

## WHO PAYS FOR MARITIME SECURITY? BURDEN SHARING AND INTERNATIONAL LEGAL CONSTRAINTS IN THE STRAIT OF MALACCA AND INDONESIAN ARCHIPELAGIC SEA LANES

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### Abstrak

Selat Malaka dan Jalur Laut Kepulauan Indonesia (ALKI) memfasilitasi sekitar 25 persen perdagangan maritim global dan sekitar 80 persen pasokan minyak mentah Asia Timur setiap tahunnya. Artikel ini mengembangkan konsep beban tata kelola maritim asimetris untuk menjelaskan bagaimana UNCLOS secara struktural mengutamakan kebebasan navigasi, sekaligus membebankan tanggung jawab keamanan yang tidak proporsional kepada negara-negara berkembang pesisir, khususnya Indonesia. Menggunakan metode kualitatif dan analisis yuridis, pemeriksaan empiris data insiden maritim, dan studi komparatif titik-titik rawan internasional, artikel ini menunjukkan bahwa mekanisme kerja sama yang ada berdasarkan Pasal 43 tetap lemah secara institusional, rapuh secara politik, dan tidak memadai secara fiskal. Artikel ini berpendapat kecuali jika kekurangan UNCLOS tentang pembiayaan beban diatasi melalui protokol yang dinegosiasikan atau perjanjian regional yang mengikat, ketidaksetaraan struktural negara-negara pesisir dan negara-negara pengguna semakin dalam, mengancam keamanan navigasi jangka panjang di salah satu jalur laut yang paling penting secara strategis di dunia.

**Kata kunci:** Beban Tata Kelola Maritim Asimetris, UNCLOS 1982, Jalur Transit, Alur Laut Kepulauan, Selat Malaka

### Abstract

*The Strait of Malacca and Indonesia's Archipelagic Sea Lanes (ALKI) facilitating approximately 25 percent of global seaborne trade and roughly 80 percent of East Asia's crude oil supply annually. This article*

*develops the concept of asymmetrical maritime governance burden to explain how UNCLOS structurally privileges navigational freedom while consigning disproportionate security responsibilities to littoral developing states, notably Indonesia. Through qualitative method with juridical analysis, empirical examination of maritime incident data, and a comparative study of international chokepoints. The article demonstrates that existing cooperative mechanisms under Article 43 remain institutionally weak, politically fragile, and fiscally inadequate. The article argues that unless UNCLOS's lacuna on burden financing is addressed through a negotiated protocol or binding regional agreement, the structural inequality between littoral states and user states will deepen, threatening long-term navigational security in one of the world's most strategically indispensable waterways.*

**Keywords:** Asymmetrical Maritime Governance Burden, UNCLOS 1982, Transit Passage, Archipelagic Sea Lanes, Strait of Malacca

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## INTRODUCTION

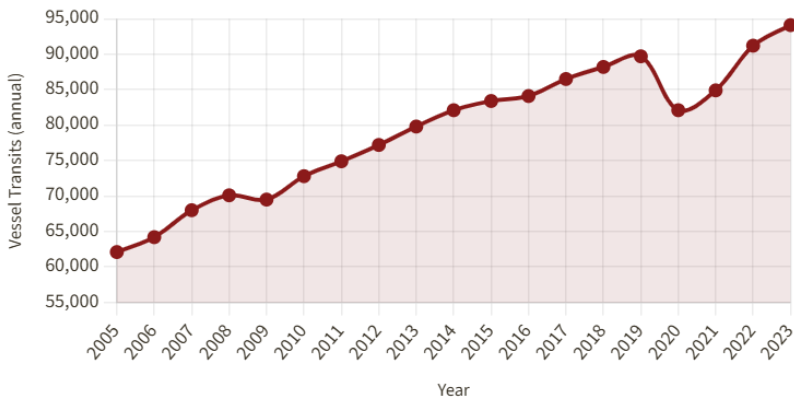
Few geographic features have shaped the contours of global commerce, geopolitical rivalry, and international legal controversy more profoundly than the Strait of Malacca. Stretching approximately 900 kilometres between the Malay Peninsula and the island of Sumatra, this narrow waterway at its most constricted point barely 2.8 kilometres wide at the Philip Channel serves as the principal maritime conduit between the Indian Ocean and the South China Sea, and by extension between the energy-producing economies of the Middle East and the energy-consuming industrial giants of Northeast Asia.<sup>1</sup> According to the International Maritime Organization,<sup>2</sup> approximately 94,000 vessel transits were recorded through the strait in 2023, representing a volume of maritime traffic that has grown at a compound annual rate of roughly 3.2 percent over

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<sup>1</sup> Bateman, S., & Ho, J. (2014). *ASEAN and the Indian Ocean: The key maritime links*. S. Rajaratnam School of International Studies

<sup>2</sup> IMO. (2023). *Review of traffic density in international straits: Strait of Malacca and Singapore 2023*. IMO NAV/60.

the preceding two decades. The United Nations Conference on Trade and Development<sup>3</sup> estimates that goods valued through this corridor each year, constituting approximately 25 percent of all global seaborne trade by value.



**Figure 1.** Annual vessel transits through the Strait of Malacca, 2005–2023. Data compiled from IMO (2023), Singapore Maritime Port Authority (MPA, 2024), and UNCTAD (2024). The upward trend reflects growing Asian trade volumes; the 2020–2021 dip corresponds to pandemic-related trade contraction. Post-2021 recovery has exceeded pre-pandemic levels.

