

Chapter I

Introduction

In the geographical meaning, straits can be defined as a natural passage that connects two extensive areas of water. On the other hand, the legal definition of strait based on the legal concept of territorial sea is any passage whose minimum breadth is equal to or less than the combined territorial sea claim of the bordering states or states.¹ There are several types of strait according to 1982 LOSC² (Law of The Sea Convention). According to 1982 LOSC, the types of the Straits are straits governed by long standing special conventions, straits with its center consisting of high seas/ EEZ corridors, straits with an island bordering the Straits and its mainland, where there is alternative route seaward of the island, straits situated between part of high seas or EEZ with territorial sea of a third state, straits governed by compatible agreement and straits formed by high seas/ EEZ.

As the types of straits mentioned above, the Straits of Malacca are categorized as the Straits formed by high seas/ EEZ. Because of the geographical location of the Straits, the Straits of Malacca become one of the important straits used for international waterways in the world. The Straits of Malacca are mainly bordered by Malaysia, Indonesia and also Singapore. As the coastal countries, Malaysia, Indonesia and Singapore have their own right towards the Straits of Malacca.

¹ Smith, R.W. 1974. An Analysis of the strategic attributes of international straits: A geographical perspective

² United Nations. United Nation Law of the Sea retrieved from http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf

The Straits of Malacca become one of the busiest waterways used by the states to distribute the products of their states such as hazardous material and oil to another state. The Straits of Malacca also become separator for the mainland of Malay Peninsula and Sumatra Island located in Indonesia. As an international waterway, the physical condition of the Straits of Malacca is narrow and it endangers vessels and cargoes that pass through the Straits bringing hazardous materials and oil that will be distributed to other states.

“The width of the Straits varies from 3 miles at the narrowest passage near Singapore Island based to 300 miles at the widest near the north-western entrance between We Island based and the Kra Isthmus. At different places, the Straits are quite shallow. Thirty-seven points of the Philip Channel, for example, are less than 23 meters deep. The Straits are 100 meters deep close to the Continental Slope of the Andaman Sea. The Straits are full of rocks, dangerous reefs and cross current. A strong tidal current at the bottom of the Straits forms large ripples in the sediment on the sea floor.”³

As international waterway, the Straits of Malacca become one of the important straits in the world. Many kinds of vessel and cargoes pass through this strait as their route to distribute goods. Besides becoming international waterway, the Straits of Malacca also become a connector of Indian Ocean to South China Sea or Pacific Ocean. Because of that, this straits is considered as one of the busiest straits throughout the world.

According to the data, it is found that the number of vessels passing through the Straits is increasing each year. During 2000 to 2010, the number of vessels

³ SJICL. 1992. Control of Marine Pollution in the Straits of Malacca and Singapore: Modalities for International Cooperation. *Singapore Journal of International and Comparative Law*. p. 452-463.

passing through the Straits is recorded 55957 up to 74133 in 2010.⁴ This number of vessels passing through the Straits causes some pollution impacts towards the Straits due to discharge of harmful substances and oil spill from the vessel directly to the water. This condition that happens continuously may lead to marine environment pollution as well as endanger the marine ecosystem in the Straits. It will also endanger the marine living future condition in the Straits of Malacca.

A. Background

The Straits of Malacca, one of the busiest straits and strategic international waterways is facing some crucial problems leading to environmental degradation and damage like marine environmental pollution. Due to the strategic geographical location of the Straits of Malacca which is located in the world's most important maritime crossroads, the Straits of Malacca become the shortest route of waterways connecting Indian Ocean through Andaman Sea to Pacific Ocean through South China Sea.⁵ As one of the important maritime crossroads in the world, vessels, cargoes, oil tanker pass through the Straits and cause some environmental problems in the Straits like water pollution. The pollution in the Straits not only comes from vessels activity in the Straits but also comes from industrial activity.⁶ Malaysia, Indonesia and Singapore as the coastal countries need to enhance their

⁴ M.H.B.D Rusli.2012.protecting vital sea lines of communication: A study of the proposed designation of the Straits of Malacca and Singapore as a particularly sensitive sea area. *Ocean & Coastal Management* 57 (2012) 79-94.

⁵ Khalid, N. (2005, May). Signifikasi Keselamatan Selat Melaka Terhadap Kepentingan Ekonomi dan Strategik Malaysia. Paper presented at the Persidangan Kebangsaan Pertahanan Strategik dan Keselamatan Serantau (PERKASA 2005), Putrajaya.

⁶ The industrial activities become one of factor that contribute to marine environmental pollution because the waste of industrial activity such as lead, cooper and mercury are thrown in the land and it will flow to the Straits.

capacity to protect the environment from any kind of pollution which endangers marine environment.

