Encyclopedia Galactica

Coastal State Sovereignty

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"In space, no one can hear you think."

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1 Coastal State Sovereignty

1.1 Definition and Core Principles

Coastal state sovereignty represents one of international law's most intricate balancing acts, delineating where the absolute authority of a nation over its territory yields to the shared interests of the global community in the world's oceans. Unlike the unequivocal dominion exercised over land territory, sovereignty in maritime spaces operates on a graduated spectrum, diminishing in intensity as one moves seaward from the coastline. This carefully calibrated system, codified primarily through the United Nations Convention on the Law of the Sea (UNCLOS), emerged from centuries of diplomatic struggle and reflects a fundamental compromise: granting coastal states significant control over adjacent waters vital for their security and economy, while safeguarding essential freedoms of navigation and overflight upon which global trade and security depend. The modern architecture carves the ocean into distinct legal zones, each conferring specific rights and responsibilities upon the coastal state, transforming the once amorphous expanse of sea into a structured jurisdictional mosaic.

Conceptual Overview: At its core, coastal state sovereignty in maritime contexts signifies the bundle of rights and powers a nation exercises exclusively over defined ocean areas adjacent to its coast. Crucially, this maritime sovereignty is qualitatively different from sovereignty over land. It is inherently constrained, subject to internationally recognized limitations designed to protect the rights of other states, particularly the freedom of the high seas. This concept evolved significantly from early, often extravagant, claims of *Mare Clausum* (closed sea) championed by figures like John Selden in 17th-century England, asserting national dominion over vast ocean tracts, towards the nuanced, zonal approach solidified in the 20th century. The foundational principle remains that sovereignty emanates from the land; a state's control over the sea is an extension of its terrestrial existence, not an independent right. The starting point for defining all maritime zones is the baseline, typically the low-water line along the coast, a concept whose stability is increasingly challenged by rising sea levels – a tension explored later in this work.

The Territorial Sea: Core Sovereign Space: Extending a maximum of 12 nautical miles (NM) from the baseline lies the territorial sea, the maritime zone where coastal state sovereignty is most complete, analogous to sovereignty over land territory. Within this belt, the coastal state exercises sovereignty over the water column, seabed, subsoil, and airspace above. This encompasses the power to enact and enforce laws covering virtually all domains: criminal and civil jurisdiction, customs, immigration, sanitation, security, and resource management. However, this sovereignty is not absolute. UNCLOS explicitly subjects it to a critical limitation: the right of innocent passage for foreign vessels. Ships of all states enjoy the right to traverse the territorial sea continuously and expeditiously without stopping or anchoring, provided their passage is not prejudicial to the peace, good order, or security of the coastal state (activities like weapons exercises, spying, pollution discharge, or fishing render passage non-innocent). While the coastal state can regulate aspects of innocent passage (designating sea lanes, requiring prior notification for warships in some interpretations), it cannot hamper or deny the right itself. This 12 NM standard

1.2 Historical Evolution

The carefully calibrated zonal structure described in Section 1, particularly the now-universal 12-nautical-mile territorial sea and its inherent balance between sovereignty and innocent passage, was not an inevitable outcome but the product of centuries of contestation, evolving state practice, and hard-fought diplomatic compromise. The historical trajectory of coastal state sovereignty reveals a persistent tension between the impulse to control adjacent waters for security and resource exploitation and the countervailing principle of open ocean access vital for global commerce and naval power projection. This struggle unfolded across distinct historical phases, each shaping the modern legal architecture.

The earliest foundations emerged from fragmented assertions of maritime dominance. Roman law concepts of *dominium maris* (dominion over the sea) coexisted with notions of *res communis* (common property), setting the stage for later conflicts. During the Age of Exploration, powerful maritime states like Portugal and Spain claimed vast oceanic dominions through papal bulls and treaties, enforcing monopolies over trade routes – the epitome of *Mare Clausum* (closed sea). However, practical limitations became apparent. The Dutch jurist Hugo Grotius, championing *Mare Liberum* (free sea) in 1609 to challenge Portuguese control of the East Indies trade, argued the ocean was too vast for effective occupation and possession, thus inherently common to all. His English counterpart, John Selden, robustly defended national control (*Mare Clausum*) in 1635, reflecting England's own imperial ambitions. Amidst this theoretical clash, a pragmatic doctrine emerged: the "cannon shot rule." Originating from the practical range of coastal artillery in the 17th century, it evolved into a widely accepted, though informal, custom limiting territorial waters to approximately 3 nautical miles – the distance a shore-based cannon could effectively project force, symbolizing the coastal state's ability to enforce its laws. This narrow belt represented the first widespread recognition of a zone of coastal control within an otherwise free ocean, a fragile equilibrium that would prevail for centuries but prove increasingly inadequate.

The 18th and 19th centuries witnessed the ascendancy of Grotius's freedom of the seas principle, championed by naval powers like Great Britain, which now sought unimpeded global reach. The narrow territorial sea concept solidified, primarily justified for security and neutrality purposes. Coastal state claims beyond this minimal strip, particularly concerning fisheries, were largely rejected. A pivotal moment arrived with the 1893 *Bering Sea Fur-Seals Arbitration*. The United States, attempting to enforce conservation measures against British sealing vessels operating *beyond* its territorial sea, claimed protective jurisdiction over migratory species. The tribunal resoundingly rejected this assertion, affirming that the high seas freedom of fishing prevailed outside the narrow territorial belt, underscoring the limited scope of permissible coastal state control during this era. While states exercised sovereignty within ports and internal waters, the vast expanse beyond remained largely *res communis*.