The trajectory illustrated in Figure 1 underscores a critical reality: the navigational pressure on the strait is not merely returning to the pre-pandemic status quo, but is intensifying at an unprecedented rate. This physical congestion directly compounds the waterway's geopolitical and economic weight. Indeed, the strategic significance of the strait extends well beyond aggregate trade statistics. Approximately 15.2 million barrels of crude oil and petroleum products transited the waterway daily in 2023,<sup>4</sup> making it the second busiest oil chokepoint globally after the Strait of Hormuz. Liquefied natural gas (LNG) flows have risen sharply following the expansion of Australian and Qatari export terminals, with the strait handling approximately 680 million tonnes of LNG cargo in 2023.<sup>5</sup>

<sup>3</sup> UNCTAD. (2024). *Review of maritime transport 2024*. United Nations.

<sup>4</sup> EIA (U.S. Energy Information Administration). (2024). *World oil transit chokepoints: Special report*. EIA.

<sup>5</sup> BP. (2024). *Statistical review of world energy 2024*. BP plc.

Approximately 75-80% of China's seaborne crude oil imports pass through the Strait of Malacca, making it a vital route for its energy security. This heavy reliance has led to concerns about the "Malacca Dilemma," where any disruption in the straits could severely impact China's energy supply and economic stability.<sup>678</sup>

Against this backdrop of extraordinary economic importance stands a legal and governance architecture that has remained fundamentally unchanged since the adoption of UNCLOS in 1982. The Convention establishes transit passage rights through international straits and archipelagic sea lanes passage through archipelagic states, both regimes designed to guarantee the unimpeded movement of commercial and naval vessels. However, UNCLOS is conspicuously silent on the question of who should finance the infrastructure, surveillance operations, environmental remediation, and emergency response services that sustain these navigational guarantees. The sole relevant provision, Article 43, exhorts bordering states and user states to cooperate in the establishment of navigational aids and safety equipment, but it imposes no legally binding contribution obligation on user states and provides no enforcement mechanism. This legal lacuna, this article argues, produces what is termed here as an *asymmetrical maritime governance burden*: a structural condition in which the economic benefits of navigational freedom are globally diffused while the operational costs of maritime security are concentrated upon the littoral state.

Indonesia occupies a uniquely exposed position within this asymmetry. Not only does Indonesian sovereign or jurisdictional territory border the entire southern and eastern extent of the Strait of Malacca, but

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<sup>6</sup> Zhang, Z. (2011). China's energy security, the Malacca dilemma and responses. *Energy Policy*, 39, 7612-7615.

<https://doi.org/10.1016/j.enpol.2011.09.033>

<sup>7</sup> Rahmadani, S., Kusmanto, H., & Warjio, W. (2019). Strategi Cina menghadapi "Malacca Dilemma" dalam Rangka Pengamanan Jalur Energy Cina di Selat Malaka. *JUPIIS: JURNAL PENDIDIKAN ILMU-ILMU SOSIAL*.

<https://doi.org/10.24114/jupiis.v11i1.12304>

<sup>8</sup> Chen, H., Zhang, W., Huang, X., & Wang, X. (2024). Estimating the dynamic economic impacts of oil supply disruptions on China: A case study of Malacca Strait block. *Resources Policy*. <https://doi.org/10.1016/j.resourpol.2024.105376>

three designated Archipelagic Sea Lane Passages (ALKI I, II, and III) traverse the Indonesian archipelago, cutting through the Sunda Strait, the Lombok and Makassar Straits, and the Banda and Savu Seas respectively. The plan to procure patrol boats requires a very large budget, assets dedicated to maritime patrol, anti-piracy, and counter-trafficking operations.<sup>9,10</sup> Meanwhile, the ReCAAP Information Sharing Centre reported 54 incidents of piracy and armed robbery against ships in the Asia-Pacific region in 2023, with Indonesian waters accounting for a disproportionate share of patrol responsibilities irrespective of where individual incidents occur.<sup>11</sup>

The analytical novelty of this article lies in its integration of doctrinal international legal analysis, maritime political economy, burden-sharing theory, and systematic empirical data to construct a unified critique of UNCLOS's governance architecture. Prior scholarship has examined individual dimensions of this problem piracy and maritime security cooperation,<sup>12</sup> Indonesia's legal rights in the ALKI system<sup>13</sup>, Article 43's implementation deficit, and the political economy of chokepoint governance<sup>14</sup> but no prior study has systematically developed the concept of asymmetrical maritime governance burden as the organising framework for a comprehensive analysis linking legal doctrine, empirical security data, and burden-sharing theory.

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<sup>9</sup> Bakamla (Indonesian Maritime Security Agency). (2024). *Annual operational report 2023*. Bakamla RI.

<sup>10</sup> Sitorus, H. F., Said, B. D., Suwarno, P., Widodo, P., & Saragih, H. (2023). Maritime Patrol Collaboration with Indonesian Maritime Law Enforcement Agencies. *International Journal Of Humanities Education and Social Sciences (IJHESS)*. <https://doi.org/10.55227/ijhess.v2i5.437>

<sup>11</sup> ReCAAP Information Sharing Centre. (2024). *Annual report 2023: Piracy and armed robbery against ships in Asia*. ReCAAP ISC.

<sup>12</sup> Bateman, S., & Ho, J. (2014). *ASEAN and the Indian Ocean: The key maritime links*. S. Rajaratnam School of International Studies.