The Straits of Malacca that is facing some environmental issues are still used as an international waterway. Many commercial vessels like cargo ship and oil tankers pass through this strait. The number of commercial vessels was increased by almost 37% during 2000-2010.⁷ The increasing number of vessel passing through the Straits is contributing to the increasing number of marine pollution and environmental degradation.⁸ This increasing number of vessels can contribute to a significant risk to marine environment, livelihood of the coastal communities and fishing or tourism industries around the Straits.

“...LNG/LPG tankers using the Straits registered 26 per cent growth from 2.962 to 3.726 while container and general cargo vessels rose 41 per cent over the same period. These figures exclude cross traffic and other vessel types plying the waterway. In addition almost 50 per cent of global energy shipments pass through the Straits annually...”⁹

The increasing number of vessel and cargoes passing through the Straits is not supported by the natural condition of the Straits of Malacca. The condition of the Straits is narrow and it contributes to the marine accident such as vessel and cargoes grounding, collisions and also oil spill. This

⁷ Centre for the Straits of Malacca (CSOM). Malacca: The Impact of Transportation on Wildlife in the Malacca Straits. Retrieved <http://www1.american.edu/ted/malacca.htm> on 17 05 2012

⁸ Marine pollution define as the phenomenon where the chemical, sewage or disposal, oil exploitation get into the sea and cause the sea's changing whether in physical changing or chemical changing. While marine pollution based on 1982 Law of The Sea Convention is define as a changes in the sea environment including estuaries that can evoke bad effect to marine and the consequences is endanger marine living resources, human being health, nuisance of marine ecosystem including coral reefs and plankton, decline of marine water quantities and its potency. See Siahaan, N.H.T, 1989a, Pencemaran Laut dan Kerugian yang Ditimbulkan (I), in Harian Angkatan Bersenjata, Jakarta: 8 Juni 1989.

⁹ Centre for the Straits of Malacca (CSOM). Malacca: The Impact of Transportation on Wildlife in the Malacca Straits. Retrieved from <http://www1.american.edu/ted/malacca.htm> on 17 Mei 2012.

condition reminds people about the incident that create big damage in marine living resources of the Straits of Malacca. The incident was caused by the grounding of Showa Maru in 1975 and the collision of Nagasaki Spirit in 1992 which brought crude oil more than 50.000 barrels.¹⁰ The incident caused oil spill which affected to marine environment especially in the Straits of Malacca. The oil may worsen the marine living creatures through the destruction of their habitat and food. The destruction of marine habitat and food contributes to the lost of certain fish, turtle, sea grass, dugong and shrimp. The lost of this marine habitat is caused by oxygen depletion, organic pollution and oil spill.¹¹

The increasing number of vessel passing through the Straits mentioned above not only causes vessel accident but also threatens the existence of mangrove. Besides threatening the existence of mangrove, the activities such as industry, shipping and domestic discharge in the Straits also cause degradation of coral reef in Malacca water.

There are some effects from shipping activities in the Straits of Malacca. Due to heavy shipping activities in the Straits of Malacca, it was recorded that the coral reef development in the Straits is low and mangrove ecosystem especially in Malaysian state of Johor is threatened by constant soil erosion as a result of high navigational density plying the waterway.¹²

¹⁰ SJICL. 1992. The Importance of the Straits of Malacca and Singapore. *Singapore Journal of International and Comparative Law*. p.301-311.

¹¹ SJICL. 1998. Analysis of The State of The Marine Environment of The Straits of Malacca and Singapore. *Singapore Journal of International and Comparative Law*. p. 330-335.

¹² Mohd Hazmi bin Mohd Rusli.2011. The legal feasibility of the imposition of traffic limitation scheme in the Straits used for international navigation: A study of the Straits of Malacca and Singapore. *Internatioal Journal of Humanities and social science Vol. 1 No. 6. June 2011*. p.122-123.

The condition above is different from the condition before. When the Straits of Malacca was not as busy as today, the Straits become biodiversity zone which was rich of habitat, characterized by estuaries environment and there are variety of marine and coastal species of flora and fauna. However, after the heavy shipping activities and pollution happened in the Straits, the increasing deterioration of the Straits cannot be avoided. As a result of this condition, there are some changing in the species composition, the lost and extinct species and increasing number of endangered species like what happened with the fish named “terobok” fish and herring. In early 1950s, both of them were abundant. However, because of the heavy shipping activities in the Straits of Malacca, in early 1970s they completely disappeared.¹³

To protect marine environment in the Straits of Malacca from pollution caused by heavy shipping activity and other factors contributing to marine pollution in the Straits of Malacca, the coastal countries which are Malaysia, Indonesia and Singapore have made some national and regional efforts in order to make the condition of the Straits of Malacca becomes better.¹⁴ The coastal countries try to implement their rule and regulation to protect and control the pollution in the Straits. Furthermore, the coastal countries tried to cooperate with other users of the Straits and international organization to make the cooperation more effective. Since the incident of vessel collision and grounding in the Straits happens, the coastal countries made cooperation

