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OPEN SEAS REBORDERED: A MECHANISM TAXONOMY OF REBORDERING IN STRATEGIC PASSAGES

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Abstract

International law institutionalises a presumption of navigational openness, yet contemporary maritime geopolitics repeatedly produces situations in which sea-space becomes de facto constrained, filtered, or temporarily "closed." This article conceptualises this gap as a problem of maritime rebordering: the activation of multi-actor mechanisms that reconfigure the practical openness of maritime borders despite formal passage regimes. Building on processual border theory (bordering–debordering–rebordering) and recent work on oceanic bordering and governance, the paper develops a mechanism-based model explaining how rebordering is produced through coercive-security practices, regulatory–juridical gating, risk–market pricing, information–surveillance regimes, and material–infrastructural/environmental constraints, while treating irregular migration, piracy, and other non-state violence as recurrent activation drivers that mobilise these mechanisms. The model is operationalised through four diagnostic case studies: Hormuz, Gibraltar, the Bab al-Mandeb–Suez corridor, and the Danish Straits/Kiel Canal, analysed via a common matrix. The paper contributes a transferable typology and a flowchart of "rebordering activation logic" that clarifies why maritime borders are increasingly experienced as selectively permeable infrastructures of power – open to some flows, filtered or closed to others – under conditions of geopolitical volatility, securitisation, and environmental disruption.

Keywords

maritime borders • rebordering • chokepoints • straits • geopolitics • selective permeability • maritime security • irregular migration • non-state violence • maritime domain awareness • risk pricing

Introduction

Maritime space is often imagined as the planet's "open" connective tissue, a medium of circulation rather than separation. Yet strategic chokepoints and narrow passages, where shipping lanes, submarine cables, offshore infrastructure, and military postures converge, have repeatedly become sites where access is effectively constrained even when it remains formally open. In such moments, the sea does not simply carry flows; it also becomes a field where political authority, security practices, and market reactions actively reshape border permeability.

International maritime law institutionalises a presumption of navigational openness through a layered spatial architecture of jurisdictions (territorial sea, contiguous zone, EEZ, high seas) and passage regimes, including the governance of straits used for international navigation under the United Nations Convention on the Law of the Sea (UNCLOS, 1982). For legal clarity, UNCLOS orders marine space more broadly through internal waters, territorial sea, contiguous zone, exclusive economic zone, continental shelf rights, archipelagic waters where relevant, and the high seas/Area; straits regimes then overlay this zonal architecture in passages used for international navigation. The article does not attempt a full doctrinal exposition of each category, but this broader jurisdictional architecture matters because rebordering mechanisms operate within, across, and sometimes despite these layered legal spaces. At the same time, scholarship across geography, political science, and maritime security shows that oceans, despite their material "openness", are subjected to multiple bordering forces that territorialise, police, and differentiate mobility (Steinberg & Peters, 2015; Hung & Lien, 2022). In other words, the sea is not a legal vacuum nor a flat neutral surface: it is volumetric, infrastructural, surveilled, and contested. Maritime borders, therefore, cannot be reduced to cartographic lines; they operate as socio-material assemblages in which sovereignty is enacted through practices, technologies, and narratives as much as through treaties and charts (Hung & Lien, 2022; Cerić & Więckowski, 2025). Recent work in ocean governance pushes this critique further by warning against residual flattening of the sea into a governable surface. McAteer (2025) argues that ocean governance is often overdetermined by territory when it relies on surface-oriented, container-like assumptions, while Şarlak (2025) shows that the sea can function as environmental infrastructure in ways that actively shape containment, mobility, and control. In this article, maritime rebordering is therefore treated as operating through a volumetric, material, and rhythmic medium rather than across a flat surface alone.

Border studies offer a useful language for naming this dynamic. Process-oriented approaches conceptualise borders as institutions and practices continuously produced and reworked through governance, discourse, and everyday mobilities (Paasi, 1996; van Houtum, 2005; Newman, 2006; Rumford, 2006). The bordering–debordering–rebordering framework captures the cyclical and selective character of these transformations: borders may become more permeable for certain flows (e.g., trade, tourism, investment) while simultaneously hardening for others (e.g., irregular migration, sanctioned goods, perceived security risks) (Sohn, 2014; Więckowski & Timothy, 2021). The maritime domain amplifies this selectivity because "control" rarely coincides with a visible boundary at sea; instead, it is exercised through ports, routes, surveillance systems, risk assessments, and coalition operations – forms of governance that can rapidly intensify without any formal change in delimitation.

This paper argues that recent debates on maritime security and governance effectively describe a broad field of *maritime rebordering*: practical mechanisms that reconfigure the openness of maritime borders despite legal frameworks that formalise navigation freedoms.

The literature synthesised for this study repeatedly identifies a cluster of mechanisms and activation drivers through which

permeability is reshaped: coercive–security practices, regulatory–juridical gating, risk–market pricing (including insurance and freight), information–surveillance regimes, and material–infrastructural/environmental constraints, alongside recurrent activation drivers such as irregular migration, piracy, and other forms of non-state violence that mobilise these mechanisms in different combinations (Chintoan-Uta & Silva, 2017; Cordner, 2018; Cusumano & Ruzza, 2020; Bueger, 2022; Hung & Lien, 2022; Bueger & Stockbruegger, 2024). Importantly, these mechanisms do not merely "respond" to threats; they produce differentiated maritime geographies of access-zones where movement is slowed, rerouted, priced differently, escorted, screened, or deterred. Several strands of the literature highlight a persistent legal-practical nexus: openness is maintained rhetorically and juridically, while control is enacted through informal coordination, technological infrastructures, and situational restrictions that may sit at the edges of formal law or operate through it (Encomienda, 2013; Papanicolopulu, 2022; Hung & Lien, 2022).

At the same time, there is a conceptual gap. Research on maritime borders has expanded rapidly, but it remains fragmented across disciplinary conversations-resource frontiers and conservation, "wet ontology" and volume geography, strategic studies of sea control, and issue-specific work on piracy, migration, and surveillance (Hung & Lien, 2022). What is still underdeveloped is an integrative border-studies interpretation that (a) treats maritime borders as selectively permeable institutions, and (b) specifies how, in practice, rebordering is activated, escalated, and stabilised across different domains of risk and governance. This gap matters not only for high politics and trade but also for social and cultural mobilities. Even in relatively "open" settings, maritime borders can remain powerful symbolic and experiential boundaries – "invisible yet present" – shaping movement, memory, and meaning (Newman, 2006; Cerić & Więckowski, 2025). The point is not that the sea is simply closing, but that openness is increasingly conditional, situational, and differentiated.

For these reasons, this article is designed as a theory-building conceptual paper grounded in desk-based comparative analysis. It develops a typology and an activation logic (a flowchart) of maritime rebordering mechanisms to explain how practical openness is reorganised without requiring a change in formal delimitation. The paper is guided by a single core question:

> *How do coercive–security, regulatory-juridical, risk–market, information–surveillance, and material–infrastructural/environmental mechanisms reconfigure the practical openness of maritime borders despite legal frameworks that institutionalise navigation openness, and how are these mechanisms activated by pressures such as irregular migration, piracy, non-state violence, and environmental disruption?*

To keep the argument empirically anchored while retaining conceptual breadth, the analysis uses four chokepoint-focused case studies: the Strait of Hormuz, the Strait of Gibraltar, the Bab al-Mandeb–Suez corridor, and the Danish Straits/Kiel Canal system (Fig. 1). These cases are not selected to "represent the world," but because, together, they allow the paper to contrast distinct configurations of rebordering.