<sup>13</sup> Prasetyo, K. A., Pramono, B., & Prakoso, L. Y. (2021). MARINE DEFENSE STRATEGY THE INDONESIA GOVERNMENT IN THE CONSTRUCTION OF LAWS ON INDONESIA ARCHIPELAGIC SEA LANES. *International Journal of Education and Social Science Research*. <https://doi.org/10.37500/ijessr.2021.4320>

<sup>14</sup> Buszynski, L. (2012). The South China Sea: Oil, maritime claims, and U.S.-China strategic rivalry. *Washington Quarterly*, 35(2), 139–156

## **METHOD**

This article employs a qualitative research design combining juridical analysis, empirical legal analysis, comparative case study methodology, and systematic document-based research. The methodological approach is designed to address the interdisciplinary character of the research problem, which requires simultaneous engagement with legal doctrine, empirical security data, and comparative institutional analysis.

Doctrinal legal analysis constitutes the primary method for examining UNCLOS (1982) provisions relevant to transit passage, archipelagic sea lanes passage, and burden sharing, specifically Articles 38, 42, 43, and 44. The analysis employs the Vienna Convention on the Law of Treaties (1969) interpretive framework, applying the ordinary meaning rule, contextual interpretation, and object-and-purpose analysis to identify the scope and limits of each provision.

## **RESULT AND DISCUSSION**

### **International Legal Framework on Transit Passage and Archipelagic Sea Lanes**

UNCLOS establishes a hierarchical system of navigational regimes calibrated to the geographic character of the maritime space in question. In the high seas, the freedom of navigation is unrestricted. In the exclusive economic zone, foreign ships enjoy freedom of navigation subject to the coastal state's sovereign rights over resource exploitation and environmental regulation. In the territorial sea, foreign ships enjoy the right of innocent passage a more restrictive regime that permits coastal state regulation for specified purposes. The most complex regime, and the one most relevant to the present analysis, governs international straits and archipelagic sea lanes, where competing navigational and sovereign interests have been reconciled through the twin doctrines of transit passage and archipelagic sea lanes passage.

Transit passage, governed by Part III of UNCLOS (Articles 37–44), applies to straits used for international navigation between one part of the high seas or EEZ and another part of the high seas or EEZ. Article 38(1) defines transit passage as "the exercise in accordance with this Part of the

freedom of navigation and overflight solely for the purpose of continuous and expeditious transit of the strait." The right is broader than innocent passage in two critical respects: it applies to all ships and aircraft, including warships and military aircraft, and it cannot be suspended by the bordering state for any reason whatsoever (Article 44). This non-suspendable character of transit passage was a deliberate concession to major maritime powers during the negotiation of UNCLOS III, reflecting their insistence that the Convention not impede naval mobility.<sup>1516</sup>

Article 43 of UNCLOS represents the Convention's sole explicit engagement with the question of burden sharing in international straits. The provision reads: "User States and States bordering a strait should cooperate by agreement in the establishment and maintenance in a strait of necessary navigational and safety aids or other improvements in aid of international navigation; and for the prevention, reduction and control of pollution from ships." This language is architecturally weak in three respects that collectively explain the provision's implementation failure.

First, the provision employs the hortatory "should" rather than the obligatory "shall," transforming what might have been a binding contribution requirement into a soft exhortation to voluntary cooperation. Second, it speaks of user states and bordering states cooperating "by agreement," which presupposes a bilateral or plurilateral negotiating framework that has never been formally established in the Malacca context. Third, the provision's scope is limited to navigational aids, safety equipment, and pollution prevention it does not explicitly encompass the full spectrum of maritime security activities, including anti-piracy patrols, counter-trafficking operations, search and rescue coordination, and maritime domain awareness, which collectively constitute the bulk of Indonesia's security expenditure. This interpretive gap has been exploited by user states to resist contribution obligations for security activities not

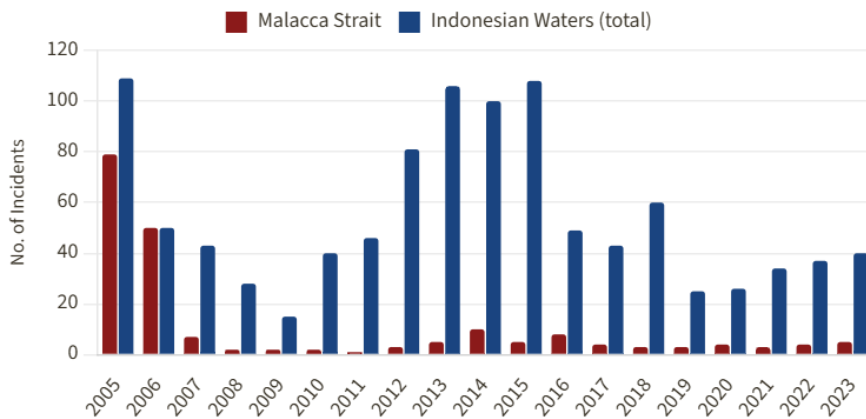
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<sup>15</sup> Kraska, J. (2011). *Maritime power and the law of the sea: Expeditionary operations in world politics*. Oxford University Press.

<sup>16</sup> Churchill, R. R., & Lowe, A. V. (1999). *The law of the sea* (3rd ed.). Manchester University Press.

expressly listed in Article 43, a reading contested by a number of scholars but never definitively resolved by any international tribunal.<sup>17</sup>

To understand the practical magnitude of this interpretive gap, one must examine the empirical security landscape. The operational reality of securing these waters, specifically regarding piracy and armed robbery, demonstrates the severe consequences of Article 43's limited scope.



