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THE THREAT OF OIL POLLUTION IN THE MALACCA STRAIT¹: ARGUING FOR A BROAD INTERPRETATION OF THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA

Craig J. Capon

Abstract: The threat of oil pollution in the world's busiest waterway, the Malacca Strait, and the legal complications that surround it continues to be a controversial issue despite international law reforms. Recent accidents have demonstrated that current measures to prevent pollution are inadequate and that traditional methods of enforcement are ineffective. Unfortunately, there is a tension between international law of the sea provisions governing pollution control in the Malacca Strait, and the desires of bordering coastal States to regulate vessels trafficking the Strait so that accident risk is minimized. Moreover, there is tension between UNCLOS provisions prohibiting the assessment of fees to use international straits, such as the Malacca Strait, and coastal State desires to raise funds to pay for preventive pollution control mechanisms. This Comment argues in favor of a broad interpretation of UNCLOS provisions in order to allow effective Vessel Traffic Services enforcement and financing which could help reduce the risk of collisions.

[T]he 20th century will not be remembered for its wars or its technological advances but rather as the era in which men and women stood by and either passively endorsed or actively supported the massive destruction of biological and cultural diversity on the planet.²

I. INTRODUCTION

Environmental degradation of the planet continues to be at the forefront of issues confronting leaders world-wide.³ One area of debate arises from the ever-present danger of pollution occurring as a result of discharges, both intentional and unintentional, from ships carrying the crucial resources our

^{'3} Id.

The term "Malacca Strait" refers to the waterway located between Indonesia and Malaysia emptying into the Strait of Singapore. Some commentators use the term Straits of Malacca referring to both the Malacca and Singapore Straits. This terminology is somewhat misleading, however, since the issues facing the Malacca Strait are not entirely applicable to the Singapore Strait. See MICHAEL LEIFER, INTERNATIONAL STRAITS OF THE WORLD: MALACCA, SINGAPORE, AND INDONESIA 54 (1978) (showing map of the Malacca and Singapore Straits).

² Keith Snow, Friend or Foe: Technology, People and the Environment, DAILY YOMIURI, Jan. 13, 1993, at 9.

crowded planet needs.⁴ This Comment focuses on the increasingly busy and crowded Malacca Strait located between Indonesia and Malaysia east of the Indian Ocean.⁵

The Malacca Strait is crucial because it is the most cost-efficient and convenient sea-link between the Pacific and Indian Oceans. The Malacca Strait serves as one of the most important waterways in the world because "the overwhelming bulk of the seaborne commerce that traffics these two oceans must use this sea-lane." Not surprisingly, the heavy traffic that flows through the area has greatly increased the risk of accidents. Accordingly, the threat of extensive environmental damage to the Malaysian and Indonesian coastlines is great.

This Comment explores international and coastal State¹⁰ attempts to deal with oil pollution threatening the Malacca Strait. First, the Comment provides a brief historical overview of the region by outlining the importance of the Strait beginning in the Fifth Century continuing into the present day. In Section III, coastal State interests in the area, the two most relevant being Malaysia and Indonesia, are highlighted. An overview of accidents necessitating intervention and regulation is also provided. Section IV discusses pre-spill mechanisms for preventing oil pollution focusing on the Vessel Traffic Services ("VTS") model. Section V outlines the relevant international law focusing primarily on the most recent United Nations Convention on the Law of the Sea ("UNCLOS"). This section also

⁴ See, e.g., Cooperative Agreements on Oil Spills to be Signed by Southeast Asian Countries, INTERNATIONAL ENVIRONMENT REPORTER CURRENT REPORT, Mar. 8, 1995. These agreements are examples of efforts to combat the problem of pollution. See also, Wong Joon San, Shipowners Urged to Show "Green" Concern, S. CHINA MORNING POST, July 1, 1993, at 4, available in WESTLAW, News Library, Chinapost Database.

See LEIFER, supra note 1.

⁶ BHABANI SEN GUPTA ET AL., THE MALACCA STRAITS AND THE INDIAN OCEAN: A STUDY OF THE STRATEGIC AND LEGAL ASPECTS OF A CONTROVERSIAL SEA LANE 1 (1974).

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⁸ See, e.g., Philippa Ambrose, Strait of Malacca Threatened Again, 26 MARINE POLLUTION BULL. 116 (1993).

Id.

This Comment uses the term coastal States to refer to Indonesia, Malaysia, and Singapore.

Unfortunately space limitations require a cursory look at the history of conflict over the Malacca Strait which dates back thousands of years. For a more comprehensive and complete history of the Malacca Strait and the conflict over it, see Sen Gupta, supra note 6; Leifer, supra note 1; K.L. Koh, Straits in International Navigation: Contemporary Issues (1982).

Vessel Traffic Services are a comprehensive series of systems in place in straits around the world which are designed to help prevent accidents involving ships and tankers. See infra notes 64-65 and accompanying text for a more thorough description of the Vessel Traffic Services model.

¹⁵ United Nations Convention on the Law of the Sea, U.N. Doc. A/CONF.62/122 (1982), reprinted in United Nations Convention on the Law of the Sea, with Annexes, and the Agreement Relating to the

discusses developed nations' maritime interests in the area since they are reflected in the international law that regulates the Malacca Strait.¹⁴

Finally, Section VI argues that international law is improving. This improvement is reflected in the recent implementation of the UNCLOS agreement. Thus, an expansive interpretation of UNCLOS Articles 41-44, and 26 is outlined. This Comment argues in favor of a broad legal interpretation of UNCLOS in order to help VTS¹⁵ and other safety measures in the area prevent environmental disaster.

П. HISTORY OF CONFLICT IN THE MALACCA STRAIT

A Physical Description of the Malacca Strait

The Malacca Strait lies between the coastal States of Indonesia and Malaysia opening into the Pacific Ocean off the coast of Singapore to the south. 16 The Strait links the Indian Ocean to the west and the South China Sea¹⁷ to the east, culminating in the link to the Pacific Ocean. 18 The Strait stretches between 300-and-600 miles long¹⁹ depending on who is doing the measuring. The width of the Strait varies from 300 miles to only 3 miles at its narrowest passage near Singapore Island.²⁰ Particular attention to the narrowness of the Strait is necessary in order to fully understand the catastrophic potential for damage from a large accident.

Along with the narrowness of the Malacca Strait, shallowness at certain points also contributes to its hazards. Research indicates that the depth of the Strait at several points is less than 23 meters.²¹ Other research suggests that there is a silting rate of 1 to 2 kilometers a year.²² Even more

Implementation of Part XI of the United Nations Convention on the Law of the Sea, with Annex, Nov. 6, 1994, S. TREATY DOC. No. 103-39, available in 1992 WL 725374 [hereinafter UNCLOS].

See SEN GUPTA, supra note 6, at 4. Sen Gupta claims that "the law of the sea is tilted generally in favour of the maritime powers." Id. However, that may not necessarily be true since the processes by which codification occurs include far more nations which are not maritime powers.

¹⁵ It should be noted that a VTS is not the end of the inquiry. It is merely one of many ways that traffic through the Malacca Strait can be controlled. Nonetheless, it does have promise. While a VTS may not be the ultimate answer, the steps taken in analyzing the feasibility of its implementation will send policymakers in the right direction toward reform.

SEN GUPTA, supra note 6, at 11.
Id.

¹⁸ *Id*.

¹⁹ *Id.* at 12.

²⁰ *Id*.

