

## Adjusting The Concept Of Particularly Sensitive Sea Area Into Lombok Strait Configuration

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**Abstract.** *This article investigates the adverse impacts of unintentional or operational ship discharges on marine ecosystems and elucidates the significance of Particularly Sensitive Sea Areas (PSSA) as an approach to safeguard the marine environment from international shipping activities. Focusing on IMO resolutions and the United Nations Convention on the Law of the Sea (UNCLOS) framework, the article analyzes the PSSA concept, underscores its role in pollution prevention, and explores inherent limitations. Specifically, it delves into the legal status of PSSA, the binding nature of IMO resolutions, and implementation challenges. Through in-depth analysis, the author concludes the necessity for revising PSSA resolutions to enhance legal clarity and effectiveness in marine environmental protection.*

**Keywords:** PSSA; IMO; UNCLOS; Marine Environmental Protection; International Law.

### LATAR BELAKANG

Unintentional or operational discharges from ships adversely affect marine ecosystems, with pollution from international shipping recognized as a problem since the 1967 Torrey Canyon incident. The international community has called for stricter regulations to curb environmentally harmful shipping activities through effective regional management, emphasizing protective measures in marine areas requiring special protection. Under MARPOL 73/78, the IMO introduced the concept of Particularly Sensitive Sea Areas (PSSAs) to protect regions of ecological, socio-economic, or scientific importance from the dangers posed by international shipping. Coastal States can implement Associated Protective Measures (APMs) such as safe navigation practices and specific discharge restrictions within PSSAs.

PSSAs are essential for preventing pollution from ships and raising global awareness about the need to protect the marine environment. However, questions remain about the legal status of PSSAs and the binding nature of IMO resolutions. This article aims to determine the legal status of PSSAs, assess the impact of IMO resolutions in customary international law, and address challenges stemming from PSSA resolutions by reviewing various sources, including IMO resolutions and scholarly literature.

This research aims to analyze the legal framework and challenges in establishing PSSAs in Indonesia, based on international maritime law. It uses a

normative legal research method with legislative, conceptual, and comparative approaches, sourcing data from primary, secondary, and tertiary legal materials. The analysis is conducted using descriptive qualitative methods. PSSA designations must adhere to IMO procedures based on UNCLOS and MARPOL 73/78. Indonesia's initiative to propose PSSA status for the Lombok Strait is motivated by its importance as a maritime route, its rich biodiversity within the Coral Triangle, and the significant environmental threats from dense shipping traffic.

The IMO plays a crucial role in developing the PSSA concept and regulating related resolutions. Despite established procedures, challenges such as legal uncertainty persist. This paper explores this uncertainty and its impact on PSSA implementation, aiming to enhance legal clarity in future designations and protections.

## **KAJIAN TEORITIS**

This article examines the legal framework and challenges in establishing Particularly Sensitive Sea Areas (PSSA) in Indonesia based on international maritime law. It defines PSSA and its legal basis, exploring the relationship between UNCLOS and IMO resolutions, and applies the precautionary principle to prevent ship pollution. The research discusses the use of the precautionary principle to understand PSSA status, details the limitations of PSSA resolutions, and suggests improvements for more effective marine protection. It concludes that PSSA resolutions need revision to ensure clear legal status.

The research employs a normative legal method with legislative, conceptual, and comparative approaches, analyzing primary, secondary, and tertiary legal materials through descriptive qualitative methods. PSSA must follow IMO procedures based on UNCLOS and MARPOL 73/78.

Indonesia seeks PSSA status for the Lombok Strait due to its strategic maritime route, rich biodiversity, and environmental threats from shipping. This aims to enhance environmental protection and sustainable practices. The IMO's role is crucial in PSSA designation, but legal uncertainties persist. The paper explores these uncertainties to improve legal clarity for future PSSA implementation.