The early 20th century shattered this equilibrium, driven by technological advances and resource pressures. Nations increasingly enacted "Hovering Acts" to assert jurisdiction over foreign vessels suspected of smuggling just beyond the 3 NM limit, testing the boundaries of acceptable control. However, the decisive rupture occurred on September 28, 1945, with President Harry S. Truman's **Proclamation on the Continental Shelf**. This unilateral declaration asserted U.S. jurisdiction and control over the natural resources of the subsoil and

seabed of the continental shelf contiguous to its coast, explicitly separating seabed rights from the water column above. While couched in conservation language, its revolutionary nature lay in claiming resource rights far beyond the territorial sea, solely based on geological adjacency. The Truman Pro

1.3 The UNCLOS Legal Framework

The seismic shift initiated by the Truman Proclamation and the subsequent cascade of unilateral claims, particularly the expansive 200-nautical-mile assertions by Latin American states like Chile, Peru, and Ecuador, revealed the inadequacy of existing international law. The world urgently required a comprehensive legal framework capable of reconciling burgeoning coastal state aspirations with the enduring imperative of maritime freedoms. This culminated in the monumental achievement of the **United Nations Convention on the Law of the Sea (UNCLOS)**, adopted in 1982 after nine years of intense negotiation (UNCLOS III) and often hailed as the "Constitution for the Oceans." Building directly upon the fragmented attempts at codification during the UNCLOS I (1958) and UNCLOS II (1960) conferences – which produced the four Geneva Conventions but failed to resolve critical issues like the territorial sea breadth – UNCLOS III delivered a holistic "package deal" that fundamentally reshaped and codified the legal architecture governing coastal state sovereignty.

UNCLOS as the Governing Treaty: With over 160 state parties, UNCLOS stands as one of the most widely ratified treaties in history, reflecting its near-universal acceptance as the bedrock of the contemporary law of the sea. Its significance extends beyond mere codification; it crystallized emerging state practice into binding treaty law while also progressively developing entirely new legal regimes, such as the Exclusive Economic Zone (EEZ) and the intricate system for the deep seabed ("the Area"). Signed in Montego Bay, Jamaica, on December 10, 1982, and entering into force in 1994, its 320 articles and 9 annexes constitute a remarkably detailed constitution for maritime governance. This intricate structure meticulously balances the rights and responsibilities of coastal states, flag states, and the international community as a whole, providing the definitive legal reference point for virtually all activities on, over, and under the world's oceans. The Convention's comprehensiveness is underscored by its role in superseding the four 1958 Geneva Conventions for its parties, integrating and refining those earlier provisions within its overarching framework.

Defining Maritime Zones and Rights: UNCLOS provides precise legal definitions and spatial parameters for the graduated maritime zones radiating from the coastal baseline, resolving the ambiguities that plagued previous attempts. It firmly establishes the **12-nautical-mile territorial sea** as the maximum breadth, confirming the core space of coastal state sovereignty subject only to the right of innocent passage. Adjacent to this, the **24-nautical-mile contiguous zone** is explicitly defined, allowing coastal states to prevent and punish infringements of customs, fiscal, immigration, or sanitary laws *within* its territory or territorial sea. Crucially, UNCLOS introduced the revolutionary concept of the **200-nautical-mile Exclusive Economic Zone (EEZ)**, a zone where coastal states possess "sovereign rights" (distinct from full sovereignty) for the purpose of exploring, exploiting, conserving, and managing living and non-living natural resources of the waters superjacent to the seabed, the seabed, and its subsoil. Beyond the EEZ, coastal state rights concerning the seabed extend onto the **continental shelf**, defined by both geomorphology (natural prolongation of land

territory) and distance (a minimum of 200 NM, extending up to 350 NM or 100 NM beyond the 2,500-meter isobath under specific criteria). UNCLOS meticulously distinguishes the rights applicable in each zone, creating a clear spatial hierarchy: full sovereignty internal to the baseline; sovereignty constrained by innocent passage in the territorial sea; limited enforcement jurisdiction in the contiguous zone; sovereign rights over resources and limited jurisdictional powers in the EEZ; sovereign rights over seabed resources on the continental shelf; and freedoms of the high seas beyond.

Inherent Rights and Obligations: For each defined zone, UNCLOS enumerates specific

1.4 Baselines and Maritime Delimitation

The meticulously defined maritime zones established under UNCLOS, as outlined in Section 3, are not abstract concepts floating independently; their tangible application hinges entirely on the precise determination of a critical starting point: the baseline. This fundamental line, drawn along the coast, serves as the legal and technical foundation from which the breadth of the territorial sea, contiguous zone, EEZ, and continental shelf is measured. Consequently, the rules governing the establishment of baselines, and the subsequent process of delimiting maritime boundaries where coastal state claims overlap, represent the practical implementation of the zonal sovereignty framework. These processes transform theoretical rights into concrete spatial jurisdiction, often involving complex geographical realities and intricate legal balancing acts between competing principles of equity and predictability.