Conceptual background and literature review synthesis

Borders as processes: selective permeability and cyclical change

In contemporary political geography and border studies, borders are no longer treated primarily as fixed cartographic lines. Instead, they are increasingly conceptualised as *processes* – institutional, discursive, and practical arrangements through which space is ordered, mobility is regulated, and identities are produced (Paasi, 1996; van Houtum, 2005; Newman, 2006; Rumford, 2006).

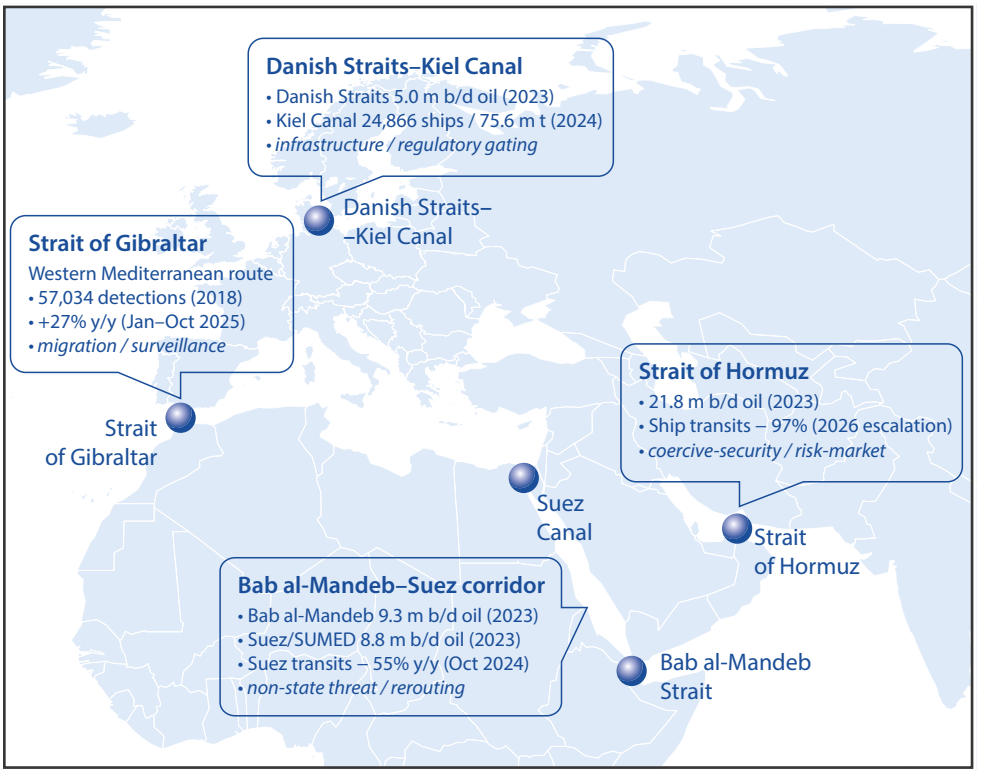

Figure 1. Locations and selected indicators of the four chokepoint-focused case studies (m b/d = million barrels per day; y/y = year-on-year; m t = million tonnes)

Source: Own elaboration based on data EIA (2026), Frontex (2019, 2025), UNCTAD (2024, 2026), and GDWS (2025).

This processual view emphasises continuous remaking through policies, administrative practices, cultural narratives, economic strategies, and everyday routines. From this perspective, borders work as mechanisms of both inclusion and exclusion: they regulate access to rights, resources, markets, and movement, while also producing the symbolic differentiation of "inside" and "outside" (van Houtum, 2005; Newman, 2006).

In general terms, borders can be viewed as mobile (Amilhat-Szary & Girout, 2015) and even as experiencing a kind of cyclicity (Brunet-Jailly, 2005). A particularly useful expression of this orientation is the *bordering–debordering–rebordering* framework, which highlights cyclical and sometimes contradictory phases. The most constant feature of borders actually lies in their changeability. Borders change over time and their essence is characterised by opening and closing cycles (Więckowski, 2025). Bordering refers to practices that construct, institutionalise, and reinforce separation and control (van Houtum, 2005; Kolosov & Scott, 2013) mainly at the beginning of the border creation process. Debordering describes the weakening of traditional border functions and the growth of cooperation and mobility, often linked to integration processes and the institutional facilitation of cross-border flows (Rumford, 2006; Scott, 2015; Cerić, 2025). Rebordering captures the reactive return or strengthening of border functions in response to crises, political shifts, economic turbulence, or perceived security threats (Newman, 2006; Konrad, 2015; Więckowski,

2025). Crucially, these processes rarely occur in pure form; they overlap and coexist, producing hybrid border conditions in which openness and closure operate simultaneously but unevenly across sectors and social groups (Sohn, 2014; Więckowski & Timothy, 2021; Więckowski, 2025).

The central analytical point for this article is that openness is selective. Even where borders appear open, permeability is differentiated by flow type (goods, services, tourists, migrants), by the actors involved, and by governance rationales. Sohn (2014) stresses that debordering does not mean the disappearance of borders, but rather their functional reconfiguration into tools for managing mobility. This selectivity is especially relevant in maritime contexts, where the absence of visible checkpoints can obscure that different flows are subject to different forms of regulation, surveillance, or interdiction. Additionally, even in the shadows of massive geopolitical change, debordering, and supranationalism, borders continue to reinforce a sense of national identity and belonging (Andersen & Prokkola, 2022). This highlights that the state, along with its multiple levels (local, regional, international) possesses memory, history, and identity, but also carries the pressure of negative aspects of both past and present, as well as apprehension about the future (O'Dowd, 2001). In its turn, it is determined by the interests of the elite wishing to control a territory and political institutions (Kolosov & Więckowski, 2018).

What makes maritime borders distinctive: materiality, volume, and mobile power

While processual border theory was largely developed through land-border cases, maritime borders require additional conceptual attention. Sea borders are often invisible in everyday experience, rarely demarcated by physical markers, and most commonly encountered indirectly – through navigation rules, port regulations, surveillance regimes, risk signals, or the sudden appearance of enforcement. Maritime borders are therefore less "checkpointed" and more "regime-based", with border functions concentrated in ports, corridors, and institutional procedures rather than at a visible line on the water.

Hung and Lien (2022) argue that maritime borders have been under-theorised because border research has historically privileged terrestrial scenarios. Yet a growing body of scholarship shows that oceans and seas are subject to diverse bordering forces, challenging the assumption of maritime space as naturally borderless (Hung & Lien, 2022). Their review offers three conceptual priorities directly relevant to this article.

First, *land–ocean inter-bordering*: maritime borders cannot be fully understood without considering how shoreline infrastructures, coastal governance, and land-based political economies extend into the sea and shape ocean control (Hung & Lien, 2022). Second, *multiple materialities*: maritime borders are produced through interaction among legal frameworks, physical geography, infrastructures, technologies, and ecological dynamics (Hung & Lien, 2022). The ocean's properties – depth, currents, weather volatility, mobility of species and pollutants – complicate treating borders as stable, linear separators. Instead, maritime borders emerge through layered material relations (surface navigation, underwater resources and cables, air/sea interfaces) and through *volumetric* ordering rather than purely linear demarcation (Elden, 2013; Hung & Lien, 2022). This point can be sharpened further. If, following McAteer (2025), ocean governance is not only a question of surface jurisdiction but also of time, matter, and rhythm, maritime borders should be understood as enacted within a moving medium whose currents, depths, weather, and temporalities affect how control becomes practicable. This is particularly evident in migration-related bordering. As Şarlak (2025) shows, the sea is not merely the setting in which containment occurs: when surveillance, interception, rescue, and disembarkation arrangements operate in conjunction with distance, currents, weather, limited visibility,

and the exposure of small boats, these material conditions become part of the practical barrier faced by people on the move. In this sense, the sea can function as an environmental infrastructure – not as an autonomous actor, but as a material medium incorporated into wider socio-technical arrangements of containment and control. Third, *mobile state power*: maritime sovereignty is often enacted not by static markers but by moving vessels, patrols, escorts, surveillance practices, and risk zoning (Hung & Lien, 2022).