**Figure 2.** Incidents of piracy and armed robbery against ships in the Strait of Malacca and Indonesian waters, 2005–2023. Data sourced from ReCAAP Information Sharing Centre Annual Reports (2006–2024) and IMB Piracy and Armed Robbery Report (2024). The spike in 2010–2011 reflects a period of coordinated sea robbery activity; the sustained elevation post-2019 reflects opportunistic incidents during pandemic-reduced patrol capacity.

The trajectory illustrated in Figure 2 highlights a stark operational asymmetry. While incidents within the immediate confines of the Malacca Strait have remained relatively low over the past decade, the broader Indonesian waters bear a substantially higher and more volatile rate of maritime crime. This persistent threat requires continuous, resource-intensive patrolling and interdiction efforts that fall squarely outside the cooperative framework of Article 43. Consequently, the fiscal burden of

<sup>17</sup> Franck, T. (2001). When, If Ever, May States Deploy Military Force Without Prior Security Council Authorization?. *Washington University Journal of Law and Policy*, 5, 051-068.

providing the security architecture that guarantees safe transit for global commerce rests disproportionately on the coastal state.

Indonesia's unique legal exposure arises not only from its bordering status in the Strait of Malacca but from its designation as an archipelagic state under Part IV of UNCLOS. Article 53 grants archipelagic states the right to designate sea lanes and air routes through their archipelagic waters, subject to the obligation to designate such lanes as are "suitable for the continuous and expeditious passage of foreign ships and aircraft through or over its archipelagic waters." Indonesia formally designated three Archipelagic Sea Lane (ALKI) corridors in Government Regulation No. 37 of 2002, based on IMO-approved routes. ALKI I traverses the Lombok Strait and continues northward through the Makassar Strait; ALKI II passes through the Sunda Strait; and ALKI III crosses the Banda and Savu Seas, with a sub-branch through the Ombai Strait.

Article 54 of UNCLOS, which governs duties of ships and aircraft in archipelagic sea lanes passage, makes explicit reference to Article 44's prohibition on suspension a provision designed to ensure that archipelagic states cannot interrupt the continuous passage of foreign vessels even in national security contexts. However, like Article 43, neither Article 53 nor 54 contains any provision for the financial contribution of user states to the maintenance, surveillance, and security of ALKI routes. The navigational freedom guaranteed by the Convention is thus matched by a fiscal silence that places the entire burden of maintaining navigational safety upon Indonesia.

### **Burden Sharing and International Participation in Maritime Security**

The most institutionalised burden-sharing arrangement in the Malacca Strait context is the Malacca Strait Patrols (MSP) initiative, established in 2004 through a trilateral agreement between Indonesia, Malaysia, and Singapore, and subsequently expanded to include Thailand in 2008. The MSP comprises three components: coordinated sea patrols (MALSINDO, later renamed Malacca Strait Sea Patrol), aerial surveillance through the Eyes in the Sky (EiS) initiative, and the Intelligence Exchange

Group (IEG) for information sharing.<sup>1819</sup> While the MSP has been credited with the significant reduction of high-seas piracy in the strait incidents fell from 79 in 2004 to 12 in 2008 following the initiative's implementation it remains a trilateral arrangement among the three littoral states, with no formal mechanism for external user state contribution (ReCAAP, 2024).

The MSP's financing structure reveals the distributional problem with clarity: the three littoral states collectively fund all patrol operations, intelligence sharing infrastructure, and aerial surveillance flights, while the commercial operators whose cargoes are protected and the user states whose flag ships transit the strait contribute nothing directly to MSP operations. Japan, which has the most formalised bilateral assistance programme in the region through the Japan International Cooperation Agency (JICA), has provided capacity-building support at JPY between 2004 and 2023 for coast guard training, patrol vessel donation, and port security infrastructure across Indonesia and Malaysia.<sup>2021</sup> While this assistance is significant, it does not constitute burden sharing in the technical sense, as it is structured as development assistance conditioned on Japanese strategic and economic interests rather than as a proportionate contribution to security costs.

The Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP), which entered into force in September 2006, represents the most institutionally elaborate multilateral response to maritime insecurity in the region. ReCAAP's Information Sharing Centre in Singapore coordinates incident reporting, analysis, and capacity-building among its 21 contracting parties. However, ReCAAP's mandate is explicitly limited to information sharing and does not

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<sup>18</sup> Bateman, S., & Ho, J. (2014). *ASEAN and the Indian Ocean: The key maritime links*. S. Rajaratnam School of International Studies.

<sup>19</sup> Emmers, R. (2012). *Geopolitics and maritime territorial disputes in East Asia*. Routledge.

<sup>20</sup> JICA (Japan International Cooperation Agency). (2023). *Maritime security cooperation programme Indonesia and Malaysia: Programme evaluation 2004–2023*.

<sup>21</sup> Shiga, H. (2023). The new dynamics of Japan's Official Development Assistance in an era of great power competition. *Journal of Contemporary East Asia Studies*, 12, 249 - 263. <https://doi.org/10.1080/24761028.2023.2292438>

encompass operational coordination, financing, or burden allocation.<sup>22</sup> The centre's annual budget in 2023 is funded through member state contributions calibrated on a complex formula and represents a negligible fraction of the operational costs of maintaining maritime security in the region.

Both Indonesia and Malaysia have notably declined to join ReCAAP as contracting parties, a stance attributed primarily to sovereignty concerns regarding the implications of international information sharing for national maritime jurisdiction.<sup>23</sup> This non-participation, while diplomatically understandable, has created gaps in the regional maritime security information architecture and further weakened the cooperative framework that Article 43 was intended to support.