## **METODE PENELITIAN**

This journal employs normative legal research to analyze existing laws and norms, aiming to interpret the law through values, principles, and rules in legislation. The authors use statutory and comparative approaches. The statutory approach analyzes the legal framework governing particularly sensitive sea areas from international and national perspectives. The comparative approach examines practices of designating these areas in several countries, including Indonesia, evaluating the strengths and weaknesses of each practice. Data sources include primary legal sources like the 1982 Law of the Sea Convention and national maritime regulations, secondary sources such as books and articles, and tertiary sources like dictionaries and encyclopedias. Data analysis is conducted using descriptive qualitative methods to systematically, logically, and critically describe and explain the data.

## **HASIL DAN PEMBAHASAN**

### **1. PSSA Concept**

The concept of Particularly Sensitive Sea Area (PSSA) is governed by the International Maritime Organization (IMO), with guidelines established by Resolution A.982(24) in 2005. This resolution defines a PSSA as an area requiring special protection due to its ecological, socio-economic, or scientific significance, and its vulnerability to damage from international shipping activities (Satria et al., 2018).

The idea of PSSAs emerged in 1973 during the Conference on Tanker Safety and Pollution Prevention, led by a Swedish delegation. The IMO formalized the concept through various resolutions and guidelines, notably in 1991, 2001, and 2005. Unlike other frameworks, IMO allows Coastal States to adopt Associated Protective Measures (APMs), which include discharge restrictions and navigational safety measures. These APMs must align with IMO instruments and UNCLOS Article 211(6) to prevent ship-source pollution (Beckman & Bernard, n.d.,2020).

APMs can be either recommended or mandatory for foreign ships, depending on their legal basis. Measures based on IMO resolutions are recommended, while those based on IMO conventions, such as discharge restrictions, are mandatory. Coastal States may enforce these measures under Article 220 of UNCLOS if foreign ships violate them within a PSSA (Ashri et al., 2021).

Despite being derived from non-binding IMO resolutions, PSSAs are valuable for Coastal States to address ship-source pollution. They offer functional advantages and simpler designation processes compared to 'special areas' under MARPOL 73/78, making PSSA proposals relatively easier (Beckman & Bernard, n.d.; Ashri et al., 2021; Satria et al., 2018).

**a. UNCLOS XII**

The 1982 adoption of Part XII in UNCLOS establishes a global framework for preventing ship pollution, addressing coastal state jurisdiction concerning Particularly Sensitive Sea Areas (PSSAs) and Areas to Be Avoided (ATBAs). Within UNCLOS, responsibilities for preserving the marine environment are delineated for flag states, coastal states, and port states (Article 192). It sets out regulations for managing marine resources across different maritime zones, covering marine scientific research, environmental protection, and dispute resolution (UNCLOS, 1982).

Article 194(5) empowers states to safeguard marine environments, stressing the need for international collaboration to conserve vulnerable ecosystems and biodiversity. It serves as a legal foundation for states to enact protective measures, underlining collective responsibility for marine conservation (UNCLOS, 1982).

The World Wide Fund for Nature (WWF) acknowledges the IMO's stance on the necessity of action based on UNCLOS principles for environmental safeguarding. Article 211(6) of UNCLOS, addressing ship pollution, is closely tied to PSSA regulations. De La Fayette suggests that while both Article 211(6) and PSSAs aim at marine environment protection, PSSAs are tailored by the IMO, allowing for more flexible and efficient regional protection strategies (De La Fayette, 1999).

Molenaar draws a distinction between PSSAs and Article 211(6), arguing that PSSA guidelines differ from UNCLOS procedures. A 1999 report from DOALOS to the IMO highlights disparities between PSSA criteria, which encompass various factors, and the specific mandates of Article 211(6) (DOALOS, 1999; Molenaar, 1999).

**b. IMO (*International Maritime Organization*)**

PSSA, a component of international maritime law, provides criteria for identifying specific maritime regions controlled by coastal states or situated in international waters. The International Maritime Organization (IMO) supervises the process of PSSA designation by nations, setting standards for their creation. Initially developed as an update to marine area protection principles in 1991, PSSA became part

of MARPOL 73/78 thereafter. The IMO formalized PSSA requirements in 2005 with Resolution A.982(24), establishing the legal basis for its enforcement. According to this resolution, PSSA denotes an area requiring special safeguarding by the IMO due to ecological, socio-economic, or research concerns, where potential harm from global shipping operations exists (Resolution A.982, 2005:24).