Peter Tillman, Strait of Malacca and the Law of the Sea, 68 AUSTRL. L.J. 885, 888 (1994).

alarming are large patches of sand waves that constantly change the depths of the Strait in certain locations.²³

The physical features of the Malacca Strait have caused Indonesia and Malaysia grave concern over coastal safety since one of the many large ships carrying various toxic substances through the Strait could easily run aground.²⁴ In particular, large warships with nuclear elements and massive oil tankers with large loads present problems of enormous scope. Should a supertanker traveling through shallow regions of the Straits run aground, the environmental distress that would result could be catastrophic and hundreds of miles of coastline could be blackened.²⁵ Without action by the international community, the likelihood that accidents will decrease is unlikely.²⁶

B. Historical Significance of the Malacca Strait as a Trade Route

The Malacca Strait has played an important role in maritime navigation for a long time, "function[ing] as an inter-oceanic canal that has been used by all nations since time immemorial and, as such, has been the object of struggle for control by States." The importance of the Malacca Strait as a trade route has been well documented:

Historically, the Strait of Malacca . . . attained international prominence from approximately the fifth century A.D. as a marine corridor-between the Indian Ocean and the Southeast coast of Sumatra. Its use in conjunction with the Strait of Singapore in providing a direct transoceanic route into and from the South China Sea came centuries later. An earlier role was that of a major channel in an expanding network of trade between India, China, and the Malay world, which formed a junction to its south. This network of trade was governed by the alternating rhythm of monsoonal winds that made it necessary for vessels either proceeding between the Bay of Bengal and China or engaged in the exchange of the produce of India, the

²³ Id.

²⁴ Id

²⁵ But see KOH, supra note 11, at 8. Koh suggests that some coastal States exaggerate the potential pollution threat in order to gain more control. Id.

²⁶ See infra note 48 and accompanying text for a more detailed discussion of accidents that have occurred.

²⁷ Tillman, supra note 22, at 886.

Malay world, and China at an intermediate point within the Indonesian archipelago, to utilize safe anchorages off the southeast coast of Sumatra before continuing their journey or returning to their home ports. In the case of those merchants engaged in trade from and with China, it has been argued that what today would seem an unnatural prolongation of voyage was regarded as late as the ninth century as providing the easiest navigational access to China.²⁸

Because of the Malacca Strait's importance as a trade route, debate among the Asian states intensified during the period of European colonial domination beginning in the 17th century.

The Dutch role in the history of conflict over the Malacca Strait is important. In 1642 the Dutch defeated the Portuguese and seized Malacca.²⁹ The Dutch position, while challenged by locals as well as colonial interests, allowed them to control the most direct route between the Indian and Pacific Oceans.³⁰ The Dutch influence dissipated by the beginning of the 19th century, as British influence in the area increased.³¹ In 1824 the British and the Dutch signed a treaty giving freedom of passage through the waterway to both nations as well as to the native populations.³² The Japanese were the next colonial power to assert control over the Strait during their occupation of the area in World War II.³³ Since the period of early trade between the Asian nations, as well as during the colonial period, the waterway has played a key role in trade conflicts continuing into the second half of the 20th century.

C. Importance of the Malacca Strait to Naval Mobility during the Cold War

After the Second World War, the Malacca Strait played an important role in the superpower conflict of the Cold War. As the primary route between the Indian and Pacific Oceans, the waterway allowed the United States and the Soviet Union to maintain substantial military fleets in both oceans.³⁴ The expedited inter-ocean trip gave both countries the ability to

²⁸ LEIFER, supra note 1, at 6.

²⁹ Id. at 8.

³⁰ Id. at 9.

^{31 7.7}

³² Tillman, supra note 22, at 887.

³³ LEIFER, supra note 1, at 10.

³⁴ Cf. SEN GUPTA, supra note 6, at 56.

assemble forces against one another rather quickly.³⁵ While no major crisis or confrontation occurred between the great powers,³⁶ it was nonetheless a significant area of the world that was of strategic importance to both countries. Other nations with appreciable naval power, including Britain, Japan, and China, also relied on the waterway's strategic role.³⁷ With the demise of the Soviet Union and the end of the Cold War, the Strait has lost at least some of its strategic importance for naval power. Thus, naval powers, such as the United States and Russia, have less incentive to insist on unregulated passage through the Malacca Strait.

III. THE THREAT OF OIL SPILLS IN THE MALACCA STRAIT AND COASTAL STATE INTERESTS IN PREVENTING THEM

A. Recent World and Malacca Strait Oil Accidents

A review of some significant oil accidents around the globe illustrates the potential for damage should a spill of enormous magnitude occur in the Malacca Strait. The danger of pollution due to accidents is best exemplified by looking at oil tankers and the capacity of the cargo they carry which creates the potential to wreak considerable environmental damage. Oil tankers are a fundamental and necessary component in the scheme of energy transport through the Strait primarily because of Japan's reliance on oil supplies from the Middle East.³⁸ Japan receives eighty percent of its oil from the Persian Gulf through the Strait by way of tanker.³⁹

Despite efforts to avoid them, major oil spills are a relatively common occurrence provoking heated debate. 40 Tanker accidents frequently occur in

³⁵ See id. at 3. Sen Gupta reflected more than 20 years ago that "the possibility of the Indian Ocean turning out to be an area of great power rivalry—the powers being the US and USSR—lends a new dimension to the strategic importance of the Malacca Straits." Id.

³⁶ But see id. at 8. In 1971, during the India-Pakistan war of December 1971, an American warship "steamed into the Bay of Bengal in a demonstration of force on behalf of Pakistan, and the Soviets immediately made use of the development to assure India that units of the Russian navy would not 'allow' an American intervention." Id.

³⁷ See generally id.

³⁸ Joe Avancena, Japan Setting Up More Facilities to Combat Oil Spills in the Gulf, SAUDI GAZETTE, July 4, 1995, available in LEXIS, Busfin Library, Moclip File.

⁴⁰ See, e.g., David Michael Collins, The Tanker's Right of Harmless Discharge and Protection of the Marine Environment, 18 J. Mar. L. & Com. 275 (1987). In his article, Collins accepts the inherent problems of pollution imbedded in using oil tankers for shipping oil supplies. Collins argues that any legal regime must recognize the inherent right for oil tankers to discharge harmless amounts of oil. Under the Collins approach, the ultimate issue might surround the definition of the term harmless. Id.

valuable coastal areas.⁴¹ For example, "between 1967 and 1978, eighty percent of all oil spilled by tankers was spilled within ten miles of shore."⁴² Recent accidents involving large tankers has led to a new awareness of the potential damage they can cause.⁴³

The Torrey Canyon and Amoco Cadiz spills are particularly significant since both occurred in the English Channel, 44 a body of water similar to the Malacca Strait in geographical form. 45 The Exxon Valdez spill gravely affected the ecological system of Prince William Sound; 11 million gallons of crude oil were discharged, covering hundreds of miles of Alaskan coastline. 46 Should a spill of that magnitude occur in one of the narrower, shallower areas of the Strait, the impact would be devastating. Coastal States bordering the Malacca Strait are justifiably concerned over the significant threat posed by this type of accident in a waterway that sees 200,000 ton supertankers traveling among traffic of over 6000 ships a month. 47

Accidents and catastrophes are no stranger to the Malacca Strait. Many ships have collided and caused oil spills.⁴⁸ As a result of these

During the past two decades, marine oil pollution has become an emotional and evocative issue as an increasing number of major spills have wreaked havoc on aquatic and bird life and on the fishing and tourism industries of coastal States. The level of damage resulting from major spills like the *Torrey Canyon* off the coast of Brittany in 1967, the *Amoco Cadit* off the coast of France in 1978, and the Exxon Valdez in Prince William Sound, Alaska, in 1989 has been phenomenal. The United Nations estimates that some 600,000 tons, approximately 4.2 million barrels, of oil spillages and seepages occur annually as a consequence of normal oceanic shipping activities. The use of supertankers has increased the hazard inherent in transporting oil by sea because of the far greater quantity of oil that is spilled when an accident occurs.