The primary rule, enshrined in UNCLOS Article 5, dictates the **normal baseline** as "the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State." This seemingly straightforward principle – using the low-water mark – reflects the long-standing aim of connecting maritime jurisdiction to the terrestrial domain at its most stable and visible point. However, its application in practice encounters significant challenges. Coastlines are dynamic, subject to erosion, accretion, and the construction of coastal defenses. Determining the exact low-water line requires precise hydrographic surveys and reliable charting. Moreover, the stability of this baseline is increasingly threatened by sea level rise, a profound contemporary challenge that risks shifting baselines landward and potentially diminishing maritime entitlements, a tension explored further in Section 12. The selection of the low-water mark, as opposed to mean sea level or high water, historically aimed to maximize the area subject to coastal state sovereignty (internal waters landward of the baseline) while providing a reasonably objective standard. Nevertheless, its inherent ambulatory nature, susceptible to coastal change, necessitates constant monitoring and chart updates to ensure jurisdictional certainty. The International Court of Justice (ICJ) emphasized the importance of geographical reality over theoretical lines in the *North Sea Continental Shelf Cases* (1969), setting a precedent for interpreting baseline rules in light of actual coastal configurations.

Where the coastline is deeply indented, cut into, or fringed with islands, the strict application of the normal baseline can create an impractical and fragmented maritime zone structure. To address this, UNCLOS Article 7 permits coastal states to employ **straight baselines**. This method connects appropriate points on the coast or across islands, creating a simplified outer limit from which maritime zones are measured. However, the use of straight baselines is strictly conditional: the drawing must not depart to any appreciable extent

from the general direction of the coast, and the sea areas landward of the lines must be sufficiently closely linked to the land domain to be subject to the regime of internal waters. This doctrine emerged from the landmark *Anglo-Norwegian Fisheries Case* (1951), where the ICJ upheld Norway's use of straight baselines connecting its outer skerries and rocks against UK objections, recognizing the unique geography of its fjord-indented coast. The precedent was crucial but also opened the door to controversies. Excessive or unjustified applications of straight baselines, where coastal geography does not genuinely meet the stringent criteria, artificially inflate maritime claims and encroach upon high seas freedoms. Notable modern disputes, such as those surrounding China's claimed baselines enclosing vast swathes of the South China Sea far from its mainland or significant island features, exemplify the geopolitical friction arising from contested baseline interpretations, challenging the delicate

1.5 Sovereign Rights over Resources

The precise demarcation of maritime zones through baselines and delimitation, as discussed in Section 4, ultimately serves a fundamental purpose: securing the coastal state's exclusive economic interests in the adjacent ocean space. While navigational rights and security concerns are vital aspects of sovereignty, the exclusive rights to explore, exploit, conserve, and manage natural resources constitute the economic bedrock upon which the modern regimes of the Exclusive Economic Zone (EEZ) and continental shelf were built. This framework, codified in UNCLOS, transformed coastal state jurisdiction from primarily a security concept to an engine for economic development, granting unprecedented control over vast maritime resources previously considered part of the global commons.

5.1 Living Resources: Fisheries Management

Within the 200-nautical-mile EEZ, coastal states possess sovereign rights for the purpose of exploring, exploiting, conserving, and managing living marine resources. This exclusivity fundamentally shifted global fisheries governance. States gained the authority to determine the **total allowable catch (TAC)** for fish stocks within their zones, a power carrying significant responsibility. UNCLOS imposes a dual obligation: firstly, to ensure harvested species are not endangered by over-exploitation, utilizing the best scientific evidence to maintain populations at levels capable of producing the **maximum sustainable yield (MSY)**; and secondly, to promote the **optimum utilization** of these resources. Where the coastal state lacks the capacity to harvest the entire TAC, it is obliged, through agreements or other arrangements, to grant other states access to the surplus. This provision led to complex bilateral and regional fisheries access agreements, often involving significant fees. For example, the European Union negotiates substantial financial compensation annually with coastal states like Mauritania, Senegal, and the Seychelles for access to their EEZ tuna stocks. Enforcement of fisheries laws within the EEZ is a key sovereign right, allowing coastal states to board, inspect, and arrest vessels violating regulations, though the duty to ensure sustainability remains a persistent global challenge, as IUU fishing continues to undermine management efforts.

5.2 Non-Living Resources: Hydrocarbons and Minerals

Concurrently, coastal states hold exclusive sovereign rights to explore and exploit the non-living resources of the seabed and subsoil within both the EEZ and the continental shelf. This encompasses the vast wealth of

hydrocarbons (oil and natural gas) and minerals (such as sand, gravel, polymetallic nodules, phosphorites, and massive sulphides). States typically exercise these rights through national legislation establishing licensing regimes, where exploration and production rights are granted to state-owned enterprises (e.g., Norway's Equinor, Saudi Aramco, Brazil's Petrobras) or international oil companies (IOCs) via concessions, production sharing agreements (PSAs), or service contracts. The discovery and development of offshore hydrocarbon fields have transformed national economies; Norway's sovereign wealth fund, built largely on North Sea oil revenues, stands as a prime example. Similarly, the exploitation of offshore diamonds by Namibia and De Beers Marine illustrates the value of seabed mineral rights. The scale of investment and technology required means that international partnerships are common, but the coastal state retains ultimate control and a significant share of the economic benefits, exercising regulatory oversight over safety, environmental protection, and revenue collection within its sovereign resource domain.