Taken together, these insights shift analysis away from treating maritime borders as merely legal delimitations or treating openness as stable. Maritime borders are dynamic socio-material assemblages whose practical meaning depends on how legal regimes intersect with infrastructures, technologies, and geopolitics. This matters especially for chokepoints because they compress materialities and governance logics into narrow corridors where small changes in threat, control, or capacity can have disproportionately large effects.

"Invisible yet present": salience, liminality, and the activation problem

A further conceptual step is needed to explain why maritime borders can appear irrelevant until they become suddenly salient. The "Invisible yet present" framework developed by Cerić and Więckowski (2025) offers a microfoundation for how maritime borders are perceived and experienced even in open-border settings. Their study of the German–Polish maritime border shows that borders can remain low-salience because crossings often lack clear physical cues; travellers experience the sea border as a mental map rather than a visible line (Cerić & Więckowski, 2025). This does not imply the absence of the border; it suggests that awareness may be activated through perception, memory, technology (e.g., GPS), and symbolic interpretation.

In that work, maritime borders are conceptualised as *floating thresholds* – transitional spaces without permanent material demarcation, yet carrying symbolic charge and interpretive ambiguity (Cerić & Więckowski, 2025). This aligns with broader arguments on liminality: when markers are absent, maritime borders may become sites of cognitive and emotional negotiation shaped by imagination, uncertainty, and historical memory (Wilkinson, 2010; Elías, 2021; Contreras et al., 2024; Cerić & Więckowski, 2025). The study also introduces the concept of *symbolic permeability*, emphasising that maritime borders can be open in a legal and functional sense while remaining meaningful through narratives, cultural cues, and perceptions that reintroduce difference (Cerić & Więckowski, 2025). Importantly, even in open-border settings, moments of crisis can reactivate bordering logics – e.g., temporary restrictions during the COVID-19 pandemic reminded travellers that open maritime borders remain politically contingent and reversible (Böhm, 2021; Więckowski & Timothy, 2021).

This "invisible yet present" logic is central to the present paper because it clarifies an observation that dominates contemporary chokepoint politics: maritime borders may appear operationally routine until escalation, disruption, or risk activates them as a restrictive regime. What changes is not only movement itself, but the visibility and intensity of bordering – how strongly the border is performed through enforcement, deterrence, surveillance, and market signals.

Literature review synthesis

Across the studies, there is a clear shared diagnosis of contemporary maritime border conditions: formal legal openness coexists with recurrent practical restriction. The literature converges on the argument that maritime rebordering is produced less through explicit legal closure and more through socio-material and infrastructural practices that operationalise control within open regimes. This legal–practical tension is discussed in relation to securitisation and "informal" or pragmatic governance that may challenge legal coherence (Bueger & Edmunds, 2021; Lott, 2022), while other work highlights how sovereignty

is performed through spatial constructs and material projects such as "island chains" or sea-based "walls" (Wirth, 2023). A second point of agreement is that infrastructures and information systems are not merely supportive tools but core border-making devices: maritime domain awareness frameworks, surveillance systems, and data-integrity/lexicon problems shape what is seen as risky, controllable, and governable (Chintoan-Uta & Silva, 2017; Curt, 2023; Şengül et al., 2023). Third, the review shows a broad consensus that contemporary maritime governance is hybrid, combining state authority with non-state actors and market logics. Private maritime security companies and mixed public–private "vessel protection" practices become part of the bordering assemblage (Eruaga & Mejia, 2020; Cusumano & Ruzza, 2020), while piracy is increasingly analysed as something "made" through infrastructures, objects, and governance practices rather than treated as a purely criminal anomaly (Bueger & Stockbruegger, 2024). Related work on navies and ocean space points in the same direction: maritime security strategy increasingly combines warfighting, constabulary, infrastructure-protection, and deterrence functions within overlapping security logics (Depledge, 2022). This is relevant for the present argument because migration pressures, piracy, and other non-state threats are often governed through security framings that do not require formal legal closure in order to produce practical restriction. In sum, the literature positions maritime borders, especially in pressured corridors, as dynamic constructs shaped by security rationales, infrastructural containment, hybrid authority, and information regimes rather than as stable legal abstractions.

At the same time, there are limitations that motivate a clearer and more comparable analytical framework. Fragmented conceptualisation and inconsistent terminology complicate comparisons across different threat classifications, understandings of "maritime security," and naming conventions for rebordering mechanisms (Menzel, 2022; Curt, 2023; Pandey, 2023). A related limitation is uneven empirical comparability: evidence is regionally concentrated and methodologically diverse (often case-study heavy), constraining generalisation across chokepoints (see Fantinato, 2021; Wirth, 2023; Şarlak, 2025). Data and technology constraints – standardisation, real-time tracking, and integration of surveillance systems – also complicate robust cross-case assessment and can blur whether we are observing the border itself or the data that represent it (see Curt, 2023; Şengül et al., 2023; Mourkousis et al., 2024). These limitations provide the rationale for a mechanism-based taxonomy and activation logic that reduces definitional overlap while still capturing interaction among mechanisms.

Mechanism taxonomy and operationalisation

This section develops a mechanism-based taxonomy of *maritime rebordering* designed for structured comparison across cases. To improve terminological consistency, mechanisms are classified by their primary instrument of bordering rather than by the sector in which they are most visible. The five mechanisms retained here are coercive–security, regulatory–juridical, risk–market, information–surveillance, and material–infrastructural/environmental. Irregular migration, piracy, and other forms of non-state violence are treated not as co-equal mechanisms but as recurrent activation drivers and governance objects that mobilise these instruments in different combinations.

Five mechanisms of maritime rebordering: a typology and empirical traces

To make maritime rebordering comparable across cases, this paper specifies five analytically distinct mechanisms through which maritime borders become functionally restrictive under nominal legal openness. The mechanism perspective is consistent with work arguing that maritime governance

is enacted through operationally produced security spaces and problem-oriented coordination (Bueger, 2022), through infrastructural forms of containment that shape mobility and access (Şarlak, 2025), and through the making of maritime security "objects" via sociotechnical and institutional infrastructures (Bueger & Stockbruegger, 2024). Table 1 summarises the main empirical traces used to illustrate each mechanism in a desk-based comparative design.

Coercive-security mechanisms (state-led security control). Coercive–security rebordering occurs when states constrain passage through the threat or use of force – via naval deployments, interdictions, seizures, coercive deterrence, and other forms of maritime power projection. In line with maritime border scholarship, this mechanism foregrounds mobile state power: control is enacted through moving platforms and operational spatial practices rather than through fixed

Table 1. Mechanisms of maritime rebordering and trace repositories used in this article (for typology transparency)