Id.

⁴¹ Paul Stephen Dempsey, Compliance & Enforcement in International Law: Oil Pollution of the Marine Environment by Ocean Vessels, 6 J. INT'L L. BUS. 459, 464 (1984).

⁴² Id

⁴³ See, e.g., E. Jane Ellis, International Law and Oily Waters: A Critical Analysis, 6 Colo. J. INT'L ENVIL. L. & POL'Y 31, 31 (1995). Ellis states:

⁴⁴ See Dempsey, supra note 41, at 463.

⁴⁵ Both waterways are narrow at certain spots. Both waterways see the passage of thousands of ships during any given month. Most importantly, both waterways are extremely strategic thereby serving as the subject of intense debate among nations all over the globe.

⁴⁶ See Anton P. Giedt, National Resource Damages Under the Oil Pollution Act of 1990: Setting Standards for Causation-of-Injury by Agency Rule-Making, 45 BAYLOR L. REV. 373, 378, n.22 (1993).

⁴⁷ Tillman, supra note 22, at 886.

⁴⁸ In 1975, the Japanese tanker, Shawa Maru, ran aground. Tillman, supra note 22, at 891. In April, 1978 the United States Tanker Sealift Mediterranean was involved in a collision resulting in the loss of more than one million gallons of fuel oil. Two Tankers Collide Near Entrance to the Strait of Malacca; One Ablaze and Spilling Oil, Oil Spill Intelligence Rep., Jan. 21, 1993, available in 1993 WL 2755345. In April 1979, the Liberian tanker, Fortune, collided near the Strait spilling three million gallons of Kuwaiti crude oil. Id. In October 1983, the Greek tanker Monemvasia hit the bottom of the Strait spilling 1.2 million gallons of crude oil. Id. In 1988, the Bahamian tanker Century Dawn collided

accidents, First World powers, most notably Japan, have established oil spill clean-up bases in the Strait.⁴⁹ While no collision has resulted in catastrophic environmental damage, the potential alone signifies the scope of the problem being dealt with here. The most significant spill to date was the grounding of the *Shawa Maru*, in 1975.⁵⁰ The accidents that have occurred to date constitute the most compelling evidence of the necessity for preventive pollution control mechanisms such as VTS models.⁵¹

B. Coastal State Interests in the Strait

The Malacca Strait is bordered by the coastal States of Indonesia, Malaysia, and Singapore. 52 The stance of the coastal States, while not uniform, can be characterized as advocating more local control of the region based upon their exposure to the threat of ecological disaster. 53 The position of coastal States in general can be summarized as follows: "as a sense of vulnerability has arisen among the coastal [States], they have expressed countervailing demands for a change in the customary status of such straits and for greater regulation of vessel passage through them." 54 In particular, Indonesia, after a near disaster involving two supertankers in 1993, "called for tighter regulations preventing tankers of

with another vessel spilling 3.1 million gallons of crude oil. Id. In June 1992, the United States destroyer Ingersoll collided with a merchant ship. American Brief: Sembawang Shipyard, ASIAN WALL ST. J., June 26, 1992, available in 1992 WL-WSIA 2013097. On August 23, 1992, the Greek cruise ship Royal Pacific collided with a fishing trawler spilling an undetermined amount of fuel oil. HOTLINE, 15 Oil Spill Intelligence Rep. 33, Aug. 27, 1992, available in 1992 WL 2680165. In September 1992, the Japanese tanker Nagasaki Spirit collided with the Ocean Blessing spilling 2000 tons of crude oil. Blaze on a Japanese Oil Tanker is Out, Malaysia Officials Say, ASIAN WALL ST. J., Sept. 28, 1992, available in 1992 WL-WSJA 2007984. On January 21, 1993, the tankers Maersk Navigator and Sanko Honour collided. Two Tankers Collide Near Entrance to the Strait of Malacca; One Ablaze and Spilling Oil, Oil Spill Intelligence Rep., Jan. 21, 1993, available in 1993 WL 2755345. This collision threatened to create one of the world's largest oil spills. Ambrose, supra note 8, at 116. Most recently, a supertanker crashed into a cargo ship killing 29 people. Two Ships Collide in Asia Smoke; 29 Dead, SEATTLE TIMES, Sept. 28, 1997, at Al; for a complete listing of accidents and spills which have occurred in the Malacca Strait, see B.A. HAMZAH & MOHD. NIZAM BASIRON, THE STRAITS OF MALACCA: SOME FUNDING PROPOSALS 66-69 (Maritime Institute of Malaysia. 1996).

⁴⁹ Malaysia: Japan Sets Oil Spill Cleaning Base, ASIAN WALL ST. J., June 13, 1994, available in 1994 WL-WSJA 2007241.

⁵⁰ Tillman, supra note 22, at 891.

For a discussion of the VTS model, see infra text accompanying notes 64-65.

⁵² LEIFER, *supra* note 1, at 18, 54.

⁵³ Id. at 1.

⁵⁴ *Id*.

such size [from] passing through the Malacca [Strait]."55 The coastal States have presented several proposals to various international bodies most of which endorse the general theme of allowing more sovereign control over the area.56

One interesting twist in the Indonesian stance is its desire to market its own ports as alternatives to the Malacca Strait.⁵⁷ Indonesia's long term strategy is contrary to the interests of the other coastal States.⁵⁸ Although Indonesia, Malaysia, and Singapore share similar concerns for the environment.⁵⁹ Indonesia has advocated one proposal that appears to be based as much on profit as environmental concern. Under its proposal, Indonesia hopes to divert traffic from the Strait through its own ports. 60 Although such a marketing strategy could help reduce the potential for collisions in the Strait, its viability is by no means assured.

IV. PRE-SPILL MECHANISMS FOR ACCIDENT AVOIDANCE

A. Existing Pre-Spill Mechanisms for Preventing Spills

International Maritime Organization ("IMO") initiatives prescribe limited pre-spill mechanisms designed to prevent accidents before they happen. The International Convention for the Prevention of Pollution by Ships ("MARPOL"), a significant IMO initiative, demands that flag states regulate the condition of the vessels which fly their flags. 61 The IMO has also pulled

The long-term strategy of Indonesia is to reduce the importance of the Malacca Straits as a major sea route and divert some of the traffic to Indonesian harbours Indonesia is jealous of the entrepot trade that Singapore has enjoyed and is working towards handling its own trade through its own ports. [In sum,] the Malacca Strait may cease to be one of the great Asian trade routes if the long-term strategy visualized by Dr. Sumitro, Indonesia's Trade Minister (at the time], becomes a reality.

Ambrose, supra note 8, at 116; for a discussion of this collision see supra note 48 (discussing collision between Sanko Honour and Maersk Navigator oil tankers).