China presents the most analytically significant case study in the disjunction between strategic dependence and financial obligation. As the world's largest maritime trading economy and the largest single beneficiary of unimpeded transit through the Malacca Strait, China sources approximately 40 percent of its total crude oil imports through this corridor and transits approximately 60 percent of its total seaborne trade value through the combined Malacca-Singapore-Lombok strait system annually.<sup>24</sup> The strategic vulnerability that this dependence creates what Liu Mingfu (2015) and others have termed the "Malacca Dilemma" has been a central preoccupation of Chinese maritime strategy since at least 2003.<sup>25,26</sup> Yet China has made no formal financial contribution to MSP operations, no direct budgetary contribution to Indonesian or Malaysian maritime security

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<sup>22</sup> ReCAAP Information Sharing Centre. (2024). *Annual report 2023: Piracy and armed robbery against ships in Asia*.

<sup>23</sup> Bateman, S., & Ho, J. (2014). *ASEAN and the Indian Ocean: The key maritime links*. S. Rajaratnam School of International Studies.

<sup>24</sup> EIA (U.S. Energy Information Administration). (2024). *World oil transit chokepoints: Special report*.

<sup>25</sup> Liu, M. (2015). *The China dream: Great power thinking and strategic posture in the post-American era* (T. Miller, Trans.). CN Times Books.

<sup>26</sup> Yung, C. D., Rustici, R., Devanny, J., & Gorman, S. (2014). *Not an Option: A Study of China's Dependence on the Malacca Strait* (Strategic Monograph). National Defense University Press

expenditure, and no binding commitment under any burden-sharing framework.<sup>27</sup>

China's engagement with Malacca security has been conducted primarily through the lens of diplomatic reassurance and strategic hedging supporting the principle of coastal state sovereignty over strait security to counter potential U.S. naval dominance, while simultaneously opposing any development that might restrict commercial navigation freedom. This dual posture has rendered China structurally resistant to binding burden-sharing arrangements, as it prefers to frame security financing as a bilateral matter between China and individual littoral states through foreign assistance and investment a framing that maintains Chinese strategic leverage without creating enforceable contribution obligations.<sup>28</sup> Several studies have confirmed that the Strait of Malacca–South China Sea is one of the world's busiest sea lanes, carrying approximately 20–30% of global maritime trade and a significant portion of oil trade. China is heavily dependent on this route: approximately 60–80% of its trade and/or energy imports pass through the Strait of Malacca and the South China Sea.<sup>293031</sup>

The legal basis for these tolls is straightforward: Egypt exercises full territorial sovereignty over the Canal Zone, and the Convention of Constantinople (1888), while guaranteeing freedom of passage, does not preclude the imposition of service charges for the maintenance and operation of the waterway. Exercising sovereign authority delegated by the

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<sup>27</sup> Storey, I. (2008). Securing Southeast Asia's sea lanes: A work in progress. *Asia Policy*, 6(1), 95–128.

<sup>28</sup> Buszynski, L. (2012). The South China Sea: Oil, maritime claims, and U.S.-China strategic rivalry. *Washington Quarterly*, 35(2), 139–156

<sup>29</sup> Somu, R., Jeevan, J., Salleh, N. M. H. M., Othman, M. R., Mokhtar, K., & Ngah, A. (2022). The role of seaports in regional development in the East Coast of Peninsular Malaysia: An evaluation through an exploratory factor analysis. *Journal of Transport and Supply Chain Management*.  
<https://doi.org/10.4102/jtscm.v16i0.617>

<sup>30</sup> Paszak, P. (2021). The Malacca Strait, the South China Sea and the Sino-American Competition in the Indo-Pacific. *Journal of Asian Security and International Affairs*, 8, 174 - 194. <https://doi.org/10.1177/23477970211017494>

<sup>31</sup> Binh, N. T., Hiep, T. X., & Long, T. H. (2022). MARITIME SECURITY IN THE INDO-PACIFIC REGION: A VIEW FROM THE GEOSTRATEGIC POSITION OF THE MALACCA STRAIT. *AUSTRAL: Brazilian Journal of Strategy & International Relations*. <https://doi.org/10.22456/2238-6912.119787>

Panamanian Constitution over an internationally critical but domestically sovereign waterway (ACP, 2024). Both the Suez and Panama systems thus demonstrate that artificial canals can be viable instruments of sovereign revenue generation precisely because their legal status as sovereign territory precludes the application of UNCLOS's transit passage regime.

The Strait of Malacca, by contrast, is a natural strait falling squarely within the UNCLOS transit passage regime. Article 26 of UNCLOS explicitly provides that "no charge may be levied upon foreign ships by reason only of their passage through the territorial sea," and this prohibition extends by analogy to transit passage through international straits a position confirmed by the authoritative commentators and by the consistent state practice of the littoral states themselves. Indonesia's attempts in the 1970s to assert rights to impose passage levies in the pre-UNCLOS period were firmly rejected by the major maritime powers and have not been revived in post-UNCLOS practice, reflecting an entrenched understanding that unilateral transit charges are legally impermissible under the current international law regime.

The comparative analysis of international chokepoints begins with a foundational legal distinction that explains the divergent governance models of different strategic waterways: the distinction between artificial canals constructed through sovereign state territory and natural straits governed by customary international law and UNCLOS. This distinction is determinative for the question of toll imposition.

