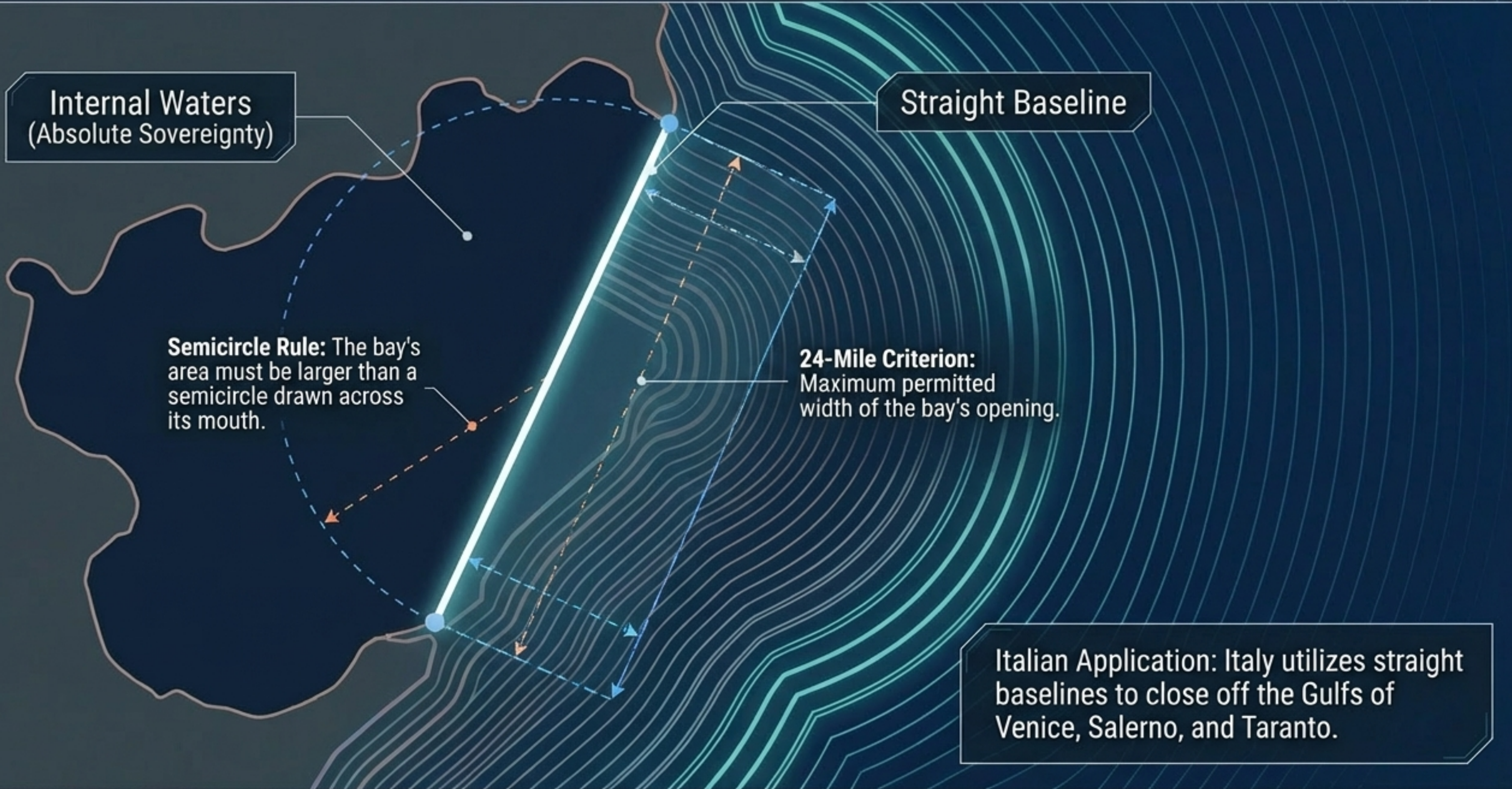


UNCLOS (United Nations Convention on the Law of the Sea)