Mechanism (primary instrument)	Analytical focus / what is being "bordered"	Typical actor families	Empirical traces used in this article (indicative)	Anchor sources and trace repositories
Coercive-security (coercion, naval power)	Threat/use of force constraining passage; escalation management	State security actors (navies, coast guards, maritime police); coastal states; *ad hoc* coalitions	Security alerts; official advisories; incidents/seizures; heightened threat framing	UNCLOS (1982); CRS (2026); IMO (2019; 2026a, 2026b, 2026c); Hung & Lien (2022); Lloyd's List (2026); MARAD (2026).
Regulatory-juridical (rule-based gating)	Selective friction/ exclusion via rules (sanctions, inspections, documentation)	State regulatory and administrative actors (port-state control, customs, sanctions/ enforcement authorities, courts/tribunals where relevant)	Enforcement intensification; compliance constraints; rule reinterpretation under pressure	Paasi (1996); van Houtum (2005); Newman (2006); Lott (2022); Bueger & Edmunds (2021)
Risk-market (pricing-out)	Cost/contract feasibility constraining passage	Commercial and insurance actors (shipowners, charterers, brokers, marine insurers, P&I clubs, classification societies)	War-risk guidance; clauses; premium/ surcharge signals; rerouting	Bueger (2022); UNCTAD (2024; 2026); BIMCO (2026); IMO (2026a, 2026b, 2026c); Lloyd's List (2026); UNSCR (2026)
Information-surveillance (visibility/advisories)	Bordering through classification of risk and operational "pragmatic spaces"	Informational and coordination actors (MDA centres, reporting services, advisory bodies, surveillance operators, interagency coordination platforms)	Advisories; reporting geographies; persistent alerts; risk zoning	Bueger (2022); MARAD (2026)
Material--infrastructure & environment (capacity constraints)	Selective closure via corridor feasibility	Infrastructure and corridor-management actors (canal/strait authorities, VTS/ traffic-management services, hydrographic/coastal administrations, port/canal operators)	Capacity limits; transit declines; infrastructure disputes	ICJ (1991; 1992); Feyrer (2021); Lee & Wong (2021); SCA (2021; 2025; 2026); EIA (2026); EPRS (2024); UNCTAD (2024); GDWS (2025; 2026); Şarlak (2025)

border infrastructure (Hung & Lien, 2022). It differs from regulatory gating because the primary instrument is coercive capacity and escalation management, even when actions operate alongside legal narratives of continued openness.

Regulatory-juridical mechanisms (rule-based gating within openness). Regulatory–juridical rebordering refers to selective constraint enacted through rule systems: sanctions compliance, port-state controls, documentation regimes, inspections, and the practical reinterpretation or stretching of mandates under political pressure. This mechanism draws on the border-studies insight that borders persist as institutions and practices often reproduced through administrative routines and rule enforcement that differentiate access (Paasi, 1996; van Houtum, 2005; Newman, 2006). It is distinct from coercive–security mechanisms because the primary instrument is not force but rule-based filtering that increases friction, delays, or excludes specific categories of vessels, operators, or cargo.

Risk-market mechanisms (pricing-out and cost-driven exclusion). Risk–market rebordering occurs when insecurity is translated into cost and contract feasibility: war-risk premiums, insurance coverage conditions, conflict surcharges, charter-party constraints, and corporate routing decisions. Here, practical openness is reconfigured not primarily by coercion or formal rule change, but by economic rationalities that make passage unattractive, prohibitively expensive, or contractually unviable for some operators. Routes remain open "on paper," yet are avoided, delayed, or priced out in practice (Bueger, 2022; Şarlak, 2025).

Information-surveillance mechanisms (bordering through visibility, classification, and advisories). Information–surveillance rebordering operates through authoritative knowledge infrastructures that define what counts as risk, where it is located, and how navigation should adapt. In Bueger's (2022) terms, such infrastructures produce "pragmatic spaces" of maritime governance – operational zones constituted through reporting, monitoring, and coordination rather than jurisdictional lines alone. Advisory ecosystems and surveillance regimes can reorganise openness by shaping avoidance, rerouting, and risk calculation, and by institutionalising geographies of reporting and heightened caution, even prior to (or without) coercive enforcement.

Material–infrastructural and environmental mechanisms (capacity and physical constraints as bordering). Material–infrastructural rebordering refers to physical and operational constraints that shape what can pass, when, and under what conditions: canal and lock capacity, draft limits, bridge clearance, traffic rules, maintenance closures, and environmentally mediated restrictions. This aligns with the argument that infrastructures do not simply facilitate circulation; they can also contain, channel, and restrict (Şarlak, 2025), becoming active instruments of bordering. It also resonates with maritime scholarship emphasising multiple materialities and the distinct properties of the maritime domain (Hung & Lien, 2022). Here, openness becomes contingent on corridor functionality and physical feasibility, leading to selective restrictions even when legal openness remains unchanged. They are grouped here not because infrastructure and environment are ontologically identical, but because their primary analytical effect on rebordering is similar: they modify corridor feasibility and capacity rather than acting through force, rule-enforcement, or pricing.

Activation drivers and governance objects. Not every politically salient maritime pressure is analytically best treated as a mechanism. In this article, irregular migration, piracy, and other forms of non-state violence are treated as activation drivers or governance objects: they trigger and shape constellations of coercive–security, regulatory–juridical, information–surveillance, risk–market, and material–infrastructural responses. This distinction prevents conflating what pressures the border with how the border is operationally re-enacted in practice.

Irregular migration and SAR politics (as activation drivers rather than a separate mechanism). Irregular migration is treated here not as a mechanism in itself, but as a governance

object that activates coercive interception, rule-based allocation of responsibility, surveillance systems, humanitarian disembarkation politics, and the use of maritime space as containment infrastructure. This distinction matters because it separates the political problematisation of mobility from the operational instruments through which rebordering is enacted.

Piracy and non-state violence (as activation drivers rather than a separate mechanism). Following the typology's non-overlap principle, piracy and non-state armed threats are treated not as a separate mechanism but as activation drivers that can trigger constellations of coercive–security response, information/surveillance intensification, and risk–market gating. This follows Bueger and Stockbruegger's (2024) conceptual move: piracy is not merely an external event, but an object assembled and governed through infrastructures, practices, and institutions that render threats legible and actionable. In this framework, piracy and non-state violence matter because they help explain why advisory regimes, private security responses, and market instruments co-evolve into functional rebordering under nominal legal openness (Bueger & Stockbruegger, 2024).

Operationalising "activation episodes": from legal openness to practical restriction

To keep cross-case narratives comparable, this article uses the term *activation episode* to refer to periods (ranging from days to months) during which practical openness becomes more selective or constrained under the pressure of one or more mechanisms. The concept reflects the emphasis on episodic escalation and situational governance in maritime security and border control (Bueger, 2022; Şarlak, 2025). In this article, activation episodes are identified qualitatively using empirical traces (clusters of incidents, heightened advisories, observable rerouting, intensified interdiction activity, documented capacity constraints), rather than through exhaustive event coding.

Across the four cases, activation episodes are discussed through three analytical dimensions. First, *trigger and border object*: the type of pressure involved and the passage understood with its surrounding governance space (ports, lanes, surveillance/reporting geographies), consistent with land–ocean inter-bordering (Hung & Lien, 2022). Second, *dominant mechanism constellation*: the primary mechanism and its reinforcing mechanisms, reflecting hybrid and multi-causal maritime governance (Bueger, 2022; Bueger & Stockbruegger, 2024). Third, *outcome traces*: observable indications of functional restriction or heightened selectivity (avoidance/rerouting, reduced transit volumes, increased costs, heightened interception patterns, persistent advisory intensity). The aim is not comprehensive quantification, but comparable documentation of how practical openness changes in ways consistent with the mechanism taxonomy.

Formal legal restriction vs functional restriction

Maritime rebordering can occur through formal legal restrictions or functional restrictions, and the latter is often the more prevalent form in contemporary chokepoints.

Formal legal restriction refers to explicit rule changes or formal suspensions that legally limit passage (a declared prohibition, codified closure, treaty-based restriction). Functional restriction refers to practical constraint without a formal change in the legal regime of navigation. It includes avoidance behaviour, risk-driven rerouting, pricing-out through insurance and surcharges, intensified surveillance and reporting that discourages transit, and selective enforcement practices that make passage more burdensome for some actors than for others. The key claim across the reviewed literature is that functional restriction is increasingly central to maritime governance, producing "in practice" rebordering under stable legal baselines.