The Suez Canal, administered by the Suez Canal Authority (SCA) under Egyptian sovereign authority, generates substantial toll revenues that represent the Authority's primary source of income and a significant component of Egyptian state revenue (SCA, 2023). The legal basis for these tolls is straightforward: Egypt exercises full territorial sovereignty over the Canal Zone, and the Convention of Constantinople (1888), while guaranteeing freedom of passage, does not preclude the imposition of service charges for the maintenance and operation of the waterway. Similarly, the Panama Canal Authority (ACP) collects substantial toll revenues, exercising sovereign authority delegated by the Panamanian Constitution over an internationally critical but domestically sovereign

waterway.<sup>32</sup> Both the Suez and Panama systems thus demonstrate that artificial canals can be viable instruments of sovereign revenue generation precisely because their legal status as sovereign territory precludes the application of UNCLOS's transit passage regime.

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The Strait of Hormuz, through which approximately 21 million barrels of crude oil pass daily representing roughly 21 percent of global petroleum liquids consumption,<sup>35</sup> presents a governance case that is structurally similar to the Malacca Strait in its legal architecture but radically different in its geopolitical context. The Strait is bounded by Iran and Oman, and Iran's periodic threats to close the Strait in response to international sanctions have generated enormous hedging complexities for consuming economies. Yet the international burden-sharing response to Hormuz security has been primarily military rather than legal or administrative: the Combined Maritime Forces (CMF), led by the United States and including over 30 naval partners, provides the primary security presence in the Gulf

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<sup>32</sup> Panama Canal Authority (ACP). (2024). *Annual report on operations and toll revenues 2023–2024*.

<sup>33</sup> Franck, T. (2001). When, If Ever, May States Deploy Military Force Without Prior Security Council Authorization?. *Washington University Journal of Law and Policy*, 5, 051-068.

<sup>34</sup> Rezeki, M., & Zahra, R. (2025). Kewenangan Negara Pantai dalam Mengatur Pelayaran di Selat Internasional Berdasarkan UNCLOS 1982. *Polyscopia*. <https://doi.org/10.57251/polyscopia.v2i3.1931>

<sup>35</sup> EIA (U.S. Energy Information Administration). (2024). *World oil transit chokepoints: Special report*.

of Oman.<sup>36</sup> This arrangement places the primary operational and resourcing burden on user states specifically the United States but through a strategic military framework driven by American energy security interests rather than through any UNCLOS-based burden-sharing mechanism.

Bab el-Mandeb, the narrow strait between Yemen and Djibouti through which approximately 6.2 million barrels of oil pass daily, has been progressively destabilised since the onset of the Yemen Civil War in 2015 and the subsequent Houthi campaign of ship attacks beginning in late 2023. Since late 2023, the Yemeni conflict has literally “spilled” into the sea: the Houthis have used drones and missiles to attack merchant ships in the Bab el-Mandeb and Red Sea, forcing global rerouting and a multilateral naval response.<sup>37</sup> 2023–2025 data shows a significant and sustained decline in cargo and tanker traffic through Bab el-Mandeb following the start of the Houthi offensive.<sup>38</sup> The Houthi attacks, which by January 2024 had prompted more than 20 major shipping lines to divert traffic around the Cape of Good Hope at a substantial additional cost per voyage, represent the most dramatic illustration of the economic consequences of governance failure at a maritime chokepoint. The resulting dramatic surge in global shipping costs and Red Sea freight rates demonstrates the macroeconomic fragility created by inadequate chokepoint security governance. Many cargo and container ships diverted their routes from the Red Sea/Suez to the Cape of Good Hope due to the threat of attacks, with “a large proportion of ships taking detours” and triggering a “surge in shipping prices”.<sup>39</sup> The Red Sea study noted an 80% reduction in container ship capacity through the Red Sea and a diversion of vessels around Africa, which “resulted in higher costs and longer journey times,” with serious implications for global

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<sup>36</sup> CMF (Combined Maritime Forces). (2023). *Annual review of operations 2023*. CMF Headquarters, Bahrain.

<sup>37</sup> Donelli, F. (2025). Maritime Disruption in Yemen: The Making of a Hybrid Red Sea Order. *Middle East Policy*, 32, 35 - 50.  
<https://doi.org/10.1111/mepo.70018>

<sup>38</sup> Bolat, F. (2025). Modeling the Impact of Houthi Attacks on Red Sea Trade Routes with the GEO-SHIP Framework. *Transactions on Maritime Science*.  
<https://doi.org/10.7225/toms.v14.n03.004>

<sup>39</sup> Verschuur, J., Lumma, J., & Hall, J. W. (2025). Systemic impacts of disruptions at maritime chokepoints. *Nature Communications*, 16.  
<https://doi.org/10.1038/s41467-025-65403-w>

trade and security.<sup>40</sup> Another article noted that about 15% of world trade passes through the Red Sea/Suez; the disruption and surge in insurance premiums have led many large companies to turn to the Cape of Good Hope, a journey “several weeks and several thousand kilometers” longer, adding significant pressure to the global economy.<sup>41</sup>

### **Legal Constraints on Maritime Transit Charges**

The legal impermissibility of unilateral transit charges in international straits is grounded in a convergence of UNCLOS provisions, customary international law, and consistent state practice. Article 26(1) of UNCLOS prohibits charges on foreign ships by reason of passage through the territorial sea, while Article 38's regime of transit passage forecloses any interference with the freedom of navigation that might be construed as conditioning passage on payment. Article 44 reinforces this prohibition by providing that bordering states "shall not hamper transit passage" language that would encompass any financial imposition that effectively deters or conditions transit. The combined effect of these provisions is to create what might be characterised as a structural subsidy: littoral states maintain the infrastructure, security, and environmental management systems that make safe and reliable transit possible while being legally precluded from recovering any portion of these costs from the commercial beneficiaries of their provisions.