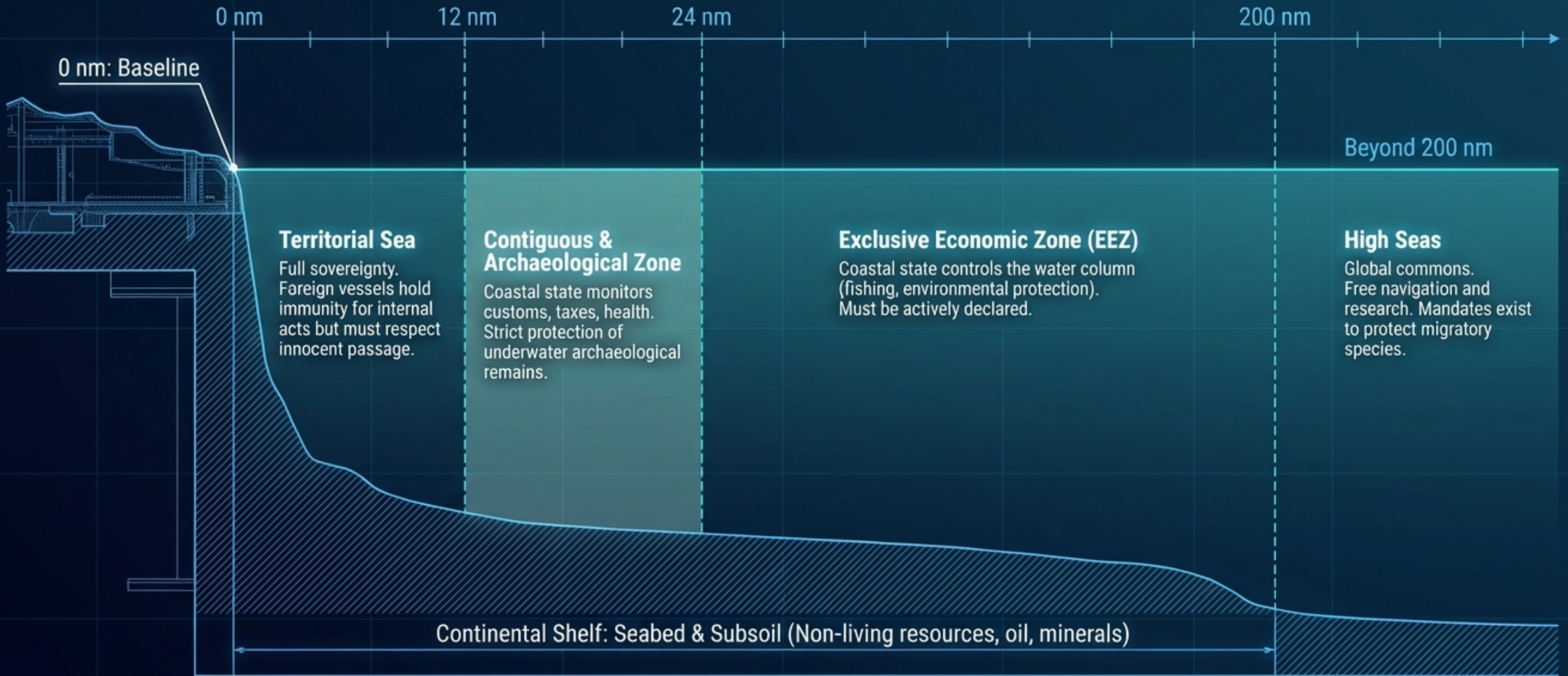
Signed in Montego Bay

The modern architecture of maritime law evolved from a fractured set of rules into a comprehensive global constitution for the oceans, universally superseding older laws.

Defining the starting line for sovereignty



The anatomy of maritime jurisdiction



Comparing operational rights across UNCLOS zones

	Territorial Sea	Contiguous Zone	Exclusive Economic Zone	High Seas
Distance from Coast	0 to 12 nm	12 to 24 nm	Up to 200 nm	Beyond EEZ
State Sovereignty	Absolute	Limited (Enforcement only)	Economic & Environmental Rights	None (Global Commons)
Permitted Activities	Full enforcement of all local laws	Customs, tax, health, archaeological	Fishing, resource extraction, conservation	Free navigation, scientific research
Passage Rights	Innocent Passage	Free Passage	Free Passage	Free Passage

From territorial borders to ecological function

Ocean protection requires safeguarding systemic functions. Following the 1992 Rio Declaration and Nairobi Convention, Marine Protected Areas (MPAs) are designed to combat overfishing and climate change through three interlocking mandates:

Environmental

Protecting fragile biodiversity and ecosystem integrity.

Economic

Enabling sustainable tourism and responsible resource use.

Sustainable Development

Social

Facilitating scientific research and generating local employment.



The Continental Scale: European Union mandates

Natura 2000 Network



Marine Strategy Framework Directive (MSFD)



The Regional Scale: The Mediterranean constraint

The Mediterranean is a heavily utilized, nearly enclosed basin. This geographic reality concentrates human impact, requiring aggressive, specialized environmental frameworks governed by the Barcelona Convention.