The distinction clarifies the paradox introduced above: international law may institutionalise openness, yet actors can still

experience the maritime border as closing through layered mechanisms that reshape routing decisions, perceived safety, mobility rights, and operational feasibility. Each case below is therefore analysed through baseline legal openness, the dominant mechanism constellation, and outcome traces indicating changed practical openness.

Maritime rebordering activation logic

Figure 2 visualises the paper's core claim: the practical openness of maritime borders is not a stable legal "given", but an outcome produced through the activation of rebordering mechanisms. The flowchart links a baseline of formal legal openness, triggering conditions (escalation, migration pressure, piracy clusters, infrastructure accidents, environmental constraints), and activation of one or more mechanism groups, culminating in observable changes in permeability. It provides a mechanism-based explanation of how borders can "reappear" at sea without formal suspension or amendment of navigation regimes: restrictions are often enacted functionally – through deterrence, operational gating, informational warnings, rerouting, or pricing out – rather than through explicit legal closure.

The flowchart also clarifies two analytical assumptions used throughout the empirical illustration. First, rebordering is commonly multi-mechanism: a single episode may involve simultaneous activation of coercive–security measures, risk–market reactions, and information/surveillance intensification. Second, rebordering is flow-selective: the same maritime border may remain effectively open for some mobilities while becoming restrictive for others. Accordingly, the outcome stage is observed separately for different flow types (trade/logistics, people-on-the-move, security/military mobility), allowing the cases to trace how different constellations generate different practical openness outcomes under the same legal narrative of openness.

Methodological note: Structured comparative desk study

This article is a theory-building conceptual paper based on a structured comparative desk study. Its aim is not to compile an exhaustive event dataset, but to clarify *how* maritime borders become functionally restrictive under stable legal baselines of navigational openness. The analysis follows a "most-different mechanisms, common problem" logic: four strategic

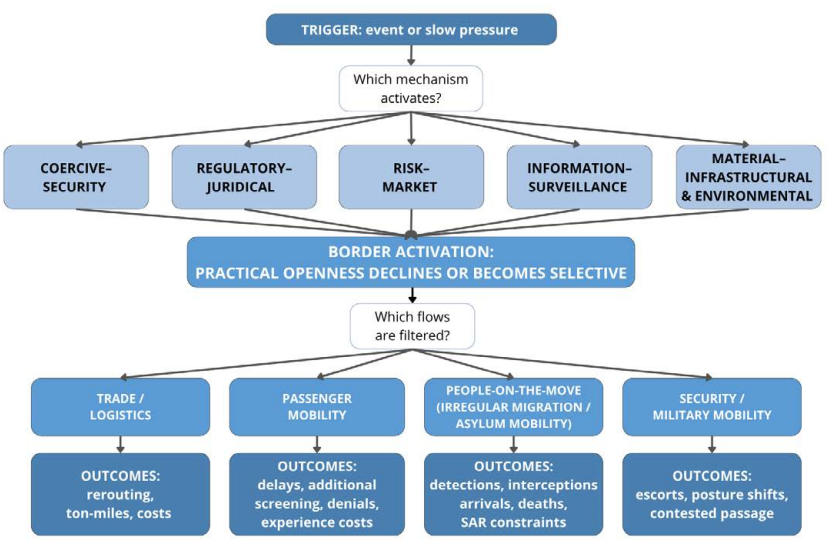

Figure 2. Maritime rebordering activation logic: from legal openness to selective practical closure

passages – Hormuz, Gibraltar, Bab al-Mandeb–Suez, and Danish Straits/Kiel Canal – differ in geopolitics, dominant pressures, and governance arrangements, yet each illustrates the same analytical paradox: legal openness persists while practical openness becomes selectively reconfigured through rebordering mechanisms.

Empirically, the article triangulates two desk-accessible bodies of material. First, it draws on a targeted review of relevant scholarly literature across border studies, maritime border scholarship, and maritime governance/security research. Second, for each case, it uses a small set of documentary traces sufficient to demonstrate mechanism activation and outcomes (legal texts on passage regimes; chokepoint exposure summaries; institutional and industry advisories; route/mobility monitoring datasets). These traces are used illustratively to support cross-case comparability, rather than to claim comprehensive coverage of all events.

To ensure comparability, each case is analysed using the same template: (1) baseline legal openness relevant to passage, (2) dominant rebordering mechanism constellation (as per the taxonomy and activation logic), and (3) observable outcome traces indicating functional restriction (avoidance/rerouting, pricing-out, intensified surveillance/advisories, migration route shifts, capacity constraints). The case vignettes are therefore mechanism-revealing illustrations rather than exhaustive histories. Evidence availability is uneven across domains (especially market pricing and insurance signals), and some processes shaping practical openness (informal coordination, private risk assessment) remain only partially visible in public sources.

Four mechanism-revealing cases

The four cases are illustrative and mechanism-revealing rather than exhaustive histories. Each vignette follows the same template – baseline legal openness, dominant rebordering mechanisms, and outcome traces – and is paired with Figure 3, which situates each passage in its surrounding jurisdictional "seascape" and boundary configuration (A: Hormuz; B: Gibraltar; C: Bab al-Mandeb; D: Danish Straits).

Strait of Hormuz

Baseline legal openness. In formal legal terms, Hormuz is a strait used for international navigation connecting one EEZ/high seas area to another, where ships enjoy the right of transit passage that "shall not be impeded" (UNCLOS, Art. 38) and where States bordering straits "shall not hamper transit passage" and "there shall be no suspension of transit passage" (UNCLOS, Art. 44) (UNCLOS, 1982). Economically, this legal baseline overlays extreme chokepoint exposure: the U.S. Energy Information Administration (EIA) estimates average oil flows through Hormuz of 20.9 million b/d in 2023, making it one of the world's most consequential energy passages (EIA, 2026), with limited alternatives for large-scale diversion.

Dominant rebordering mechanisms. Hormuz is a canonical case of *coercive–security* activation interacting with *information-surveillance* and *risk-market gating*. In late February–early March 2026, the U.S. Maritime Administration advised vessels to keep clear of the area where possible and to coordinate with NCAGS/UKMTO/JMIC amid "significant military activity" (MARAD, 2026). Subsequent institutional reporting suggests that the mechanism mix rapidly extended beyond 'advisory gating' into measurable traffic collapse and formal multilateral condemnation. UNCTAD's rapid assessment records a fall in daily transits from a pre-escalation average of 141 (1-27 February) to near-halt conditions (a 97% decline), and links this disruption to higher freight rates, bunker prices, and insurance premiums (UNCTAD, 2026). Earlier episodes, the 2019 tanker attacks condemned by the IMO Council and the late-1980s "tanker war," which led to U.S.-led escort operations, show that this form of activation is recurrent rather than exceptional (IMO, 2019; CRS, 2026). Together, these events