¹³ SJICL. 1998. Analysis of The State of The Marine Environment of The Straits of Malacca and Singapore. *Singapore Journal of International and Comparative Law*. p. 334

¹⁴ The Importance of The Straits of Malacca and Singapore. 1998. *Singapore Journal of International and Comparative Law*. p. 301-322.

and agreed on TSS (Traffic Separation Scheme)¹⁵ adopted by IMO (International Maritime Organization)¹⁶ to arrange the traffic in the Straits. The coastal countries also need to prepare other agreement and cooperation regarding the Straits. By agreement and cooperation among coastal countries, all users and international organization, they can get more advantages from the cooperation and find the solution to address environmental problem happen in the Straits of Malacca.

The condition mentioned above shows that Malaysia, Indonesia and Singapore as the coastal countries need further cooperation to address the environmental problem in the Straits of Malacca to get better condition for the Straits and get more advantages from the cooperation. The coastal countries need to discuss more in the cooperation with the Straits of Malacca's users and international organization in order to enhance safety and protect marine environment in the Straits of Malacca to be more effective and give the coastal countries and all users advantages.

B. Writing Purpose

1. To fulfil the requirement to achieve bachelor in International Relation

¹⁵ TSS (Traffic Separation Scheme) firstly introduced in 1977 and it is adopted by International Maritime Organization (IMO). The Traffic Separation Scheme was amended in 1981 and was again adjusted and extended in 1998 to accommodate the increasing number of shipping traffic in the Straits of Malacca and Singapore. The vessels and cargoes passing through the Straits of Malacca are bound to follow the TSS in order to reduce the vessels and cargoes collision or grounding. See Backman.2009b. Singapore strives to enhance safety, security and environmental protection in its port and in the Straits of Malacca and Straits of Singapore.

¹⁶ International Maritime Organization was established by a convention adopted by the United Nations Maritime Conference of 1948. As international corporation, International Maritime Organization provide training to lead agencies of the ASEAN-OSRAP. One of International Maritime Organization purpose based on the article 1 (a) of the conventions is to prevent and control marine pollution that come from ships activity.

2. To explain the condition and environment problem happen in the Straits of Malacca
3. As the media to see the impact of marine environmental pollution in the Straits and the importance to do cooperation among the coastal countries
4. To look for the outcome from the cooperation to protect marine environment in the Straits of Malacca
5. To know the role of international organization and user state toward marine environment protection in the Straits of Malacca
6. To know the kinds of cooperation done by coastal countries to protect marine environment in the Straits of Malacca together with all user and their contributions during cooperation
7. To know what kind of advantages of the coastal countries in making cooperation to address the environmental problem

C. Research Question

By giving illustration above, the undergraduate thesis will focus on why the coastal countries cooperate with the Straits of Malacca's users and international organization.

D. Theoretical Framework

According to problem background which talks about the cooperation of the coastal countries to protect marine environment in the Straits of Malacca, the writer uses international regimes theory applied on environment problem.

International Regimes Theory

According to Stephen Krasner, regimes are implicit or explicit principle, norms, rules and decision making procedures around which actors' expectations converge in a given area of international relation.¹⁷ While Robert Keohane defines regimes are institutions with explicit rules agreed upon by the governments that pertain to particular sets of issues in international relation. Thus, the complex apparatus of principle, norms, rule and procedure collapses into single concept of rules.¹⁸ As the definition of regime, the regime theory can be applied for environmental problem happen in the Straits of Malacca. The coastal countries tried to applied environmental regime to regulate and manage the activities in the Straits of Malacca.

Today, environmental problem has its own characteristic which differentiate them with the problems before and it need to be explained when it's all about policy measures. The environmental problem today are concern more on global public goods characterized by high uncertainty, multiple interest and complexity, requiring trans-disciplinary approach to deal with the problem.¹⁹ To deal with environmental problem, the society started to pursue global solution. It is shown in the various decision making process in

¹⁷ Principles are beliefs of fact, causation and rectitude. Norms are standards of behavior defined in terms of rights and obligations. Rules are specific prescription for action. Decision making procedures are prevailing practices for making and implementing collective choice see in Andreas Hasenclever, Peter Mayer and Volker on "Theories of International Regime" 1997 by Cambridge University Press.