1. The Precautionary Principle

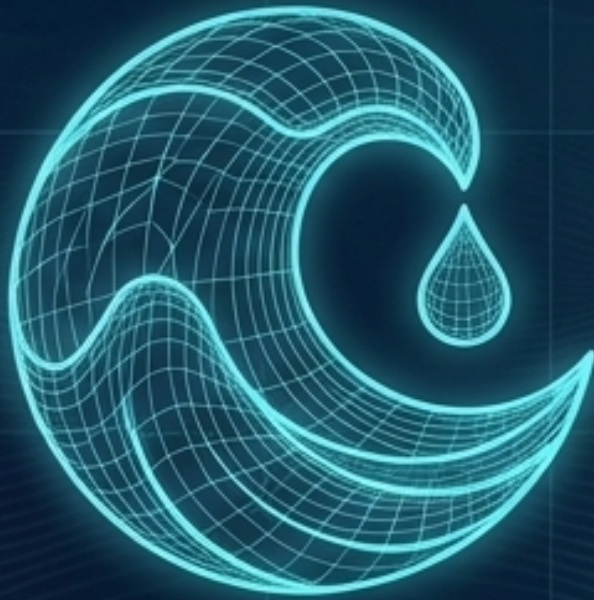
Better safe than sorry: Preventative environmental action is legally required even in the absence of absolute scientific certainty.

2. The Polluter Pays Principle

Financial liability for environmental degradation rests explicitly with the offending party.

Operationalizing the Barcelona Convention

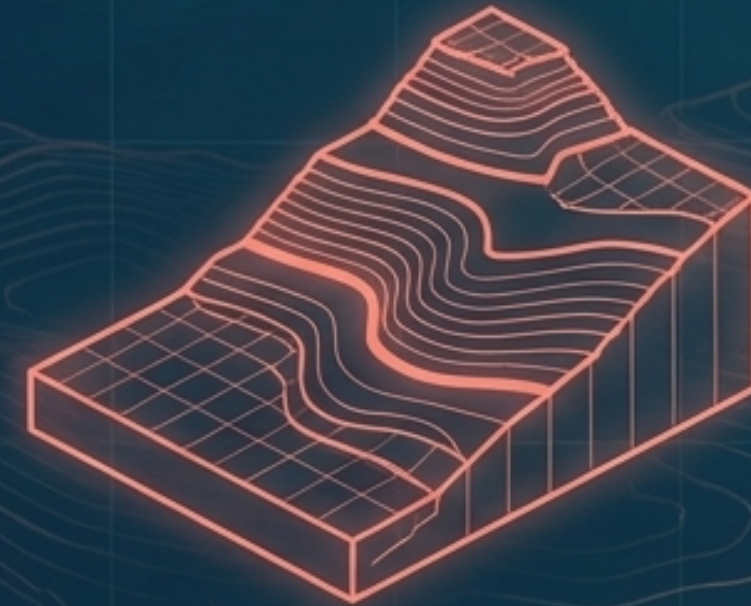
Targeted legal protocols manage both the open water and the vulnerable shoreline.



Focus: The Sea

ASP Protocol (1995)

Creates the ASPIM network: highly monitored Specially Protected Areas of Mediterranean Importance. Driven by rigorous scientific data to protect fragile offshore biodiversity.



Focus: The Shore

Madrid Protocol (2008)

Integrated Coastal Zone Management (ICZM). Regulates sustainable coastal development, prevents overbuilding, and enforces adaptation strategies for climate change.

The Local Scale: Italy's structural protection model

Established by Law 979/1982 and Framework Law 394/1991, Italy safeguards its extensive coastlines through a centralized, categorized system.



1. Marine Nature Reserves

27 centrally managed zones overseen directly by the Ministry of the Environment.



2. Zoning Systems

Graded protection areas managing human interaction from absolute scientific isolation to monitored recreational freedom.



3. Marine National Parks

Massive, high-value interconnected ecosystems requiring systemic protection strategies.



4. Submerged Parks (Law 388/2000)

Specialized zones protecting underwater nature alongside archaeological remains, functioning as 'underwater museums' (e.g., Baia and Gaiola).

The gradient of protection: Italian MPA zoning

Zone Classification	Protection Level	Scientific Research	Economic & Tourism Use
Zone A: Integral Reserve	Maximum	Authorized entry only	Strictly Prohibited
Zone B: General Reserve	High	Permitted	Low-impact, highly regulated activities only
Zone C: Partial Reserve	Moderate	Permitted	Regulated, sustainable human use allowed
Zone D: Protection	Buffer	Permitted	High freedom, under constant state monitoring

The Overlapping Web of Protection

Effective marine conservation is a nested ecosystem of laws. The Mediterranean represents only 0.82% of global oceans but holds up to 18% of marine species. Protecting this density requires global, continental, regional, and local laws operating simultaneously over the exact same water.

Global Layer: UNCLOS High Seas & EEZ rules

EU Layer: Natura 2000 & MSFD targets

Regional Layer: ASPIM (Barcelona Convention)

National Layer: Italian Framework Law 394/1991