### **c. Requirement for PSSA Implementation**

The designation of Particularly Sensitive Sea Areas (PSSAs) recognizes maritime regions with significant ecological, socio-economic, or scientific importance, often featuring fragile ecosystems, biodiversity hotspots, or critical research value. This process, overseen by the International Maritime Organization (IMO), ensures that only areas of exceptional significance receive special protection. There are two primary criteria for designation: ecological and socio-economic.

Ecological criteria emphasize the intrinsic value and vulnerability of the marine environment, focusing on areas with high biodiversity, unique or endangered species, and sensitive habitats such as coral reefs and seagrass beds. Areas vital for marine life reproduction or migration also strengthen the case for PSSA designation.

Socio-economic criteria consider the potential threats from human activities, including heavy shipping traffic, unsustainable fishing practices, and various forms of marine pollution. When an area's ecological value is at risk from these threats, PSSA designation can provide a protective solution.

The designation process begins with a nomination by a national government or regional organization. The IMO's Scientific Group on PSSAs (GESAMP) conducts a scientific evaluation based on the established criteria. If GESAMP gives a positive recommendation, the proposal is reviewed by the IMO's Marine Environment Protection Committee (MEPC). Upon approval, the MEPC designates the area as a PSSA and establishes specific protective measures.

The coastal state or relevant regional organization is responsible for implementing and monitoring these measures. Effective PSSA management requires international cooperation and public consultation with local communities and stakeholders. Additionally, it is essential to build the capacity of coastal states to manage and enforce PSSA measures for long-term success.

By adhering to these stringent requirements and procedures, the international community ensures that only the most deserving areas receive PSSA designation, thus

providing essential protection for ecologically sensitive marine environments and promoting a sustainable balance between human activities and ocean health.

## **2. Best Practice PSSA**

### **a. Australia PSSA Concepts**

Australia has been a strong advocate for the use of Particularly Sensitive Sea Areas (PSSAs) as a tool for protecting vulnerable marine environments. Here's a breakdown of Australia's involvement with PSSAs:

#### 1) Australia's Role:

- a) **Designation of PSSAs:** Australia has actively participated in proposing and supporting the designation of several PSSAs worldwide. The most notable example is the Great Barrier Reef Marine Park which was designated a PSSA in 1990 (PSSA Special Area). This designation helped establish stricter shipping regulations within the reef system to minimize the risk of pollution and grounding incidents.
- b) **Development of PSSA Guidelines:** Australia has contributed to the development of IMO guidelines for establishing and managing PSSAs. These guidelines ensure a consistent and internationally recognized approach for PSSA designation.
- c) **Promoting PSSA Concept:** Australia actively promotes the PSSA concept at international forums, highlighting its effectiveness in marine environment protection.

## **3. Legal Issue in Lombok Straits**

### **a. Justification for Lombok Strait (tunjukkan ada polusi dan kerusakan lingkungan) ecological, socio-economic, culture or scientific significance and educational**

The Lombok Strait, situated between Bali and Lombok Island within the coral triangle, is under consideration for Particularly Sensitive Sea Area (PSSA) status due to its ecological significance and heavy maritime traffic. This strait, a crucial route connecting the Pacific and Indian Oceans, is threatened by oil spills, debris, and physical damage from shipping activities. Thousands of vessels, including oil and chemical tankers, navigate the strait every four months, with traffic expected to increase alongside Asia's economic growth(Choi J, 2021).

To address these risks, the Indonesian government has proposed the Traffic Separation Scheme (TSS) as part of Associate Protective Measures (APMs) to improve maritime safety. This initiative involves coordination with international bodies such as the IMO and NORAD, and consultations with neighboring countries like Malaysia, Vietnam, and the Philippines. The objective is to protect the marine environment while accommodating international and domestic shipping interests(Choi J, 2021).

Building on prior research, including Choi J.'s 2021 study on PSSA legal status, this research aims to explore unresolved or controversial aspects and contribute additional insights to the existing body of knowledge. By delving deeper into these issues, the study seeks to provide a more comprehensive understanding of the topic, offering significant practical and theoretical benefits(Choi J, 2021).