⁵⁶ Tillman, supra note 22, at 890. Even after shows of force by the United States and the Soviet Union during the Cold War, Indonesia and Malaysia continued to press their sovereignty over the Strait by continuing to assert that the Malacca Strait was not an international strait within the meaning of UNCLOS. Id.

See SEN GUPTA, supra note 6, at 84.Id.

Id. at 84-85.

⁵⁹ *Id.* at 85.

⁶⁰ Id. at 84.

⁶¹ International Convention for the Prevention of Pollution from Ships, art. 1(1), reprinted in THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS; MARPOL 73/78 (Kenneth

together significant conventions under which signatory nations agree to regulate vessel conditions, crew training, and dispute resolution such as civil liability. ⁶² Despite the IMO's significant work in the area, accidents continue to occur. ⁶³ Thus, further reform is necessary.

The existing pre-spill mechanisms of prevention are an improvement, but as with international law in general, they are based on voluntary compliance with few resources devoted to enforcement. Rather than staying with the status quo, it is plausible that heavy traffic, and accidents that result from it, can be dealt with primarily by regulating vessel traffic or diverting it. Since diversion involves significant costs, the former (regulating traffic) is the remaining viable alternative.

B. Vessel Traffic Services

In contrast to depending on flag States, VTS relies on coastal State enforcement. VTS is described quite broadly:

VTS is the term adopted by the International Maritime Organization to describe the range of systems operated by coastal States over specified areas of sea adjacent to their ports or coasts under which ship traffic subject to the supply or exchange of information of the giving of advice or, possibly, of instructions by coastal stations with a view to enhancing the safety and efficiency of that traffic. A VTS is any service implemented by a competent authority, designed to improve safety and efficiency of traffic and the protection of the environment. It may range from the provision of certain information messages to extensive management within a port or waterway. 64

VTS is also interpreted to mean "voluntary or mandatory ship reporting, traffic separation schemes ("TSS"), the establishment of sea lanes, the management of sea traffic by a central navigational controller, and

R. Simmonds & Brian H.W. Hill, eds. 1995) [hereinafter MARPOL]; see also, David M. Dzidzornu and B. Martin Tsamenyi, Enhancing International Control of Vessel-Source Pollution under the Law of the Sea Convention, 1982: A Reassessment, 10 UNIV. OF TASMANIA L. REV. 269, 275 (1991).

⁶² See infra text accompanying notes 89-93.

⁶³ See, e.g., supra note 48 and accompanying text.

⁶⁴ G. Plant, International Legal Aspects of Vessel Traffic Services, 1990 MARINE POLICY 71, 71.

compulsory pilotage within the territorial sea."65 A comprehensive VTS system, if correctly enforced and financed, could prevent accidents in the Strait.

The Malacca Strait does have a partial VTS in place. Malaysia has begun the implementation of the Malaysian VTS aimed at "enhanc[ing] navigational safety and prevent[ing] pollution."66 There are also voluntary traffic separation schemes in the waterway that Malaysia has recently asked to expand.⁶⁷ Under the proposed traffic separation scheme, more than 100 miles of the waterway would be marked by navigational aids. 68 However, the existing VTS is a coastal and port VTS, 69 suggesting that it is not operational in all areas of the Strait. Thus, a full VTS, operational throughout the Strait and adequately enforced and financed, is necessary.

INTERNATIONAL REGULATION OF OIL TANKERS AND THE MALACCA V. **STRAIT**

Modern international law governance of oil pollution originates in part from early principles of international law which sought to ensure that States used the seas reasonably while considering other user's rights and interests:

Juridical control of oil pollution from vessels at the international level has operated in the overall context of the legal rules determining the use of the seas by all States without let or [Indeed.] since Hugo Grotius' concept of mare liberium won the day in the debate over the juridical nature of the sea, the only restraint on national conduct in the maritime realm has been the concept of abuse of rights which seeks to ensure that States use the seas reasonably in due consideration of the interests and rights of other users.⁷⁰

⁶⁵ Donald R. Rothwell, Navigational Rights and Freedoms in the Asia Pacific Following Entry into Force of the Law of the Sea Convention, 35 VA. J. INT'LL. 587, 601 (1995).

⁶⁶ Strait Pollution to be Prevented, S. CHINA MORNING POST, Dec. 27, 1995, at 32, available in WESTLAW, Chinapost Database.

⁶⁷ Malaysia Aims to Make Strait Collision-Free, S. CHINA MORNING POST, June 12, 1995, at 31, available in WESTLAW, Chinapost Database.

⁶⁸ Id. 69 Id.

Dzidzornu, supra note 61, at 272.

With that backdrop, the analysis turns to the international regimes that have sought to allow unfettered access to the seas. The following legal description, while not comprehensive, serves as a general summary of the law 71

A. The Corfu Channel Case and the First Law of the Sea Convention at Geneva⁷²

The Corfu Channel case is a useful starting point in understanding the current law of the sea. The case arose out of a dispute between Great Britain and Albania over Albania's placement of mines in the Corfu Channel. In that case the International Court of Justice held that under customary international law, ships of all nations have the right to navigate "through straits used for international navigation between two parts of the high seas without the previous authorization of a coastal state, provided that the passage is innocent." Corfu Channel sits as the predecessor for international law's codification of the freedom of innocent passage principle. While transit passage is the appropriate analytical framework for international straits, such as Malacca, there is little doubt that the innocent passage principle is interrelated and relevant.

The First Law of the Sea Convention ("UNCLOS I") was held in Geneva, Switzerland in 1958.⁷⁷ Draft work was examined in four separate

⁷¹ For a more comprehensive discussion of the law of the sea, *see* JOHN W. KINDT, MARINE POLLUTION AND THE LAW OF THE SEA (1986).

The First Law of the Sea Convention at Geneva has since been replaced by the most recent UNCLOS. See UNCLOS, supra note 13, art. 311(1) ("This Convention shall prevail, as between States Parties, over the Geneva Convention on the Law of the Sea of 29 April 1958."). However, the Convention served as the predecessor for many of the UNCLOS laws and as such is worthy of mention to illustrate the historical development of the law of the sea.

⁷³ Corfu Channel Case, 1949 I.C.J. 4, 4-12.

⁷⁴ Id. at 28.

⁷⁵ But see KOH, supra note 11, at 35. "The Corfu Channel Case did not establish a customary law right of passage through the territorial sea, but merely an exceptional right of passage through straits, the waters of which might be either territorial or inland waters." (emphasis added). Id. as cited in D.P. O'CONNELL, INTERNATIONAL LAW, Vol.1, at 495 (2d ed. 1970). It is not clear what this sentence means, but the author interprets it to mean that passage through territorial straits, such as Malacca, is an exception of sorts. While this may or may not be true, the legal regime after Corfu Channel seemed to interpret international law differently.

The legal regime, codified in UNCLOS, carving out the framework for innocent and transit passage is very similar. Therefore, discussion of either regime should include at least a reference to the other. If not convinced, compare the language of the *Corfu Channel* holding to *UNCLOS*, *supra* note 13, art. 24 (freedom of innocent passage) and *UNCLOS*, *supra* note 13, art. 38 (freedom of transit passage).