5.3 Continental Shelf Beyond 200 NM

The coastal state's sovereign rights over non-living seabed resources extend far beyond the 200 NM EEZ limit if the natural prolongation of its land territory – the continental margin – extends further. Establishing the **outer limits of the continental shelf** is a complex, science-driven process governed by UNCLOS Article 76. Coastal states must submit detailed geological and geophysical data, along with proposed limits, to the **Commission on the Limits of the Continental Shelf (CLCS)** within ten years of ratifying UNCLOS. The CLCS reviews the submission and makes recommendations; while not binding per se, coastal states establishing limits based on these recommendations gain international recognition and legal certainty. Rights on this **extended continental shelf** pertain exclusively to the **non-living resources of the seabed and subsoil** and to **sedentary species** (organisms which, at the harvestable stage, are either immobile on or under the seabed or unable to move except in constant physical contact with it, like clams or corals). Crucially,

1.6 Jurisdictional Powers and Enforcement

The exclusive sovereign rights over resources within the EEZ and continental shelf, as detailed in Section 5, are rendered meaningful only through the accompanying authority to enforce relevant laws and regulations. Coastal state jurisdiction thus encompasses not merely the prescriptive power to establish rules but also the critical enforcement capacity to ensure compliance. However, this enforcement authority is not monolithic; it operates on a graduated scale, diminishing in scope and intensity as one moves seaward from the baseline, reflecting the delicate balance between coastal state interests and the freedoms enjoyed by other states. Understanding these jurisdictional powers and their inherent limitations is essential to grasping the practical realities of maritime governance.

Within the territorial sea, the coastal state exercises near-total enforcement jurisdiction, mirroring its full sovereignty over this zone. Law enforcement agencies possess broad authority to board, inspect, detain, and prosecute vessels and individuals violating any of the state's laws applicable within this 12-nautical-mile belt. This encompasses criminal law (e.g., drug trafficking, illegal immigration), customs and fiscal regulations, sanitary and phytosanitary rules, environmental protection statutes, and fisheries management. The primary, and significant, limitation on this otherwise plenary power stems from the right of innocent

passage. Under UNCLOS Article 27, the coastal state should not exercise criminal jurisdiction on board a foreign ship passing through the territorial sea to arrest any person or conduct investigations relating to crimes committed *during* its passage, except in specific circumstances: if the consequences of the crime extend to the coastal state; if the crime disturbs local peace, good order, or security; if the assistance of local authorities is requested by the master, flag state, or a diplomatic agent; or if it relates to drug trafficking. An illustrative case is the 1997 *M/V* "Saiga" (No. 1) incident (later adjudicated by ITLOS), where Guinea arrested a Cypriot-flagged tanker bunkering fishing vessels in its territorial sea. While Guinea argued the bunkering violated its customs laws and thus rendered passage non-innocent, the Tribunal later found aspects of the enforcement action unlawful, highlighting the precise boundaries of permissible intervention during innocent passage.

Adjacent to the territorial sea lies the contiguous zone, extending up to 24 nautical miles from the baseline. Here, the coastal state's enforcement powers are significantly more circumscribed and purpose-specific. As established in UNCLOS Article 33, enforcement jurisdiction in this zone is limited *solely* to preventing or punishing infringements of the coastal state's customs, fiscal, immigration, or sanitary (CZIM) laws and regulations *within its territory or territorial sea*. A coast guard vessel cannot, for instance, arrest a foreign ship in the contiguous zone for illegal fishing or mere speeding; its enforcement action must demonstrably relate to a CZIM violation committed or anticipated *inside* the inner zones. This zone acts as a crucial buffer for targeted enforcement, allowing authorities to interdict vessels suspected of smuggling goods, people, or illicit substances *before* they enter the territorial sea or *after* they have committed an offence within it. It also serves as the lawful starting point for the doctrine of "hot pursuit." The 2004 case of the US Coast Guard boarding the *Summer Wind*, a suspected drug-smuggling vessel 20 miles off Florida, exemplifies the contiguous zone's role. Although initially boarded just outside the territorial sea, the pursuit was justified based on violations committed within US jurisdiction, leading to a significant cocaine seizure.

Within the 200-nautical-mile Exclusive Economic Zone, the coastal state's enforcement powers are primarily tied to its sovereign rights over resources and related jurisdictional competences explicitly granted by UNCLOS (Articles 56 and 73). Enforcement is robust concerning laws and regulations related to the exploration, exploitation, conservation, and management of living and non-living resources. This includes boarding, inspection, arrest, and judicial proceedings against vessels and crews engaged in illegal, unreported, and unregulated (IUU) fishing within the EEZ. Coastal states also possess strong enforcement powers regarding marine scientific research (

1.7 Navigation Rights and Coastal State Control

The robust enforcement powers coastal states wield within their maritime zones, particularly concerning resource protection and pollution control as detailed in Section 6, exist in constant tension with a foundational principle of the law of the sea: the freedom of navigation. UNCLOS, acting as a grand constitutional compromise, meticulously carves out spaces where the exclusive interests of the coastal state must yield to the rights of other states to traverse the global commons. Section 7 examines this critical balance, exploring the specific passage regimes governing different maritime zones and the persistent points of friction, particularly

concerning military activities.