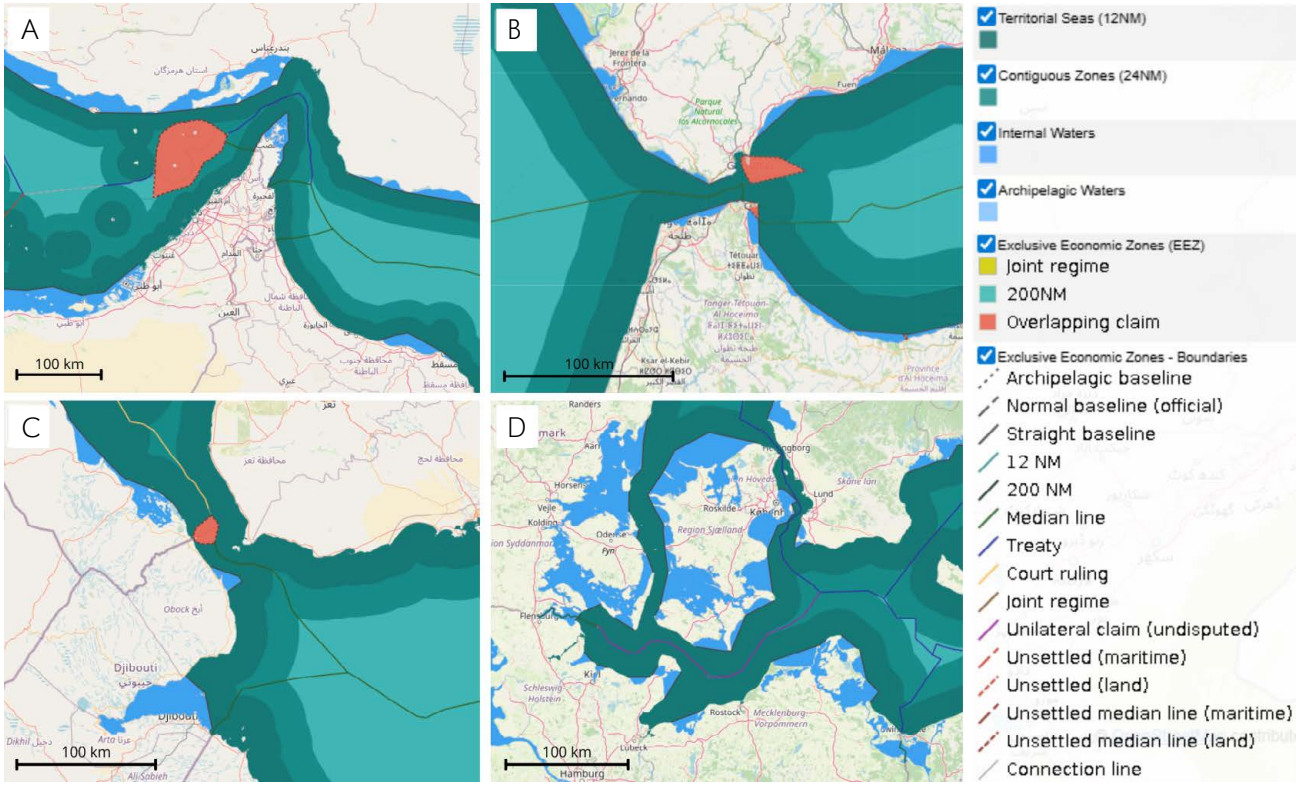

Figure 3. Maritime jurisdictional seascapes and boundary configurations in the four strategic passages analysed. *Panels show (A) Strait of Hormuz, (B) Strait of Gibraltar, (C) Bab al-Mandeb, and (D) Danish Straits. Shaded areas depict the principal maritime zones most relevant to the analysis (internal waters, territorial seas [12 NM], contiguous zones [24 NM], EEZs/200-NM areas, and overlapping claims where applicable). Line symbols indicate baselines and maritime boundary constructions, including median lines, treaty lines, court-awarded lines, unilateral claims, and unsettled segments. The figure is intended as an interpretive map of the legal seascape surrounding each chokepoint rather than as an exhaustive regional law-of-the-sea diagram.*

Source: Own elaboration based on Marine Regions (2026).

illustrate Bueger's (2022) "pragmatic spaces": advisory areas, reporting regimes, and operational coordination that reconfigure navigation without formal legal change. BIMCO's guidance for owners and charterers further demonstrates how war-risk clauses may make voyages contractually unattractive or unviable in areas exposed to piracy, terrorism, seizure, and blockade threats (BIMCO, 2026).

Outcome traces. Outcomes took the form of avoidance, deferral, rerouting, and pricing-out rather than a legally valid suspension of transit passage. UNCTAD (2026) records the shift from routine high-volume circulation to near-halt conditions. International responses reaffirmed the legal baseline: the UN Security Council condemned actions or threats obstructing navigation, while the IMO Council rejected the purported closure, noted GNSS jamming and spoofing, and urged attention to seafarer welfare; a joint statement by several governments likewise called for practical measures to protect crews and navigation (UNSCR, 2026; IMO, 2026a; Joint statement from the leaders..., 2026). Industry reporting also described an actor-selective corridor logic, including registration and vetting for "approved" transits near the Iranian coast, heightened disclosure demands, and threatened enforcement against vessels using non-approved routes (Lloyd's List, 2026). By 25 June, the IMO's voluntary evacuation framework had enabled 57 ships carrying about 1100 seafarers to move under individually coordinated temporary routes, but it was paused after an attack in the Gulf of Oman pending renewed safety guarantees (IMO, 2026b, 2026c). As of early July, Hormuz was therefore neither simply "open" nor "closed": passage remained selectively administered through exceptional coordination, temporary routing, and differentiated access rather than ordinary transit-passage conditions.

Strait of Gibraltar

Baseline legal openness. Like Hormuz, Gibraltar is governed by the straits regime of UNCLOS: transit passage through straits used for international navigation "shall not be impeded" and is not subject to suspension (UNCLOS, Arts. 38 and 44) (UNCLOS, 1982). Yet Gibraltar's bordering dynamics show *flow selectivity*. While it remains a key corridor for shipping between the Atlantic and Mediterranean, politically salient bordering frequently concentrates on *human mobility*, especially irregular maritime crossings.

Dominant rebordering mechanisms. Gibraltar is best read as a case in which irregular migration and SAR politics activate a constellation of coercive–security, regulatory–juridical, information–surveillance, and material–infrastructural mechanisms. UNHCR's Mediterranean data portal provides route-specific data on sea arrivals and "dead and missing" along the Western Mediterranean route (UNHCR, 2026), allowing observation of how bordering intensifies through patrols, detections, interdictions, and shifting departure and landfall geographies. Frontex (2025) data illustrate how enforcement pressure and smuggling adaptation can reconfigure route geography – e.g., increased departures from Algeria and changing destination patterns (including surges toward the Balearics). This pattern has an earlier activation benchmark: Frontex reported that the Western Mediterranean became the most frequently used irregular entry route into Europe in 2018, with detections in Spain reaching 57,034 (Frontex, 2019). The Frontex data indicate that the Western Mediterranean route increased by 27% (Jan–Oct 2025), while the Balearics saw strong growth (Frontex, 2025). In mechanism terms, legal openness for navigation coexists with a bordering regime in which people-on-the-move become the primary object of governance and are filtered, intercepted, deterred, and spatially displaced through overlapping security, regulatory, surveillance, and infrastructural instruments.

Outcome traces. The most legible outcomes are changes in people-on-the-move traces rather than trade-volume traces: route-specific arrivals, interdiction/detection patterns, and persistent mortality at sea. UNHCR data show continuing deaths and

missing persons associated with the Western Mediterranean route (UNHCR, 2026), underscoring that selective rebordering can be simultaneously operational and humanitarian in its consequences. The same portal indicates longer-run fluctuation consistent with recurrent activation – for example, Spain's Western Mediterranean sea arrivals rising sharply in 2018, followed by lower but persistent volumes. Frontex reporting further indicates that enforcement regimes and bilateral relations can reshape maritime routes geographically, producing a moving border of enforcement not coterminous with any single boundary line (Frontex, 2025). Gibraltar thus operationalises the paper's core claim in a distinct way from Hormuz: the same legal baseline persists, but practical bordering concentrates on human mobility rather than commercial transit.