CLYDE SANGER, ORDERING THE OCEANS: THE MAKING OF THE LAW OF THE SEA 13-15 (1987).

committees: the Geneva Convention on the High Seas, the Geneva Convention on Fishing and Conservation of the Living Resources of the High Seas, the Geneva Convention on the Continental Shelf, and the Geneva Convention on the Territorial Sea. The relevant committee for this analysis was the Geneva Convention on the Territorial Sea and the Contiguous Zone ("CTSCZ"). The CTSCZ extended the principle outlined in Corfu Channel by outlawing "the suspension of . . . innocent passage." Corfu Channel concerned states' rights to "prohibit passage through straits." Thus, assuming suspension is not equivalent to a prohibition, it probably would have been allowed under Corfu Channel.

UNCLOS-I placed the duty of enforcement on the flag States. ⁸² The principle of flag State jurisdiction and enforcement is important because it leaves coastal States out of the enforcement picture almost entirely. ⁸³ Thus, an oil tanker traveling within a few miles of a State is only regulated by a legal regime that may exist thousands of miles away. As with international law in general, ⁸⁴ flag State jurisdiction raises problems of enforcement. The existence of flag of convenience nations makes things even more problematic. ⁸⁵

The Convention on the High Seas 1958 assured every State freedom of navigation and the right to extend its nationality to ships duly registered under its laws. It gave each State absolute jurisdiction over the construction, design, equipment and manning (CDEM standards) of its flag vessels. It left to each State the discretion to ensure that the CDEM standards it adopts conform to generally accepted international standards and to ensure that its flag vessels observe those standards. As a corollary, the flag State is given sole jurisdiction to institute any legal and disciplinary process against its vessels in the event that any incident of navigation on the high seas may involve them. This absolute flag State jurisdiction was not tampered with even in the Conventions regulating resource exploitation of the oceans. Indeed, the primacy of the freedom of navigation conditioned the regulation of the exercise by the coastal State of its right to explore and exploit its continental shelf.

⁷⁸ *Id*. at 15.

⁷⁹ Koh, supra note 11, at 35 (citing UNCLOS, supra note 13, art. 14).

⁸⁰ Id. at 36.

⁸¹ Id.

⁸² Dzidzornu, supra note 61, at 272.

⁸³ Id. Dzidzornu sees flag State jurisdiction as absolute:

Id. (citations omitted). On the other hand, coastal states do "have sovereignty over their internal waters and territorial sea." Daniel Bodansky, Protecting the Marine Environment from Vessel-Source Pollution: UNCLOS III and Beyond, 18 ECOLOGY L.Q. 719, 737 (1991).

⁸⁴ Professor Bodansky quite correctly points out the near universal criticism of international law that it "lacks effective enforcement machinery." Bodansky, supra note 83, at 727.

⁸⁵ See Andrew W. Anderson, National and International Efforts to Prevent Traumatic Vessel Source Oil Pollution, 30 U. MIAMI L. REV. 985, 1003 n.75 (1976). Anderson offers the following critical description of flag of convenience nations:

B. The International Convention for the Prevention of Pollution from Ships

The International Convention for the Prevention of Pollution from Ships ("MARPOL") aims to eliminate oil pollution of the marine environment and minimize accidental discharges. Although idealistic, MARPOL is of only limited effectiveness in achieving its aims. It attempts to "eliminate" pollution by imposing on flag States "the duty to ensure that their flag vessels comply with the technical standards of construction, design and equipment . . . and requires them to issue a certificate of verification of compliance with the standards." Despite these lofty restrictions and guidelines, the principles of Corfu Channel, MARPOL, and the CTSCZ are undercut by a legal regime that depends mainly on flag of convenience nations for enforcement. Moreover, MARPOL can only go so far as UNCLOS since it serves to carve out the particulars of the groundwork that UNCLOS lays.

C. The International Maritime Organization

The IMO, created in 1959, is a specialized agency of the United Nations "responsible for measures to improve the safety of international shipping and to prevent marine pollution from ships." The main purpose of the IMO is to adopt conventions and to encourage implementation by the

Overall, the jurisdictional picture under the . . . Geneva [Convention and MARPOL] . . . is that the flag State retains its paramountcy [sic] in enforcement matters. The limited inspection powers given to port States to verify the existence and/or validity of the certificates of foreign ships as to their technical condition is, at best, an adjunct to the flag State's overriding control; it is not a derogation from it.

[&]quot;Flag of Convenience" nations may be generally described as those allowing ownership and control of their vessels by non-nationals, coupled with easy access to their registry, low taxes, and which lack the power, administrative machinery, and/or will to enforce international regulations. The chief "Flag of Convenience" nations are Liberia, Panama, Lebanon, Cyprus, Somalia and Singapore, with Liberia accounting for 80 percent of tonnage.

Id.; see also, OECD Study on Flags of Convenience, 4 J. MAR. L. & COM. 231 (1973). Since flag of convenience nations such as Panama and Liberia continue to have flag State jurisdiction over a vast majority of vessels even today, and continue to lack significant resources for enforcement, there is no evidence to suggest that the flag of convenience problem does not continue today.

MARPOL, supra note 61, preamble; Dzidzornu, supra note 61, at 275.

⁸⁷ Dzidzornu, *supra* note 61, at 275.

⁸⁸ Id. at 276

⁸⁹ Frequently Asked Questions (FAQS) about IMO (visited Feb. 22, 1997) http://www.imo.org/faqs.htm.

member nations. ⁹⁰ Examples of IMO conventions include the International Maritime Dangerous Goods Code ("IMDG Code"), MARPOL, the International Convention for the Safety of Life at Sea, 1974 ("SOLAS"), the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers ("STCW"), ⁹¹ the 1969 International Convention on Civil Liability for Oil Pollution Damage ("Civil Liability Convention"), and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage ("Fund Convention"). ⁹² Relevant IMO Member States include the United States, Japan, Indonesia, Singapore, and Malaysia, ⁹³ all major players in the Malacca Strait region.

The IMO is an important organization, but discussing the organization's potential to aid in the problems facing the Malacca Strait is beyond the scope of this Comment. The UNCLOS agreement, and the ability to enforce it, establishes the framework under which the IMO operates. Indeed, the IMO itself concedes that "it has no real power to punish member states that chronically flout the law." However, the IMO continues to be an important player in the Malacca Strait region in particular because of powers UNCLOS gives it to approve various safety mechanisms implemented by coastal States. 95

D. The United Nations Convention on the Law of the Sea⁹⁶

Part III of UNCLOS governs straits used for international navigation.⁹⁷ UNCLOS provides that "[t]he sovereignty or jurisdiction of the States bordering the straits is exercised subject to this Part and to other rules of

⁹⁰ See id.

⁹¹ Focus on IMO (visited Feb. 22, 1997) http://www.imo.org/focus/intro.htm.

⁹² International Regime for Oil Pollution Liability and Compensation (visited Feb. 22, 1997) http://www.imo.org/imo/news/296/iopc.htm.

⁹³ IMO Member States, with Year of Joining (visited Feb. 22, 1997) http://www.imo.org/members.htm.

⁹⁴ Ken Wells, et al., Craft Warnings: Flawed Tankers and Crews Threaten Further Oil Spills, ASIAN WALL ST. J., Feb. 15, 1993, available in 1993 WL-WSJA 2032262.

⁹⁵ See UNCLOS, supra note 13, art. 41(4).

⁹⁶ For a more comprehensive look at UNCLOS, see KINDT, supra note 72; Bodansky, supra note 83; Craig H. Allen, Safer Ships and Cleaner Seas: Protecting the Marine Environment Under the 1982 Law of the Sea Convention, in What the New Convention May Mean to You and Those You Work For: University of Washington CLE Conference on the Law of the Sea (Washington Law School Foundation 1993).