The delicate interplay between coastal state control and navigational freedoms is most evident in the regime of innocent passage through the territorial sea. Building upon the concept introduced in Section 1, innocent passage grants all states the right to navigate continuously and expeditiously through another state's 12-nautical-mile territorial sea without stopping or anchoring, provided passage is not "prejudicial to the peace, good order or security of the coastal State." UNCLOS Article 19 provides a non-exhaustive list of activities rendering passage non-innocent, including weapons exercises, launching/landing aircraft, acts of espionage, wilful pollution, fishing, research, and serious threats to coastal security. Coastal states retain significant authority to regulate innocent passage for safety, traffic management (designating sea lanes and traffic separation schemes), and resource protection, but crucially, they cannot impose requirements that deny or hamper the right itself. This balance is frequently tested. For instance, some states require prior authorization or notification for warships transiting their territorial sea, a practice not explicitly mandated by UNCLOS and contested by major naval powers who argue it unduly burdens the right. The 1986 incident in the Black Sea, where US warships deliberately entered the Soviet territorial sea near Crimea to assert the right of innocent passage without prior notification – resulting in minor collisions ("bumping") with Soviet vessels – starkly illustrated the geopolitical stakes involved in interpreting this regime. Coastal states can temporarily suspend innocent passage in specific areas for security reasons, but such suspensions must be duly published and cannot discriminate among foreign ships.

A fundamentally different, and more robust, passage regime applies within international straits used for navigation between one part of the high seas or an EEZ and another part of the high seas or an EEZ. UNCLOS Part III establishes the right of "transit passage" through such straits. This is not merely innocent passage; it grants ships and aircraft the freedom of navigation and overflight solely for the purpose of continuous and expeditious transit of the strait. Coastal state regulatory powers are significantly constrained compared to the territorial sea; they cannot suspend transit passage or design regulations that impede it. While coastal states can adopt laws relating to transit passage concerning safety, pollution prevention, and fisheries regulation, these laws must conform to international standards and cannot have the practical effect of denying or impairing transit rights. The strategic importance of straits like Hormuz (vital for global oil shipments), Malacca (a key East-West shipping artery), and Gibraltar makes the transit passage regime crucial for global commerce and naval mobility. Tensions arise when coastal states perceive transit passage as threatening their security or environmental interests. Iran's periodic threats to close the Strait of Hormuz, while largely rhetorical, underscore the potential for disruption, while debates over vessel traffic services and environmental protection measures in the narrow Strait of Malacca highlight the challenges of balancing unimpeded transit with coastal state concerns.

Similar to transit passage is the regime governing archipelagic sea lanes passage for mid-ocean archipelagic states. As introduced in Section 4, such states can draw straight archipelagic baselines connecting their outermost islands. Within the enclosed archipelagic waters, the coastal state exercises sovereignty, but UNC-LOS Part IV establishes the right of "archipelagic sea lanes passage" through designated sea lanes and air routes. This right mirrors transit passage: ships and aircraft enjoy the right of continuous, expeditious, and unobstructed

1.8 Continental Shelf Regime and Delineation

Section 7 explored the intricate balance between coastal state control and the navigational freedoms essential to global trade and naval mobility, particularly through critical straits and archipelagic waters. This balance, however, rests upon the foundational stability of the maritime zones themselves, whose seaward extent for the seabed is uniquely defined by the geological reality of the continental shelf. Building upon the introduction of the continental shelf concept in Sections 1 and 3, and its resource implications in Section 5, this section delves deeper into the distinct legal regime governing the continental shelf, particularly the complex process of delineating its outer limits beyond 200 nautical miles (NM) and the significant rights and responsibilities this entails.

The legal foundation of the continental shelf regime, enshrined in UNCLOS Article 76, represents a fascinating evolution and compromise. Unlike the EEZ, which is a creation of distance from the baseline (200 NM), the continental shelf concept originated in the geological principle of "natural prolongation." President Truman's 1945 Proclamation explicitly invoked this idea, asserting rights based on the physical extension of the landmass submerged under the sea. This geomorphological basis was central to the 1958 Geneva Convention on the Continental Shelf and early jurisprudence, notably the 1969 North Sea Continental Shelf Cases, where the International Court of Justice (ICJ) emphasized the shelf as "the natural prolongation of [the coastal state's] land territory." However, UNCLOS III introduced a crucial modification to ensure predictability and address geographical disparities. While natural prolongation remains relevant, particularly beyond 200 NM, Article 76 primarily establishes a minimum entitlement: every coastal state automatically possesses a continental shelf extending at least 200 NM from its baselines, irrespective of the actual geological characteristics. This distance criterion ensures all coastal states benefit from shelf rights, even those with narrow geological margins like Chile or Peru. Beyond 200 NM, establishing an extended continental shelf (ECS) requires demonstrating that the submerged prolongation of the landmass continues further, subject to complex constraints based on sediment thickness and distance from the foot of the continental slope. This dual basis – inherent rights based on natural prolongation plus a minimum distance guarantee – resolved longstanding tensions between geographically advantaged states and those reliant on distance, solidifying the regime.