Bab al-Mandeb–Suez corridor

Baseline legal openness. This corridor combines two complementary openness baselines. The Bab al-Mandeb Strait is governed by the UNCLOS straits regime (transit passage not to be impeded and not subject to suspension) (UNCLOS, 1982). The Suez Canal is governed by the *Convention of Constantinople* (1888), whose Article I declares the canal shall "always be free and open … in time of war as in time of peace" and "shall never be subjected to the exercise of the right of blockade." In geo-economic terms, EIA estimates in 2023 that oil flows through the Suez Canal and the SUMED pipeline totalled 8.8 million b/d, and through the Bab al-Mandeb totalled 8.6 million b/d (EIA, 2026), underscoring the corridor's strategic importance as a coupled gateway linking the Indian Ocean system to the Mediterranean/European system. Historically, Suez also provides a rare benchmark of formal restriction: the canal's closure between 1967 and 1975 has been used to quantify the distance shock imposed on trade when flows were forced around the Cape of Good Hope (Feyrer, 2021). This benchmark matters because it contrasts with the paper's emphasis on contemporary functional rebordering under nominal legal openness.

Dominant rebordering mechanisms. This corridor illustrates non-state armed threat activation producing cascades via *information–surveillance* and *risk–market mechanisms*, with *material–infrastructural constraints* amplifying effects when alternatives are costly. UNCTAD describes how insecurity in the Red Sea and canal disruptions drove large-scale rerouting around the Cape of Good Hope, increasing ton-miles, costs, and exposure to piracy risk (UNCTAD, 2024). The corridor also illustrates the argument that piracy and maritime insecurity are not merely events, but objects assembled through governance infrastructures and security practices: advisories, reporting systems, and private security responses shape what counts as acceptable risk and therefore which routes remain practically open (Bueger & Stockbruegger, 2024).

Outcome traces. UNCTAD reports that by mid-October 2024, Suez transits averaged 33 per day, about 57% below the previous peak and 55% lower than one year prior; it also documents an 89% surge in rerouted vessel capacity around the Cape of Good Hope, along with higher costs and emissions (UNCTAD, 2024). Egypt's reduced canal revenues and traffic declines have been reported as consequences of the Red Sea security environment; The Suez Canal Authority reported a near two-thirds revenue drop in 2024 and roughly 50% fewer ship transits (SCA, 2025; 2026). A different kind of activation – driven primarily by material-infrastructural constraint rather than armed threat – was the March 2021 Ever Given grounding, which blocked the canal for six days and produced a queue of roughly 422 vessels awaiting passage (SCA, 2021; Lee & Wong, 2021). In mechanism terms, this illustrates how corridor capacity and infrastructure contingencies can generate immediate functional restriction, even without a security trigger. Together, these traces capture the distinction central to this paper: neither UNCLOS transit passage nor the Constantinople Convention's formal openness must be abolished for the

corridor to become *functionally re-bordered* through attack risk, elevated costs, and sustained rerouting.

Danish Straits and the Kiel Canal

Baseline legal openness. The Danish Straits sit at the interface of long-standing treaty commitments and contemporary law-of-the-sea governance. The *1857 Copenhagen Treaty for the Redemption of the Sound Dues* aimed at the "complete and permanent removal" of dues and, as summarised in Denmark's filings in the International Court of Justice (ICJ) Great Belt proceedings, included undertakings not to impose passage dues and not to subject ships to "detention or hindrance" in passage through the Sound or the Belts (ICJ, 1992). The passage's strategic energy relevance is measurable: EIA estimates 4.9 million b/d of oil transited the Danish Straits in 2023 (EIA, 2026). The Kiel Canal (*Nord-Ostsee-Kanal*) functions as an infrastructural bypass linking the North Sea and Baltic Sea, providing distance and time savings relative to the Baltic Skagen route and thus forming part of the region's openness architecture.

Dominant rebordering mechanisms. This case foregrounds *material–infrastructural* and *regulatory–juridical* mechanisms. The ICJ case *Passage through the Great Belt (Finland v. Denmark)* (ICJ, 1992) documents how a fixed-link infrastructure project (bridge clearance) can be argued to permanently close the Baltic for certain high air-draught vessel categories – a clear example of infrastructural containment and selective restriction even where general passage remains feasible. A contemporary regulatory–juridical activation concerns Russia's "shadow fleet" (EPRS, 2024): Denmark has explored and begun intensifying legally grounded measures (including inspection and control practices) aimed at limiting sanctions-evasion tankers transiting the Danish Straits, framed around maritime safety and environmental risk, thus targeting specific vessels while leaving general passage formally intact (Ministry of Environment and Gender Equality – Denmark, 2025). In contemporary practice, the Kiel Canal's operational capacity, speed regimes, lock reliability, and investment cycles can become border-like constraints leading to delays, queuing, or diversion. As reported via German official briefings, 2024 saw 24,866 ships and 75.6 million tons of cargo through the Kiel Canal, with traffic patterns explicitly linked to geopolitical crises and sanctions affecting Russia-related trade (GDWS, 2025; 2026).

Outcome traces. Two outcome patterns are analytically valuable. First, the Great Belt dispute (ICJ, 1991) documents selective closure through design constraints affecting particular vessel types (drill ships, rigs, "reasonably foreseeable" high structures) while leaving general merchant passage largely unaffected, illustrating flow-selective rebordering. Second, canal traffic statistics provide a measurable trace of infrastructural and geopolitical activation: fluctuations in ship counts and cargo volumes, references to sanctions-related declines in Russia-linked flows, and documented concerns about throughput and investment needs. Discrete infrastructure failures can produce short-run functional restrictions. For example, in January 2025, a cargo ship collision damaged a lock gate at Brunsbüttel, prompting traffic redirection and operational constraints during inspections and repairs (Waterways and Shipping Office Kiel Canal, 2025). Together, these outcome traces show how rebordering can be produced by corridor capacity and rule-based gating, making practical openness contingent on material systems as much as on legal principle.

Discussion

Across the four chokepoints, the central pattern is consistent: formal legal openness persists while practical openness is repeatedly reconfigured through activation episodes. A further implication concerns the possible 'formalisation' of functional bordering. Recent developments in the Strait of Hormuz suggest a move toward conditionality mechanisms (registration, vetting, disclosure requirements,

and alleged payments) (Lloyd's List, 2026) that – if normalised – could amount to an incremental re-engineering of transit passage into a discretionary, selectively priced, information-gated practice. This is where a "Pandora's box" dynamic becomes analytically relevant: once a major international strait is treated as governable through unilateral corridor authorisation and transactional passage, other strategic passages may face copycat rationales, threatening the stability of the non-suspendable straits regime. Notably, the IMO Council explicitly urged its committees to consider implications for the implementation of IMO instruments, signalling that the current episode is not treated merely as a security incident, but as a potential stress test for core governance norms of international navigation (IMO, 2026a). Late June and early July 2026 developments reinforce this point, because partial traffic recovery has occurred through exceptional, route-specific arrangements rather than through a clean restoration of ordinary transit-passage conditions (IMO, 2026b, 2026c). Even though UNCLOS transit passage norms and the Constantinople Convention's "free and open" principle remain key legal reference points, "openness" functions less like a stable condition and more like a governed outcome produced through interacting mechanisms – security postures and interdiction, migration-related enforcement, trigger events involving non-state violence or piracy, market risk pricing, information/surveillance regimes, and infrastructural capacity constraints.