The distinction between a prohibited "transit charge" and a permissible "service fee" has been explored in legal scholarship but remains legally underdeveloped in practice. Article 26(2) of UNCLOS permits charges for specific services rendered, on a non-discriminatory basis, to passing vessels a provision analogous to the principle underlying port dues and lighthouse charges in domestic maritime law. Some scholars have argued that this provision could support a limited user-fee framework for services such as

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<sup>40</sup> Nandini, N., Ma'arif, S., Syamsunasir, S., & Widodo, P. (2024). The Red Sea Crisis: Implications of The Houthi Attack on Maritime Trade and Global Security. *International Journal Of Humanities Education and Social Sciences (IJHESS)*. <https://doi.org/10.55227/ijhess.v4i1.1135>

<sup>41</sup> Župac, S. (2024). The Red Sea crisis: Geopolitical background and impact on the global economy. *Zbornik radova – VI Kongres geografa Srbije sa međunarodnim učešćem - zbornik radova*. <https://doi.org/10.5937/kongef24105z>

vessel traffic management systems, pilotage, and marine pollution emergency response. However, the practical and political obstacles to implementing such a framework in the Malacca Strait context are formidable: any Indonesia-imposed fee schedule would likely be challenged by major user states as inconsistent with the transit passage regime, and the absence of a precedent of successful fee imposition in a natural international strait makes such a challenge difficult to contest without judicial clarification. These costs are proportionate to the actual cost of the service and can be differentiated according to the type/size of the vessel, as well as the type of waste (Annex I and V MARPOL are partially/fully covered by indirect costs).<sup>42</sup>

Given the legal impermissibility of unilateral transit charges, Article 43 represents the only viable legal pathway for establishing a burden-sharing architecture within the existing UNCLOS framework. The provision's reference to cooperation "by agreement" leaves considerable latitude for the design of contribution mechanisms, and a number of scholars have argued that Article 43's scope could be expansively interpreted to encompass not only navigational aids but the full spectrum of maritime safety and security services. Such an interpretation would provide the legal basis for a formal multilateral agreement establishing user-state contribution obligations calibrated to transit volumes, cargo values, or vessel type an arrangement that would be legally distinct from a prohibited transit charge because it would be grounded in treaty obligation rather than coastal state imposition. The study of the expansion of the scope of UNCLOS through the "rule of reference" technique and references to other practices and agreements shows that the interpretation of UNCLOS provisions can evolve along with the need for more comprehensive environmental protection and marine governance.<sup>43</sup> This provides methodological support for a functional reading of Article 43 to encompass

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<sup>42</sup> Verdesoto, V. M., Camarero, A., & Cancelas, N. G. (2025). Implementing Sustainable Fees in the Ship Waste Reception Service to Match with European Policy and Port Traffic Characterization. *Sustainability*.  
<https://doi.org/10.3390/su17031039>

<sup>43</sup> Nguyen, L. N. (2022). Expanding the Environmental Regulatory Scope of UNCLOS Through the Rule of Reference: Potentials and Limits. *Ocean Development & International Law*, 52, 419 - 444.  
<https://doi.org/10.1080/00908320.2021.2011509>

a broader range of maritime safety and security services, as long as they are based on agreement and respect for navigational rights.

The political challenge of achieving such an agreement is substantial but not insurmountable. The precedent of the Malacca Strait Patrol demonstrates that multilateral maritime security cooperation in the strait is politically achievable when the perceived security threat is sufficiently acute. The post-9/11 recognition of the strait's terrorism vulnerability generated the political momentum for the MSP's establishment within three years; a comparable political catalysis could potentially enable the negotiation of a broader burden-sharing framework if the right combination of security incident, diplomatic initiative, and institutional leadership were present.<sup>44</sup><sup>45</sup> The MSP (originally MALSINDO, then Malacca Strait Patrol) was born in response to the maritime violence ecosystem, with coordinated patrols, Eyes in the Sky, and intelligence groups agreed upon by the three coastal states.<sup>46</sup><sup>47</sup> The IMO's Marine Environment Protection Committee and Maritime Safety Committee provide existing institutional forums within which such an initiative could be launched, and the precedent of the International Oil Pollution Compensation Fund (IOPC Fund) an international financing mechanism established by treaty to compensate for oil spill damages demonstrates that UNCLOS-adjacent burden-sharing arrangements of considerable sophistication can be created through the treaty-making process.

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<sup>44</sup> Pulungan, R. (2021). ENHANCING MARITIME SECURITY IN THE MALACCA STRAIT: COOPERATION AGAINST PIRACY AND MARITIME TERRORISM. *Indonesian Journal of International Law*.

<https://doi.org/10.17304/ijil.vol7.2.220>

<sup>45</sup> Buana, R. S., & Ilmih, A. A. (2025). Diplomasi Internasional dalam Penyelesaian Sengketa Keamanan Maritim: Studi Hubungan Indonesia – Singapura dalam Kasus Selat Malaka. *Law, Development and Justice Review*.