The task of verifying claims to an extended continental shelf falls to the scientific and technical body established by UNCLOS: the Commission on the Limits of the Continental Shelf (CLCS). Composed of 21 experts in geology, geophysics, and hydrography elected by States Parties, the CLCS plays a unique quasi-judicial role. Its mandate is not to delimit boundaries between states but to review the scientific and technical data submitted by coastal states proposing the *outer limits* of their continental shelf beyond 200 NM. The submission process is extraordinarily complex and data-intensive, requiring detailed bathymetric mapping, seismic reflection and refraction profiles, sediment thickness measurements, and precise geographical coordinates demonstrating compliance with the intricate formulae and constraints of Article 76. States face a strict ten-year deadline from their ratification of UNCLOS to make their submission, a timeframe that has proven challenging for many, leading to requests for extensions and partial submissions. Upon receiving a submission, the CLCS examines the data and issues "recommendations." While these recommendations

are not formally binding, UNCLOS stipulates that the limits established by a coastal state *based on* these recommendations are "final and binding." This creates a powerful incentive for states to conform to the CLCS's scientific assessment. Russia's 2001 submission, the first received, notably included a vast claim encompassing much of the Arctic Ocean up to the North Pole, but the CLCS recommended resubmission with more data, illustrating the rigorous scrutiny applied. The process fosters legal certainty for the international community regarding the maximum extent of national seabed jurisdiction before

1.9 Environmental Protection Jurisdiction

The meticulous delineation of the continental shelf, particularly its potentially vast extended portions governed by complex geological criteria and CLCS review as discussed in Section 8, underscores a critical dimension of coastal state sovereignty beyond resource extraction: the profound responsibility for environmental stewardship. As national jurisdiction stretches further seaward, encompassing increasingly diverse and fragile marine ecosystems, the imperative to prevent pollution and preserve biodiversity intensifies. UNCLOS, while primarily establishing a framework for maritime rights and navigation, fundamentally redefined the environmental obligations of coastal states, elevating marine environmental protection from a peripheral concern to a core aspect of sovereign authority within national maritime zones. This section examines the evolving scope and practical application of coastal state powers and duties concerning the marine environment, an area where exclusive rights increasingly intersect with global ecological imperatives.

Central to this responsibility is the coastal state's prescriptive jurisdiction over marine pollution. UNC-LOS grants coastal states significant, though graduated, authority to establish laws and regulations aimed at preventing, reducing, and controlling pollution of the marine environment within their maritime zones. This authority varies depending on the source and location. Concerning land-based pollution, including rivers, outfalls, and coastal installations, coastal states possess primary, albeit not exclusive, prescriptive jurisdiction within their territory and internal waters. However, international cooperation and adherence to global standards (e.g., the London Convention on dumping, MARPOL for vessel-source pollution) are crucial due to the transboundary nature of marine pollutants. For vessel-source pollution, prescriptive powers are carefully balanced against navigational freedoms. Within the territorial sea, coastal states can adopt laws and regulations implementing international rules and standards or, where warranted by specific oceanographic and ecological conditions, establishing stricter rules for vessel discharges, provided these do not hamper innocent passage. In the EEZ, prescriptive jurisdiction is more constrained; coastal states can generally only implement internationally agreed rules and standards (primarily MARPOL) concerning pollution from vessels. They cannot unilaterally impose stricter discharge or design standards for foreign transiting vessels, though they can establish special mandatory measures for particularly sensitive sea areas (PSSAs) if approved by the International Maritime Organization (IMO). For **pollution from seabed activities** subject to national jurisdiction (e.g., offshore oil platforms), coastal states enjoy comprehensive prescriptive authority. The devastating 1978 Amoco Cadiz oil spill off Brittany, France, which released over 220,000 tons of crude oil, starkly demonstrated the environmental vulnerability of coastal zones and significantly influenced subsequent international regulations and national laws concerning tanker design, operation, and liability.

The effectiveness of prescriptive measures hinges upon **enforcement powers against polluters**. UNCLOS provides coastal states with graduated enforcement capabilities mirroring their prescriptive jurisdiction. In the territorial sea, coastal states have broad authority to investigate, detain, and prosecute vessels violating their pollution laws, subject only to the limitations concerning innocent passage vessels (e.g., generally refraining from criminal proceedings unless specific conditions under Article 27 are met). Enforcement against foreign vessels in the **EEZ** for pollution violations is more limited. Coastal states can only enforce their own laws implementing international rules and standards. If a vessel discharges pollutants in violation of MARPOL, which the coastal state has incorporated into domestic law, the state can undertake physical inspection and, if clear evidence exists, institute proceedings, including detention. However, proceedings involving vessels navigating the EEZ must generally be suspended if the flag state institutes its own proceedings within six months (Article 228). Enforcement actions face practical hurdles: detecting violations often requires sophisticated surveillance, and proving discharge incidents beyond territorial waters can be difficult without boarding, which itself has strict legal thresholds. The 2002 sinking of the Prestige off Spain highlighted enforcement complexities. While the vessel leaked oil while being towed seaward after being denied refuge, the initial pollution occurred near the coast, triggering Spanish enforcement jurisdiction. However, the reluctance of the flag state (Bahamas) and the coastal

1.10 Enforcement Challenges and State Practice

The significant environmental enforcement powers and responsibilities outlined in Section 9, while theoretically robust, confront formidable practical realities on the dynamic and often unforgiving maritime frontier. Translating the legal architecture of coastal state sovereignty into effective control over vast maritime domains presents persistent, often overwhelming, challenges. Disparities in resources, technology, and political will create stark variations in enforcement capabilities, while determined non-state actors and complex geopolitical tensions continually test the limits of jurisdiction. This section examines the harsh realities coastal states encounter in asserting their sovereign rights, highlighting the gap between legal entitlement and operational capacity, and the diverse, sometimes assertive, strategies states employ to bridge it.