¹⁸ Ibid

¹⁹ Formalizing knowledge on international environmental regimes for integrated assessment modelling retrieved from <http://www.iemss.org/iemss2010/papers/S11/S.11.09.Formalizing%20knowledge%20on%20international%20environmental%20regimes%20for%20integrated%20assessment%20modeling%20-%20MARTINE%20DE%20VOS.pdf>

international environmental policy, known as international environmental regimes. The international environmental regimes are considered as a key factor to deal with global environmental problems.

The international environmental regime itself has important assumption to deal with the environmental problem. In the regimes theorist, there were two broad schools of thought i.e. realism and liberalism. Hasenclever, Mayer and Rittberger see this division as an oversimplification, which allow us to trace the broad parameters of the debate precipitated by the attempt to understand regimes.²⁰ There are basic assumption on the regimes such as state operate in anarchic international system and they are rational and unitary actor. States are also the units responsible for establishing regime on the basis of cooperation in the international system. It will promote international order.²¹

The realist thought that regimes enable state to coordinate and generate differential benefits for the states by doing the cooperation. Power is important to use for the regime formation and survival. The nature of world order depends on the principles and norms of the regime. While liberalist, it says that regimes enable state to collaborate to face the problem and regime can promote the common good. It promotes globalization and a liberal world order.

Realist are often sceptical and uninterested in international law and yet they have developed an important position on the regime. While liberal camp identified as liberal institutionalist, have accept key assumptions

²⁰ John Baylis, Steve Smith and Patricia Owens. 2011. "The globalization of world politics: An introduction to international relations" fifth edition. New York: Oxford University Press Inc.

²¹ Ibid pg 297

made by neo-realist. Liberal institutionalist is focus on the way that regimes allow state to overcome the problem appearing by collaboration in the anarchic structure of international system. On the other hand, realist are interested in the way that state use their power capabilities in situations requiring coordination to influence the nature of regimes and the way that the cost and benefits derive from regime formation are divided up. Collaboration and coordination are seen to constitute different approaches to cooperation.²²

Although there are differences between realist and liberalist thought, there are similarities that could be take i.e. both of these thoughts are consider the regimes as the product of rational self-interest actor. As consequences, they try to establish some rule derives from different perspective to help the actors define their identities, interest and demonstrate that they share a common view of the world.²³

From the theory of international regime, marine environmental problem happens in the Straits of Malacca need to be solved by the coastal countries and all of the Straits of Malacca users. To solve the environmental problem in the Straits, the coastal countries need to do some actions and find the solution to protect the environment. As coastal countries, Malaysia, Indonesia and Singapore use their power to coordinate with the Straits of Malacca's users in order to reach agreement agreed by the parties. From the agreement, they can manage and decide the cost and benefits from the cooperation. Furthermore, the coastal countries can do collaboration in the term of cooperation in order to make the action protecting the Straits more effective and they can find a way to tackle the problem happens.

²² Ibid pg. 296

²³ Ibid pg. 297

The successfulness and effectiveness of the cooperation to protect marine environment in the Straits of Malacca is depend on the underlying principle and norm of environmental regimes which implemented in the Straits. when all of the Straits of Malacca users including the coastal countries can implement the principle and norm appropriately and every straits user obey and agree to do it, they can fulfil their wish to protect the environment and provide safety navigation for ships plying the Straits.

E. Hypothesis

The reason of Malaysia, Indonesia and Singapore cooperate with the Straits of Malacca's users and international organization to address environmental problem is because the countries wants to collaborate and coordinate with other user to produce agreement regards to the protection of marine environment in the Straits of Malacca and get advantages from the cooperation.

F. Methods of Writing

To write this undergraduate thesis, the writer uses deductive method based on theoretical framework that pulled a hypothetical conclusion which is proven through empirical available data. The empirical data is found through library research to help the writer writes this undergraduate thesis. The source of information will be by collecting the references in form of printed media like books, newspaper, magazine, and journal as well as electronic media like internet. Internet source will also be used since some update information and related data to the topic forwarded are available through internet.

G. Research Area

To limit the problem and research, the research area is the cooperation done by Malaysia, Indonesia and Singapore as coastal countries to protect marine environment in the Straits of Malacca from 1990 – 2012.

H. Writing System

The outline of this undergraduate thesis is described as follows:

- Chapter one : As the introduction of the topic, it is about background of the problem, writing purpose, research question, theoretical framework, hypothesis, method of writing, research area and writing system.
- Chapter two : In this chapter, it will explain the problem which happened in the Straits of Malacca and the cooperation between Malaysia, Indonesia and Singapore as the coastal countries to address environmental problem in the Straits Malacca.
- Chapter three : This chapter discuss about the cooperation among the coastal countries to protect the environment condition in the Straits of Malacca and agreement agreed by all parties.
- Chapter four : It will explain the advantages of making cooperation to address environmental problem in the Straits of Malacca.
- Chapter five : Conclusion which summarizes the discussion mentioned in the previous chapters.