<https://doi.org/10.14710/ldjr.8.2025.37-51>

<sup>46</sup> Sidik, M. A., Yulianto, B., Saragih, H., Widodo, P., & Suwarno, P. (2023). Regional Response As Indonesia's Coordination Effort To Maritime Violence In The Malacca Strait. *International Journal of Progressive Sciences and Technologies*. <https://doi.org/10.52155/ijpsat.v39.1.5352>

<sup>47</sup> Fenton, A. J. (2024). Preventing Catastrophic Cyber–Physical Attacks on the Global Maritime Transportation System: A Case Study of Hybrid Maritime Security in the Straits of Malacca and Singapore. *Journal of Marine Science and Engineering*. <https://doi.org/10.3390/jmse12030510>

The analysis developed in the preceding sections supports the conclusion that the current governance architecture is structurally inadequate and normatively inequitable, and that its inadequacy cannot be remedied through incremental adjustments to existing voluntary cooperation mechanisms. What is required is a deliberately designed, treaty-based burden-sharing framework that converts the moral and economic obligation of user states into legally enforceable contribution requirements while respecting the existing UNCLOS prohibition on unilateral transit charges. This article proposes a multi-tier framework comprising three interlocking elements.

The first element is an IMO-administered Maritime Corridor Security and Safety Fund (MCSSF), modelled on the IOPC Fund but extended in scope to encompass the full range of maritime security and safety costs identified in this analysis. The MCSSF would be funded through annual contributions by flag states calibrated on a formula combining vessel transit volumes, cargo value, and vessel type, establishing a progressive contribution schedule that places the primary financing burden on the states whose commercial fleets generate the greatest burden on littoral state security systems.

The second element is a formal bilateral burden-sharing protocol between Indonesia and major user states specifically China, Japan, South Korea, the United States, the European Union, and India establishing binding annual contribution commitments and technical cooperation obligations. Such protocols could be negotiated under the framework of ASEAN's Maritime Forum or through bilateral maritime cooperation agreements and would provide more immediate political achievability than a multilateral convention while moving the cooperation architecture from voluntary to legally binding. The Japanese precedent of bilateral coast guard cooperation and capacity-building assistance provides a template that could be formalised and scaled.

The third element is an environmental services compensation regime that recognises Indonesia's maintenance of the ecological systems mangrove coasts, marine biodiversity, fisheries resources whose integrity is essential to the long-term viability of the maritime corridor. Drawing on the conceptual framework of payment for ecosystem services and the

emerging international law of marine protected areas, this regime would establish compensation flows from major user states to Indonesia for the environmental externalities generated by high-density commercial transit through sensitive archipelagic waters. The legal basis for such a regime could be found in the combination of Article 43's cooperation obligation, Articles 192–194's environmental protection provisions, and the emerging customary norm of common but differentiated responsibilities in marine environmental governance.

Pending the negotiation of a comprehensive burden-sharing framework, Indonesia faces a range of policy options for addressing its security financing deficit. The most immediately practicable is the systematic documentation and publicisation of its maritime security expenditure as a contribution to global public goods a narrative strategy that has been successfully employed by ASEAN states in other contexts to build international support for capacity-building assistance. The annual publication of a comprehensive Indonesian Maritime Security Cost Report, modelled on NATO's annual defence expenditure reporting, would establish a factual baseline for burden-sharing negotiations and create normative pressure on user states to increase voluntary contributions.

A second option is the strategic use of IMO committees and the annual Assembly to advance a resolution calling for the development of Article 43 implementation guidelines a less legally binding but institutionally significant step that would place the burden-sharing deficit on the formal international agenda. Indonesia has the diplomatic standing and the empirical evidence base to lead such an initiative, potentially in coalition with other heavily burdened strait littoral states including Oman (Strait of Hormuz), Djibouti (Bab el-Mandeb), and Morocco (Strait of Gibraltar).

## **CONCLUSION**

The Strait of Malacca and the Indonesian Archipelagic Sea Lanes stand at the nexus of global economic vitality and systemic legal vulnerability. This article has demonstrated that the prevailing maritime governance architecture, anchored by UNCLOS (1982), produces a deeply asymmetrical burden. While the Convention successfully guarantees the unimpeded freedom of navigation for global commerce and naval mobility

disproportionately benefiting industrial powers and user states, it simultaneously externalizes the exorbitant costs of maritime security, infrastructure maintenance, and environmental remediation onto littoral developing states, particularly Indonesia.

The empirical and comparative realities presented in this study highlight the unsustainability of this status quo. The stark divergence between the trillions of dollars in secure trade value extracted by user states and the absence of any binding financial contribution toward the Malacca Strait Patrols (MSP) underscores a critical free-rider problem. Furthermore, the catastrophic macroeconomic disruptions recently witnessed in the Bab el-Mandeb strait serve as a potent warning ; inadequate chokepoint security governance invites volatility that the global economy can ill afford.

To rectify this structural inequality, the international community must move beyond the hortatory limitations of UNCLOS Article 43. This article proposes a deliberately designed, three-tiered burden-sharing framework: (1) the establishment of an IMO-administered Maritime Corridor Security and Safety Fund (MCSSF) financed by progressive flag-state contributions; (2) the negotiation of formal, binding bilateral burden-sharing protocols between Indonesia and major user states ; and (3) the implementation of an environmental services compensation regime to address the ecological externalities of high-density commercial transit.

Ultimately, maintaining the security of the world's most strategically indispensable waterways cannot rely indefinitely on the uncompensated sovereign resources of coastal states. Translating the moral obligation of burden sharing into legally enforceable commitments is no longer merely a matter of legal equity for Indonesia; it is a fundamental prerequisite for the long-term stability of the global maritime supply chain.

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