The sheer scale of maritime zones constitutes the most fundamental obstacle. A coastal state entitled to a 200-nautical-mile Exclusive Economic Zone (EEZ) could be responsible for monitoring an ocean area exceeding 125,000 square nautical miles – a task dwarfing the surveillance capacity of many nations. Maintaining a persistent presence across such expanses demands substantial investment in patrol vessels, aircraft, satellite surveillance, unmanned aerial vehicles (UAVs), and sophisticated command-and-control systems. The costs are prohibitive for many developing states. For instance, Pacific Island nations like Kiribati or the Federated States of Micronesia possess enormous EEZs critical to their economies but lack the resources for comprehensive patrols, relying heavily on partnerships like the Forum Fisheries Agency (FFA) and support from distant water fishing nations or powers like Australia, the US, and France for surveillance and limited interdiction. Even technologically advanced states face limitations; Canada struggles to maintain consistent Arctic surveillance despite significant investments in new ice-capable vessels and satellites, given the vast distances and harsh environment. The disparity is stark: while nations like Japan, the US, or EU members de-

ploy integrated networks of satellites (e.g., Copernicus Sentinel), long-endurance drones, and offshore patrol vessels equipped with advanced sensors, many coastal states in Africa, Southeast Asia, and Latin America rely on a handful of aging patrol boats with limited range and endurance, often hampered by inadequate maintenance and training. Initiatives like the Norwegian-backed "Eye in the Sky" program in West Africa or the EU's Copernicus Maritime Surveillance service aim to bridge this gap by providing shared satellite data, but effective on-water interdiction still requires indigenous or partner-provided assets.

This capacity gap is most acutely exploited in the realm of Illegal, Unreported, and Unregulated (IUU) fishing, a multi-billion dollar global scourge that directly undermines coastal state sovereign rights over living resources. Sophisticated IUU operators employ tactics specifically designed to evade detection and enforcement: disabling Automatic Identification Systems (AIS), using complex transshipment operations at sea ("reefers"), frequently reflagging vessels to flags of convenience with lax oversight (e.g., Belize, Panama, Togo), and operating through opaque corporate structures. Detecting these vessels within the EEZ is difficult; physically interdicting them in often rough seas is hazardous; gathering admissible evidence for prosecution is complex; and legal proceedings can be protracted and costly. The West African coast exemplifies the devastating impact, where estimates

1.11 Contemporary Disputes and Conflict Resolution

The formidable enforcement challenges and divergent state practices explored in Section 10 underscore that the stability of the maritime order rests not just on legal clarity but on the effective resolution of competing claims. Coastal state sovereignty, while meticulously defined by UNCLOS, remains fiercely contested in numerous strategic hotspots worldwide, where overlapping assertions over maritime space, islands, and resources fuel geopolitical friction. These contemporary disputes test the resilience of the UNCLOS framework and illuminate the complex interplay of law, power, resource wealth, and national identity in the world's oceans. Understanding these conflicts and the mechanisms employed, or avoided, for their resolution is crucial to grasping the ongoing evolution of maritime governance.

The South China Sea epitomizes the complexities of contested sovereignty and maritime jurisdiction.

Multiple claimants – China, Vietnam, the Philippines, Malaysia, Brunei, and Taiwan – assert overlapping rights over islands, reefs, and vast swathes of sea, driven by strategic location, rich fisheries, and potential hydrocarbon reserves. Central to the conflict is China's sweeping "nine-dash line" claim, encompassing nearly 90% of the sea, justified through ambiguous historical rights that starkly contrast with UNCLOS principles of baselines and EEZ/continental shelf entitlements. The legal status of features is pivotal; under UNCLOS Article 121, only naturally formed areas above water at high tide that can sustain human habitation or economic life generate full EEZs and continental shelves. Rocks generate only a territorial sea. The 2016 arbitral tribunal ruling in *Philippines v. China* critically addressed this, finding that major features claimed by China (like Scarborough Shoal and the Spratly high-tide elevations occupied by China) were legally mere "rocks" or low-tide elevations generating no EEZ entitlement. The tribunal also unequivocally rejected China's nine-dash line as incompatible with UNCLOS, ruling China had violated Philippine sovereign rights by interfering with fishing and oil exploration within the Philippines' EEZ. Despite this landmark ruling,

which China dismissed as "null and void," assertive actions continue, including large-scale island-building and militarization of artificial features, coercive activities against fishing and survey vessels (like the 2012 Scarborough Shoal standoff), and the deployment of maritime militia. These actions create persistent friction, challenging regional stability and the very rules-based order UNCLOS embodies.