⁹⁷ UNCLOS, supra note 13, pt. III.

international law." There are three main sovereign enforcers of UNCLOS provisions: the flag States, the coastal States, and the port States. As this paper focuses on the authority of the coastal States to enforce preventive pollution control measures and fees to pay for it, the analysis will focus on coastal State jurisdiction. Nonetheless, it is useful to note that primary responsibility for enforcing and policing UNCLOS provisions rests with the flag State. Given the limitations of flag State jurisdiction to enforce international law, there are strong arguments in favor of greater coastal State jurisdiction in controlling violations of international regulations. In

Coastal State authority wanes the farther away one gets from its coast. UNCLOS says that "[e]very State has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in accordance with this convention." Beyond the territorial sea, UNCLOS sets out limits of authority within the State's contiguous zone extending up to 24 miles from the State's baseline. Finally, the coastal State has primary economic rights within its exclusive economic zone extending up to 200 miles from its baseline. 104

UNCLOS sets out the transit passage legal regime governing international straits such as Malacca. Malacca comes under transit passage since its entryways, the Indian Ocean and the Straits of Singapore,

Critics argue that since pollution on the high seas or in another state's coastal waters normally does not affect the flag state, the flag state has little incentive to prescribe environmental standards or take adequate enforcement measures. Moreover, since shipowners have wide latitude in choosing where to register their vessels, they can choose a "flag of convenience" with comparatively lax environmental regulation or enforcement.

⁹⁸ UNCLOS, supra note 13, art. 34(2).

⁹⁹ See Allen, supra note 96, at 3.

¹⁰⁰ See, e.g., UNCLOS, supra note 13, art. 217; see Bodansky, supra note 82, at 736 (stating that flag State jurisdiction is core form of jurisdiction).

¹⁰¹ See Bodansky, supra note 83, at 737.

Id. No provision in UNCLOS prevents nations from choosing a lax "flag of convenience" nation which may not want, or may not be able to enforce UNCLOS.

¹⁰² UNCLOS, supra note 13, art. 3.

¹⁰³ UNCLOS, supra note 13, art. 33 states:

^{1.} In a zone contiguous to its territorial sea, described as the contiguous zone, the coastal State may exercise the control necessary to: (a) prevent infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea; (b) punish infringement of the above laws and regulations committed within its territory or territorial sea.

^{2.} The contiguous zone may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured.

¹⁰⁴ Id. arts. 55-57.

¹⁰⁵ Id. arts. 37-44.

are within the high seas or an exclusive economic zone. ¹⁰⁶ The level of authority that a coastal State has within that 12-mile-area is quite substantial, allowing the coastal State to adopt laws regulating maritime traffic, ensuring the safety of navigation, and preventing pollution. ¹⁰⁷ Although UNCLOS allows the coastal State to enforce compliance with sea lanes and traffic separation schemes within the territorial sea, ¹⁰⁸ the IMO and bordering States have veto power over traffic separation schemes and sea lanes used in international straits including Malacca. ¹⁰⁹ Most importantly, UNCLOS contains an affirmative grant of authority to coastal States to implement navigational and safety aids in international straits. ¹¹⁰

Finally, Part XII of UNCLOS requires all States, party or not, 111 "to protect and preserve the marine environment." However, some of the

¹⁰⁶ UNCLOS, supra note 13, art. 37 states: "This section applies to straits which are used for international navigation between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone."

¹⁰⁷ UNCLOS, supra note 13, art. 42 states:

^{1.} Subject to the provisions of this section, State bordering straits may adopt laws and regulations relating to transit passage through straits, in respect of all or any of the following: (a) the safety of navigation and the regulation of maritime traffic, as provided in article 41; (b) the prevention, reduction and control of pollution, by giving effect to applicable international regulations regarding the discharge of oil, oily wastes and other noxious substances in the strait; (c) with respect to fishing vessels, the prevention of fishing, including the stowage of fishing gear; (d) the loading or unloading of any commodity, currency or person in contravention of the customs fiscal, immigration or sanitary laws and regulations of State bordering straits. 2. Such laws and regulations shall not discriminate in form or in fact among foreign ships or in their application have the practical effect of denying, hampering or impairing the right of transit passage as defined in this section.

¹⁰⁸ UNCLOS, supra note 13, art. 41(1-3) states:

In conformity with this Part, States bordering straits may designate sea lanes and prescribe traffic separation schemes for navigation in straits where necessary to promote the safe passage of ships.
Such States may, when circumstances require, and after giving due publicity thereto, substitute other sea lanes or traffic separation schemes for any sea lanes or traffic separation schemes previously designated or prescribed by them.
Such sea lanes or traffic separation schemes shall conform to generally accepted international regulations.

¹⁰⁹ See UNCLOS, supra note 13, art. 41(4):

Before designating or substituting sea lanes or prescribing or substituting traffic separation schemes, States bordering straits shall refer proposals to the competent international organization with a view to their adoption. The organization may adopt only such sea lanes and traffic separation schemes as may be agreed with the States bordering the straits, after which the States may designate, prescribe or substitute them.

¹¹⁰ UNCLOS, supra note 13, art. 43 states: "User States and States bordering a strait should by agreement co-operate: (a) in the establishment and maintenance in a strait of necessary navigational and safety aids or other improvements in aid of international navigation; and (b) for the prevention, reduction and control of pollution from ships."

¹¹¹ See Allen, supra note 96, at 3 n.5.

provisions expressly do not apply to coastal States.¹¹³ Yet despite this, there is some authority to control pollution and protect the marine environment if a foreign ship is causing or threatening major damage to the marine environment of the straits.¹¹⁴

Several important points should be emphasized. First, the broadest grant of authority is within the 12-mile territorial sea with limited authority beyond that to enforce laws and regulations aimed at protecting the marine environment. This control is significant because if coastal States could only enforce preventive pollution measures within the territorial sea, that would be inviting nations to avoid that area and crowd the less-regulated high seas areas of the Strait. The effect of such an unbalanced enforcement regime would only increase the risk of serious accidents. Indeed, both within and outside the territorial sea, a narrow, strict reading of UNCLOS provisions could render coastal State enforcement of a VTS vulnerable on freedom of transit passage principle grounds. Second, Article 26(1), barring the imposition of a general fee to pay for pollution control mechanisms, could be used to thwart the financing of a VTS.

¹¹² UNCLOS, supra note 13, art. 192.

¹¹³ UNCLOS, supra note 13, art. 233 states: "Nothing in sections 5, 6 and 7 [art. 207-232] affects the legal regime of straits used for international navigation."

[[]I]f a foreign ship other than those referred to in section 10 has committed a violation of the laws and regulations referred to in article 42, paragraph 1(a) and (b), causing or threatening major damage to the marine environment of the straits, the States bordering the straits may take appropriate enforcement measures and if so shall respect mutatis mutandis the provisions of this section.

Id.

¹¹⁵ UNCLOS, supra note 13, art. 38(1) states: "[A]II ships and aircraft enjoy the right of transit passage, which shall not be impeded."

¹¹⁶ UNCLOS, supra note 13, art. 26 states:

^{1.} No charge may be levied upon foreign ships by reason only of their passage through the territorial sea. 2. Charges may be levied upon a foreign ship passing through the territorial sea as payment only for specific services rendered to the ship. These charges shall be levied without discrimination.