#### **b. INA's efforts to fulfill the PSSA requirements**

The process of Indonesia (INA) proposing the Selat Lombok as a PSSA involves several steps:

1. Justification for Selat Lombok's designation as a PSSA is based on ecological, social, cultural, economic, or scientific and educational criteria. These include the recognition of the strait's ecological significance and vulnerability to damage from shipping activities.
2. INA's efforts to fulfill the requirements involve implementing Associated Protective Measures (APM), such as discharge restrictions and navigational safety measures, to prevent unintentional or operational discharges from ships in protected areas. These measures must comply with existing IMO instruments, rules, and international standards.
3. Obtaining approval or support from other countries is crucial for the designation of Selat Lombok as a PSSA. International cooperation and consensus-building play a vital role in ensuring effective protection measures and sustainable management of the designated area.

#### **c. Approval or support from other countries**

##### **1) Rejection of PSSA Malaysia application by International**

Indonesia objects to Malaysia's proposal to designate Pulau Kukup and Tanjung Piai as Particularly Sensitive Sea Areas (PSSAs) for three main reasons:

1. Maritime Border Negotiations: The maritime borders around these areas are still under negotiation. Establishing a PSSA could complicate reaching an agreement.

2. Lack of Coordination: Indonesia views the proposal as unilateral, lacking prior coordination or mutual consent, which contradicts international maritime law principles emphasizing cooperation.
3. Economic Disruption: A PSSA could lead to stricter maritime regulations, disrupting navigation and economic activities, particularly for Indonesia.

Indonesia urges Malaysia to postpone the PSSA proposal until a final maritime border agreement is reached, emphasizing the need for bilateral cooperation and dialogue.

**2) Approval of other countries is needed because the determination of PSSA relates to several important things including:**

Other countries' firm rejection of Malaysia's proposal to designate Pulau Kukup and Tanjung Piai as Particularly Sensitive Sea Areas (PSSAs) is based on several concerns:

1. Disruption of Shipping Lanes: PSSA regulations could impose stricter maritime restrictions, disrupting navigation and economic activities, particularly for Indonesia.
2. Maritime Boundary Complications: These areas are under negotiation between Indonesia and Malaysia. A PSSA designation could exacerbate tensions and hinder dispute resolution, as it may be seen as asserting Malaysian sovereignty.
3. Setting a Bad Precedent: Malaysia's unilateral proposal, without Indonesia's consent, contravenes international maritime law principles of cooperation and dialogue, potentially setting a harmful precedent.
4. Economic Losses: Stricter regulations could lead to economic losses for Indonesia, affecting fisheries, shipping, and tourism.
5. Injustice: Establishing a PSSA without considering Indonesia's interests could increase tensions and conflicts, violating principles of fairness.
6. Threats to Stability and Security: Tensions from the PSSA designation could threaten regional stability and security. Diplomatic channels and negotiations are essential for peaceful dispute resolution.

**KESIMPULAN DAN SARAN**

Indonesia, an archipelago with extraordinary marine wealth, faces various challenges, including pollution, habitat destruction, and overexploitation of marine resources. Implementing Particularly Sensitive Sea Areas (PSSAs) in Indonesia is a crucial step to protect high marine biodiversity, including coral reefs, mangroves, and



seagrass beds, Indonesia's unique marine ecosystems. PSSA also plays a vital role in maintaining a healthy and productive sea, which supports the fisheries, tourism, and other maritime sectors that are the livelihoods of many people.

Implementing PSSA in Indonesia can also improve navigational safety in Indonesia's waters, which are bustling with shipping activities, with strict regulations to minimize the risk of accidents and marine pollution. Furthermore, PSSA ensures sustainable marine resource management, so that present and future generations can enjoy a healthy and productive sea.

Implementing PSSA in Indonesia is an essential investment for the future. Building collaboration among stakeholders, strengthening law enforcement, and developing environmentally friendly technologies are key to achieving a healthy and sustainable sea. Act now to protect Indonesia's sea! PSSA is the right solution to realize a sustainable maritime future.

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