Meanwhile, in the Arctic Ocean, climate change is rapidly transforming a once frozen frontier, intensifying focus on extended continental shelf claims and nascent shipping routes. Coastal states (Russia, Canada, Denmark/Greenland, Norway, the US) are meticulously pursuing CLCS submissions to secure rights over potentially vast seabed resources beyond 200 NM. Russia's 2001 submission, partially approved in 2023 after revisions, secures significant areas, but its claim incorporating the Lomonosov Ridge – potentially extending to the North Pole – remains contentious, as Denmark/Greenland also claims the ridge is a natural prolongation of its territory. Canada and Denmark resolved their long-standing Hans Island dispute in 2022, but other delimitations, particularly in the Lincoln Sea between Canada/Denmark and the Beaufort Sea between Canada/US, remain unresolved. The dramatic retreat of sea ice opens new possibilities for navigation, notably the Northern Sea Route (NSR) along Russia's coast and the Northwest Passage (NWP) through Canadian waters. Russia asserts significant control over the NSR, requiring permission, icebreaker escort, and fees, treating waters within its straight baselines as internal. Canada makes similar sovereignty claims over the NWP. Major maritime powers, however, contend these routes constitute straits used for international navigation subject to transit passage (Section 7), setting the stage for future disputes as traffic increases. Russia's 2007 theatrical flag planting on the seabed at the North Pole via submersible highlighted the symbolic and strategic stakes involved in defining this evolving space.

In the Eastern Mediterranean, the discovery of substantial natural gas reserves has ignited intense disputes over EEZ delimitation. The complex geography, dotted

1.12 Future Challenges and Evolving Norms

The complex tapestry of contemporary maritime disputes, from the hydrocarbon-fueled tensions of the Eastern Mediterranean to the strategic chess game unfolding in the melting Arctic, underscores that coastal state sovereignty is not a static concept but one perpetually shaped by emerging forces. As the international community grapples with unresolved conflicts, the very foundations of the UNCLOS regime face unprecedented pressures from environmental transformation, technological leaps, and intensifying geopolitical rivalries. Section 12 examines these frontier challenges, exploring how rising seas, burgeoning ocean economies, advanced surveillance, strategic competition, and the imperative for adaptive governance are reshaping the exercise and understanding of sovereign rights in the maritime domain.

The most profound existential threat to the established baselines defining maritime zones stems from anthropogenic climate change and consequent sea level rise. As glaciers melt and ocean waters expand, coastlines are eroding and low-lying island nations face inundation. This poses a direct challenge to the fundamental principle that maritime entitlements are measured from the baseline, typically the low-water line (Section 4). If baselines recede landward with the rising sea, so too will the outer limits of the territorial sea, contiguous zone, EEZ, and continental shelf, potentially stripping coastal states of vast maritime territories

and resources. Small Island Developing States (SIDS) like Tuvalu, Kiribati, and the Marshall Islands, whose very existence and economic viability depend on their extensive EEZs, are at the forefront of this crisis. Legal and policy debates are intensifying: Should baselines and maritime zones declared under UNCLOS be fixed permanently ("ambulatory baselines" being the current default) or should they be stabilized ("fixed baselines") based on historical charts to preserve existing entitlements? Initiatives like Tuvalu's proposed legal recognition of statehood and maritime boundaries even after physical submersion push the boundaries of international law. The International Law Commission (ILC) is actively studying the issue, while some states are enacting domestic legislation declaring fixed baselines. The potential disappearance of features currently generating maritime zones, such as the vanishing islets of the Carteret Islands, further complicates delimitation agreements and threatens regional stability, demanding innovative legal and diplomatic solutions.

Simultaneously, the expansion of the "Blue Economy" is driving coastal states to assert and leverage their sovereign rights in novel ways, while raising new regulatory dilemmas. Beyond traditional fisheries and hydrocarbons, states are increasingly focusing on sustainable aquaculture, marine renewable energy (offshore wind, wave, tidal), marine biotechnology (genetic resources within the EEZ), and tourism. Deep-sea mining within national jurisdiction, targeting polymetallic sulphides around hydrothermal vents or cobalt-rich crusts on seamounts within the EEZ or on the extended continental shelf, presents a particularly complex challenge. While UNCLOS grants coastal states sovereign rights over these non-living resources (Section 5), the nascent industry faces intense scrutiny over its potential environmental impacts on fragile deep-sea ecosystems, which are often poorly understood. States like Norway (exploring mining on its extended shelf in the Norwegian Sea) and the Cook Islands (licensing exploration in its EEZ for seabed manganese nodules) must balance economic development aspirations with the precautionary principle and their UNCLOS duty to protect the marine environment (Section 9). The International Seabed Authority (ISA) regulates mining in the international "Area," but coastal states are solely responsible for setting environmental standards and granting licenses within their national zones, creating a patchwork of potentially varying regulations. Initiatives like Seychelles' pioneering "blue bonds," which finance marine conservation and sustainable fisheries management within its EEZ, exemplify the innovative financial mechanisms emerging to support a sustainable Blue Economy under coastal state stewardship.

Furthermore, rapid advancements in technology are dramatically altering the capacity for surveillance and enforcement, potentially amplifying both control and friction. The deployment of increasingly sophisticated satellite constellations (offering high-resolution imagery, vessel tracking via AIS and radar detection), long-endurance unmanned aerial vehicles (UAVs), autonomous surface