- VI. ANALYSIS OF THE LEGAL TREATMENT OF THE MALACCA STRAIT AND AN ARGUMENT FOR A NEW APPROACH
- A. Inadequacy of International Law Regulation of Oil Pollution in the Malacca Strait

Policymakers characterize UNCLOS as the "strongest and most comprehensive environmental treaty in existence or likely to emerge for quite some time." Another important player, the General Counsel for the National Oceanic and Atmospheric Administration ("NOAA"), a U.S. entity, similarly praises UNCLOS for the balance it strikes between the "important interests of maritime powers and the interests of the coastal state in protecting and preserving its marine environment..."

Other characterizations of UNCLOS have not been so glowing. One commentator notes that "if UNCLOS . . . is to succeed in providing a stable ocean regime, further work is needed to spell out in concrete terms what it permits and to develop additional international rules and standards, both substantive and jurisdictional, that address problems not resolved by the Convention." Moreover, because "the balance of interests in UNCLOS . . . weighs heavily in favor of maritime [S]tates," the freedom of navigation principle desired and realized by the maritime States may continue to win out over coastal State attempts to regulate the Malacca Strait. More starkly, the UNCLOS legal regime, while innovative in some respects, is basically a recodification of already existing customs and agreements which failed to prevent past accidents.

After looking closely at the language of UNCLOS, three general concerns emerge. First, UNCLOS continues to support the unhampered, but not necessarily unregulated, freedom of transit passage principle¹²¹ which cannot co-exist with an effective coastal State regulation scheme. Second, UNCLOS primarily relies on flag State control in order to implement its mandates, ¹²² thereby failing to seriously address the flag of convenience problem. Finally, Article 26(1) prohibits the imposition of transit fees on

¹¹⁷ David A. Colson, United States Accession to the United Nations Convention on the Law of the Sea, 7 GEO. INT'L ENVIL. L. REV. 651, 653 (1995).

¹¹⁸ Terry D. Garcia, U.S. Accession to the Law of the Sea Convention: NOAA's Perspective, 7 GEO. INT'L ENVIL. L. REV. 667, 670 (1995).

¹¹⁹ Bodansky, supra note 83, at 764.

¹²⁰ Id. at 768.

¹²¹ UNCLOS, supra note 13, art. 38(1).

¹²² Bodansky, supra note 83, at 736.

vessels by reason only of their passage, thereby leaving open the question of how coastal states are to pay for preventive pollution measures. 123

Implementation and Enforcement of the Malacca Strait VTS В.

There is no guarantee that a VTS is the answer to the pollution control problems that coastal States face. Nonetheless, there is evidence that a VTS can reduce the risk of collisions. 124 In order to reduce the fears of the coastal States that they do not have enough control, VTS enforcement should be the responsibility of the coastal States. At the same time, to assuage international concerns, the IMO could oversee implementation and enforcement by the coastal States and resolve disputes that occur between nations using the Strait and the coastal States that surround it. Such a system would give those countries with the most to lose an opportunity to protect their interests; moreover, they would not be at the mercy of nations or corporations that may not share the same incentive to exercise caution in using the Malacca Strait.

Currently, the UNCLOS legal regime clings to the notion of unhampered freedom of transit passage even through territorial seas. 125 Moreover, UNCLOS leaves primary enforcement of its mandates to flag States leaving a smaller, insignificant role to the coastal States who are most in danger should an accident occur. 126 Part XII of UNCLOS "provides a flexible international framework within which existing or subsequently enacted treaties governing vessel safety and marine environmental protection can be implemented globally,"127 yet, under Article 233, those powerful grants of authority cannot "[affect] the legal regime of straits used for international navigation." A narrow reading of Article 233 is an obstacle to effective enforcement of a Vessel Traffic System and other preventive pollution control measures spanning the entire Malacca Strait. 129

¹²³ UNCLOS, supra note 13, art. 26(1). A discussion of paying for accidents once they occur is beyond the scope of this paper. Some would argue that the private insurance industry's stringent standards of coverage can scare a tanker owner into compliance with international law. That certainly remains to be seen. Post-spill mechanisms, the principle thrust of the current law of the sea, assumes that accidents will happen. While true, that does not have to be accepted. Therefore, a discussion of preventive measures is appropriate and timely.

¹²⁴ Rothwell, *supra* note 65, at 601. 125 *UNCLOS*, *supra* note 13, art. 38(1).

¹²⁶ See id. art. 217, 228.

¹²⁷ Allen, supra note 96, at 3-4.

¹²⁸ UNCLOS, supra note 13, art. 233.

¹²⁹ The coastal States are very aware of their lack of enforcement power. See Malaysia Unable to Regulate Shipping in Malacca Straits, ASIA PULSE, Oct. 1, 1997, available in 1997 WL 13565401.

A strong argument can be made in favor of an expansive reading of UNCLOS provisions that would allow full coastal State enforcement of a VTS without hampering freedom of transit passage. A close look at the language of certain provisions nets the legal authority needed to properly regulate a VTS throughout the Malacca Strait. First, Article 43 places an affirmative obligation on coastal States to regulate the Malacca Strait. Article 43 requires coastal States to cooperate "in the establishment and maintenance of necessary navigational and safety aids . . . in aid of international navigation" by requiring coastal States to work toward "the prevention, reduction and control of pollution from ships." Article 43 is firm legal support for the implementation of a VTS in the Malacca Strait. As a VTS is a "navigational and safety aid" that can help "prevent, reduce and control" pollution from ships, the authority to implement and enforce it comes directly from UNCLOS. ¹³¹

Article 42 also provides express authority for coastal State VTS enforcement. Article 42 says that coastal States "may adopt laws and regulations relating to transit passage through straits, in respect of . . . the prevention, reduction and control of pollution, by giving effect to applicable international regulations regarding the discharge of oil." International regulations, such as those embodied in MARPOL, contain the same overriding goals of a VTS, that being the elimination of pollution from ships. By implementing a VTS in the Strait, the coastal States would be giving effect to "applicable international regulations regarding the discharge of oil." Thus, Article 42 provides further support for coastal State authority to implement and enforce a VTS.

A third source of authority for coastal State implementation and enforcement of a VTS comes from Article 44. Article 44 places an affirmative obligation on coastal States to assist vessels in trafficking the Strait. ¹³⁵ Article 44 says that coastal States "shall give appropriate publicity to any danger to navigation . . . of which they have knowledge." Part of any successful VTS is some sort of warning system to vessels of dangers to navigation that threaten their passage through the Strait. Such warnings not

¹³⁰ UNCLOS, supra note 13, art. 43.

¹³¹ Id.

¹³² Id. art. 42.

¹³³ See MARPOL, supra note 61, preamble.

¹³⁴ UNCLOS, supra note 13, art. 42.

¹³⁵ Id. art. 44.

¹³⁶ Id.

only can prevent accidents, but can also speed passage through the Malacca Strait by suggesting alternate routes.

Finally, support for coastal State VTS enforcement lies in Article 41. As discussed previously, traffic separation schemes and sea lanes are often part of a VTS. 137 Article 41 states that coastal States may "designate sea lanes and prescribe traffic separation schemes for navigation in Straits where necessary to promote the safe passage of ships."138 Article 41 places no limit on implementation of sea lanes and traffic separation schemes to the coastal States' territorial sea. Thus, read broadly, Article 41 gives coastal States authority to introduce these integral parts of the Malacca VTS to the entire Strait.