The comparative value of the cases lies in contrasting dominant mechanism constellations under a shared openness baseline. Hormuz illustrates coercive–security escalation layered with advisory regimes and war-risk market governance that can generate rapid functional closure (avoidance and pricing-out) while legal passage remains formally unsuspendable. Gibraltar shows a different selective logic: commercial passage remains largely open, while bordering intensifies around people-on-the-move through detection/interdiction and migration governance, consistent with border theory's emphasis on differentiated permeability within open borders (Sohn, 2014). The Bab al-Mandeb–Suez corridor demonstrates both cascade dynamics – where non-state violence activates advisory and market mechanisms – as well as infrastructure-driven activation (Ever Given) alongside a rare benchmark of formal restriction (1967-1975 closure) (UNCTAD, 2024; Feyrer, 2021; Lee & Wong, 2021). The Danish Straits/Kiel Canal case shows how infrastructural governance and design constraints generate selective closure for particular vessel classes, how compliance enforcement targets specific shipping practices (shadow-fleet scrutiny), and how canal disruptions translate infrastructure into short-run functional restriction (ICJ, 1991; 1992; GDWS, 2025; 2026; Waterways and Shipping Office Kiel Canal, 2025).

These contrasts help clarify why the same legal baseline yields different practical openness outcomes. The legal–practical nexus is not resolved by asking whether international law matters, but by specifying how governance mechanisms mediate between legal commitments and situated practice. One strand of scholarship emphasises continuity of formal international law and sovereignty, while another emphasises fragmentation, informal lawmaking, and contestation that can undermine legal clarity in practice (see Lott, 2022; Menzel, 2022; Bueger & Edmunds, 2021). The four cases suggest both positions can be reconciled if openness is treated as multi-layered: legal openness may remain stable in legal texts, while functional openness varies through activation episodes that alter behaviour, cost, and perceived safety, producing flow-specific openness.

Two parameters help explain divergence. The first is the object of governance: irregular migration and SAR governance in Gibraltar; shipping security under state–state escalation in Hormuz; commercial vessel protection under non-state attack risk in the Red Sea corridor; corridor capacity and ship-class feasibility in the Danish Straits/Kiel system. The second is mechanism ecology (actor

configuration): maritime governance is hybrid, but the relevant actors can be grouped more coherently as state security actors, state regulatory-administrative actors, commercial/insurance actors, informational-coordination actors, and infrastructure-management actors, which interact in varying combinations across cases (see Cusumano & Ruzza, 2020; Eruaga & Mejia, 2020; Bueger & Edmunds, 2021). Under hybrid conditions, rebordering can occur even when no single actor formally declares closure, because risk and compliance decisions emerge from a distributed governance network.

Bueger's (2022) notion of pragmatic security spaces offers a useful interpretation: control at sea is often enacted not as a strict territorial line but as operational zones that guide behaviour beyond legal geography. The cases can be re-read as different forms of pragmatic space-making: Hormuz is governed through high-threat advisories and war-risk "areas"; Gibraltar through surveillance and patrol practices shaping detection and interdiction geographies; Bab al-Mandeb–Suez through corridor-wide advisories and market governance that drive mass rerouting; and the Danish Straits/Kiel through infrastructural gates, traffic rules, and physical design limits that define a corridor's operational envelope. In all cases, the border is not merely a jurisdictional demarcation but a spatialised governance outcome.

A second cross-case conclusion is that maritime rebordering cannot be explained without taking materiality and infrastructure seriously, in line with Hung & Lien's (2022) call for attention to land–ocean interbordering, multiple materialities, and mobile state power. This point is especially visible in migration-related contexts, where the material conditions of the sea can be incorporated into surveillance, interception, rescue, and disembarkation arrangements, making passage more difficult and more risky for particular mobile groups (Şarlak, 2025). Chokepoints intensify the infrastructural character of borders: security threats translate into bordering by rerouting, while accidents or capacity shocks translate corridor systems into immediate functional restriction. The Ever Given episode (Lee & Wong, 2021) illustrates how infrastructural breakdown alone can reconfigure the openness of an otherwise legally 'open' corridor. The literature highlights these fluid, infrastructural, and socio-technical dimensions (Hung & Lien, 2022; Wirth, 2023; Şarlak, 2025).

This lens also clarifies why piracy and non-state violence are treated here as activation triggers rather than standalone mechanisms. Piracy is a multiple and unstable object maintained through fragmented infrastructures, supporting the view that security objects are produced and contested rather than fixed (see Menzel, 2022; Bueger & Stockbruegger, 2024). In this framework, piracy and non-state threats matter because they mobilise advisory regimes, surveillance systems, private security markets, and insurance pricing that can produce practical closure even while legal openness remains intact.

The contribution to border studies is therefore not simply to "add the sea", but to show that maritime chokepoints make visible the general theoretical point that borders are outcomes of mechanism interaction. The bordering–debordering–rebordering framework captures the cyclical and selective character of border change (Paasi, 1996; Newman, 2006; Rumford, 2006; Sohn, 2014; Więckowski, 2025); the mechanism taxonomy and activation logic offer a reusable analytical vocabulary that can reduce fragmentation and improve cross-case comparability.

Furthermore, as previously demonstrated, the bordering–debordering–rebordering framework is merely part of a broader theoretical construct concerning the variability of boundaries. Our analysis confirms recent research published by Więckowski (2025), showing that the variability is bidirectional – meaning that any process can be terminated and reversed at any stage, and the processes of boundary changes have accelerated significantly in recent years. Following the theoretical and empirical analysis, we can further add that processes of rebordering – or, more

simply, border closures – can be selective and multidimensional.

Finally, the "Invisible yet present" approach provides an interpretive bridge between micro-level border experience and global chokepoint governance. Cerić and Więckowski (2025) show that maritime borders can remain low-salience in everyday mobility until cues or crises reactivate bordering. The chokepoint cases extend that logic: borders operate as background infrastructure until activation episodes make them visible through advisories, pricing changes, rerouting, and enforcement.

Conclusion

This article set out to explain a recurring paradox of contemporary maritime geopolitics: legal frameworks institutionalise a presumption of navigational openness, yet the practical openness of maritime borders is repeatedly reconfigured through rebordering mechanisms. Anchored in processual border theory, the paper argued that bordering–debordering–rebordering dynamics operate at sea in a selectively permeable and episodic manner. Even where straits and canals are governed by legal regimes that formalise freedom of navigation, openness in practice is not a stable fact but a contingent outcome shaped by how different actors activate security, regulatory, market, informational, and infrastructural instruments.

The mechanism taxonomy and activation-episode logic developed here provide a transferable conceptual tool for understanding these dynamics. Across four mechanism-revealing cases, the analysis showed that state escalation, irregular migration, piracy/non-state violence, and infrastructural breakdown activate overlapping constellations of coercive–security, regulatory–juridical, risk–market, information–surveillance, and material–infrastructural/environmental mechanisms. These mechanisms often operate in constellations rather than in isolation, confirming the literature's emphasis on hybrid maritime governance in which state power, private markets, and information infrastructures jointly shape what counts as a practicable route.

The paper's contribution to border studies is twofold. First, it shows that maritime borders intensify core insights about processuality and selectivity because many border effects are enacted without visible markers and become salient primarily through activation episodes. This connects the "invisible yet present" insight (Cerić & Więckowski, 2025), developed for open maritime border settings in tourism contexts, to global chokepoints in which borders become visible through advisories, pricing, routing, and enforcement once perceived risk rises. Second, it offers a mechanism-based vocabulary designed to improve comparability across cases by clarifying what counts as rebordering, when it activates, and how it becomes traceable across different flows.

A concrete agenda follows for both research and policy. For researchers, the next step is to refine the measurement of practical openness by integrating activation coding with systematically comparable traces (corridor traffic series, route statistics, advisory intensity, and – where possible – insurance and freight indicators), enabling future work to test whether particular mechanism constellations systematically produce higher degrees of functional closure. For policymakers and maritime governance actors, managing chokepoint resilience requires acknowledging that openness is contingent: ensuring it is not only a matter of legal principle, but also of reducing the conditions under which rebordering mechanisms activate and cascade.

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