Objections to such coastal State regulation may originate in the freedom of transit passage principle embodied and codified in UNCLOS. 139 However, Malacca Strait VTS regulation does not necessarily hamper an international vessel's freedom of transit passage. Nor does it call for the suspension of transit or innocent passage. If anything, a VTS is a benefit to ship captains who certainly appreciate the valuable information a VTS can Situations involving conflicts over VTS enforcement could be addressed and resolved at the IMO. 140

C. Financing the Malacca Strait VTS

As previously discussed, Article 26(1) forbids the imposition of a transit fee on vessels traveling through the Strait, even in the Indonesian and Malaysian territorial sea zones, the areas where their regulatory authority is at its apex.¹⁴¹ Consequently, the financial brunt of keeping the Strait safe lies almost solely on the shoulders of the coastal States, Malaysia, Singapore, and Indonesia. 142 Japan and the oil industry have also contributed nominal sums of money to help keep the Strait accident and pollution-free. 143 The bar on transit fees embedded in UNCLOS is at least partially derived from the Corfu Channel freedom of innocent passage principle 144 and the related UNCLOS

¹³⁷ See supra notes 64-65 and accompanying text.

¹³⁸ UNCLOS, supra note 13, art. 41.

¹³⁹ See id. art. 38 (outlining freedom of transit passage principle).

¹⁴⁰ See id. art. 41(4).

¹⁴¹ *Id.* art. 3.

¹⁴² Forum on Safety in Malacca Straits an Encouraging Start, BUS. TIMES (SINGAPORE), Sept. 11, 1996, available in 1996 WL 6287072.

¹⁴⁴ See supra notes 73-74 and accompanying text.

freedom of transit passage principle. 145 Its legitimacy is challenged by a dynamic and changing world the priorities of which have changed drastically from an era of environmental exploitation to an era of environmental awareness and preservation—the very principle implicitly embedded in UNCLOS.

Transit fee implementation has been offered and advocated by coastal States, namely Malaysia. Resistance to these fees is implicit. However, change is necessary. An effective and strictly enforced VTS in the Strait would require a substantial amount of funding. There is the potential to get funds through the IMO or through the oil industry, to date those sources have not netted the kind of money needed to implement an effective system. Malaysia should not have to finance, as it does now, the a VTS intended to benefit users of the Strait from all over the planet. Moreover, should Malaysia continue to operate a VTS that covers only part of the Strait due to financing issues and enforcement problems, extreme problems could result from the proliferation of vessels wishing to avoid the regulated portions of the Strait. Such a confused and inconsistent state of traffic is no better than what is currently in place.

However, Article 26(2) provides the legal authority needed to override the Article 26(1) restriction on transit fees. Article 26(2) says that "charges may be levied upon a foreign ship passing through the territorial sea as payment only for specific services rendered to the ship." A VTS is a service to all ships passing through a particular waterway since its aim is to guide ships safely and effectively. While there will inevitably be problems of collection and enforcement that the IMO can deal with, it is axiomatic that a VTS benefits all of the users which traffic the Strait. All vessels passing through the Strait must pass through a coastal State's territorial sea as the Strait narrows to less than 12 miles at many points. Therefore, since the VTS is a service intended to benefit all users of the Strait, charging a fee to

¹⁴⁵ See UNCLOS, supra note 13, art. 38.

¹⁴⁶ Wong Joon San, Warning on Straits Levy Alternatives, S. CHINA MORNING POST, June 14, 1993, at 1, available in WESTLAW, Chinapost Database; Richard Kimber, Pirates are Insurers' Albatross, ASIAN WALL ST. J., Oct. 19, 1994, available in 1994 WL-WSJA 2032828.

¹⁴⁷ See, e.g., Kuala Lumpur Conference Focuses on Oil Spill Preparedness in Southeast Asia, OIL SPILL INTELLIGENCE REP., June 16, 1994, available in 1994 WL 2521965 (discussing the East Asian Response Ltd.(EARL) fund financed in part by founding companies British Petroleum, Shell, Mobil, Esso, and Caltex.). Those companies contributed an initial sum of \$11 million to fight oil pollution in the Strait. Id.

¹⁴⁸ See Straits Pollution to be Prevented, supra note 66.

¹⁴⁹ See UNCLOS, supra note 13, art. 26(2).

¹⁵⁰ See SEN GUPTA, supra note 6, at 12.

traffic the Strait is not only a necessity for the effective implementation and enforcement of a VTS, but it is also legally supportable.

D. Changing Notions of Environmental Policy

Few would dispute the fact that the international legal community is trying to bring in a new era of intense environmental regulation. As part of that regulation, First World nations are asking other countries to go along with them in looking at "the larger picture, the planetary outlook, the global rather than the narrowly national map as pre-eminent in their perceptions." Significant cash expenditures by countries such as the United States and Japan, the domestic laws to curtail environmental destruction that both countries have passed and implemented, and the emergence of active environmental groups all exhibit the changing notions that affect how we look at the environment.

With the changes in environmental policy that have occurred in the First World, 154 the Strait has new hope. Not only does the environmental revolution spell answers for the Malacca Strait, but the end of the Cold War is further incentive for the United States, and other world powers, to help implement an effectively enforced and adequately financed coastal State controlled system of dealing with traffic in the Strait. With the demise of the Soviet Union to mere "power" status, the Americans have less need to send warships from ocean to ocean at a moment's notice.

In sum, the First World power brokers can use the support of coastal State regulation of the Strait as evidence of the fact that they are willing to work with developing nations in helping them cope with the environmental reality that must be addressed. This example, if effective, can further improve the effects of international initiatives to curtail environmental destruction. Despite reforms advanced in IMO initiatives and UNCLOS, it is not unreasonable to ask the First World to do more to help clean up the planet and prevent oil spills in the Malacca Strait, the busiest and most important waterway in the world.

¹⁵¹ Ranee K.L. Panjabi, *Idealism and Self-Interest in International Environmental Law: The Rio Dilemma*, 23 CAL. W. INT'L L.J. 177, 180 (1992).

¹⁵² See, e.g., Malaysia: Japan Sets Oil Spill Cleaning Base, supra note 49.

¹⁵³ The Sierra Club and Greenpeace immediately come to mind.

¹⁵⁴ Such changes include the proliferation, mainly in the First World, of pollution controls on automobiles and efforts to recycle products ranging from aluminum to newspapers to plastics of all kinds. Finally, oil pollution control mechanisms, such as those outlined in this discussion, all have been at least partially supported by First World powers.

VII. CONCLUSION

The problems that face the world's busiest waterway remain daunting. The threat of a massive environmental catastrophe, such as when the *Shawa Maru* ran aground, ¹⁵⁵ remains foremost on the minds of leaders and citizens in the countries bordering the Strait. It is not unreasonable that these nations wish to regulate the waterway that, while international in character, has such a huge effect locally. While one of the aims of UNCLOS is to eliminate pollution of the marine environment, its provisions must be read broadly to meet that goal. First, Articles 41-44 should be read so as to provide the necessary legal support for full coastal State authority to regulate a Malacca Strait VTS. Second, Article 26(2) should be read so as to allow the imposition of a fee on vessels trafficking the Strait, the proceeds of which would help pay for the Malacca Strait VTS. In this way, this century need not be characterized as one where the people of the Earth sat back while the destruction of the environment continued. ¹⁵⁶

¹⁵⁵ Tillman, supra note 22, at 891; see supra note 48.

¹⁵⁶ See Snow, supra note 2.