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Enhancing Safety, Security, and Environmental Protection of the Straits of Malacca and Singapore: The Cooperative Mechanism

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In November 2004, the International Maritime Organization, as part of its Protection of Vital Shipping Lanes Initiative, decided to convene a high-level conference to address the security of ships plying the Straits of Malacca and Singapore in collaboration with the three littoral states of Indonesia, Malaysia, and Singapore. Three meetings were held over the period 2005 to 2007. The outcome was the creation of a framework for cooperation between the users of the straits and the littoral states known as the Cooperative Mechanism, a historic breakthrough as Article 43 of the Law of the Sea Convention was implemented for the first time. This article outlines the decisions made at the three meetings, analyzes the responses of the various stakeholders during the meetings, explains the reasons for the success of the Cooperative Mechanism, and concludes by proposing ways in which the momentum of cooperation between the users and the littoral states could be sustained.

Keywords burden sharing, Cooperative Mechanism, Straits of Malacca and Singapore

Introduction

At 520 nautical miles in length and being extremely narrow in numerous places, the Straits of Malacca and Singapore, which link the Indian Ocean and the South China Sea, provide the artery through which a huge proportion of global trade is carried. Tankers and bulk carriers move vast quantities of oil, coal, iron ore, and minerals to the manufacturing centers of Southeast and Northeast Asia while millions of containers flow in the opposite direction to feed consumer markets all over the world. Some 60,000 ship movements carrying as much as a quarter of the world's commerce and half the world's oil pass through the Straits of Malacca and Singapore each year.

As a result of the high volume and value of materiel transiting the straits, serious disruption to the flow of maritime traffic through this channel would have widespread and far-reaching detrimental effects. The inconvenience of having ships detour 600 miles to avoid the straits may also result in higher freight rates and costlier goods and commodities.

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With this in mind, the International Maritime Organization (IMO) identified the Straits of Malacca and Singapore as an important example in highlighting the various issues relevant to the security of shipping lanes.

The IMO's concerns about the security of ships plying the Straits of Malacca and Singapore are also founded on the fact that, in 2004, Southeast Asia unfortunately was still recording the highest number of pirate attacks globally.¹ With this high number of attacks, there had also been an increase in crew abductions and in the number of vessels being fired on, which resulted in suggestions that this could result in terrorists training to operate and navigate large commercial vessels and thus mirroring the actions of the September 11, 2001, terrorists. This perception of the risk of ships to terrorist attack in the Straits of Malacca and Singapore is exacerbated by the physical geography of the straits and history of piracy in the region. For example, the Malacca Strait is a natural choke point for shipping and, as a result, has been a haven for pirates for centuries. Its shallow reefs and innumerable small islands combined with the sheer volume of traffic often force a ship to transit at greatly reduced speeds, making it a perfect target and environment for those who wish to board ships illegally.

The IMO's Protection of Vital Shipping Lanes Initiative

As a result of heightened concerns over security of ships plying the Straits of Malacca and Singapore, the IMO decided to convene a high-level conference to consider ways and means of enhancing safety, security, and environmental protection in the straits. The event, which was to take place in Jakarta, received the go-ahead from the IMO's Council during its Ninety-third Session that met November 15–19, 2004, at IMO's London Headquarters.²

The Jakarta event was envisaged as a practical demonstration of the seriousness that the IMO attributes to the protection of shipping lanes of strategic significance and as a vehicle for identifying issues that needed to be addressed. The event would also enable the littoral and the user states, other stakeholders, and the IMO to develop and put in place appropriate action plans. The IMO initiative to seek an international approach on a delicate and sensitive issue such as the protection of the Straits of Malacca and Singapore against terrorism had been welcomed by the United Nations General Assembly which, in a resolution on Oceans and Law of the Sea adopted on November 10, 2004, encouraged the secretary-general of the IMO to continue work on the issue in collaboration with the littoral and the user states.³

A total of three meetings were conducted in the respective capitals of the littoral states between 2005 and 2007 under the IMO's Protection of Vital Shipping Lanes Initiative. The outcome was the development of a framework for cooperation between the users of the straits and the littoral states. The framework for cooperation, known as the Cooperative Mechanism, was a historic breakthrough as Article 43 of the 1982 United Nations Convention on the Law of the Sea⁴ (hereafter, LOS Convention) was implemented for the first time in any part of the world. This article outlines the decisions made at the three meetings, analyzes the responses of the various stakeholders during the meetings, explains the reasons for the success of the Cooperative Mechanism, and concludes by proposing ways in which the momentum of cooperation between the users and the littoral states could be sustained.

Concerns of the Littoral States

The first of the meetings on enhancing the safety, security, and environmental protection of the Straits of Malacca and Singapore was held in Jakarta, Indonesia, September 7–8, 2005. The meeting was jointly organized by the IMO and the three littoral states of Indonesia, Malaysia, and Singapore.

Although addressing the maritime security of ships plying the Straits of Malacca and Singapore was a key reason that the IMO and other represented international organizations decided to set up the first meeting, the littoral states (in particular, Malaysia and Indonesia) did not share the same sentiment. They felt that there already existed sufficient multilateral channels that included extraregional countries to address maritime security and that there was no need for another forum to address the maritime security of the straits. The existing forums included: the meeting of the chiefs of defence forces of the three littoral states; the Association of Southeast Asian Nations (ASEAN) Regional Forum, which had undertaken several maritime security initiatives to spur multinational cooperation in the region; and the Western Pacific Naval Symposium, involving over 20 regional navies, which had also expanded its scope of activities to include maritime security. These maritime security fora were above and beyond the bilateral and multilateral arrangements between the three littoral countries, which have resulted in coordinated air and sea patrols as well as the setting up of information exchanges and hot links between the respective operations centers.⁵ The littoral states wanted security to be exclusively within the purview of only the three coastal countries and that, if extraregional countries were to be involved, it was strictly to be for capacity building, information exchange, and the provision of training.

The Batam Joint Statement

The three littoral states were eager to set the framework for discussions at the 2005 Jakarta meeting and, as a result, took advantage of the Fourth Tripartite Ministerial Meeting of the Littoral States held prior to the Jakarta meeting on August 1–2, 2005.⁶ This meeting, held between the foreign ministers of the three countries, laid down several basic ground rules that the littoral states would adhere to in their subsequent deliberations at the Jakarta meeting. In particular, the Statement from the Tripartite Ministerial Meeting⁷ declared that:

1. the primary responsibility over the safety of navigation, environmental protection, and maritime security in the Straits of Malacca and Singapore rests with the littoral states;
2. the measures taken in the straits should be in accordance with international law, and in particular be consistent with the LOS Convention and be cognizant of the sovereignty of the littoral states;
3. the international community, agencies such as the IMO, and the major user states have a role to play; and
4. the establishment of a Tripartite Technical Expert Group (TTEG) on Maritime Security could complement the work of the TTEG on Safety of Navigation⁸ and the Revolving Fund Committee (RFC).⁹

In essence, the Batam Joint Statement communicated the basis on which the littoral states would interact with user states in any deliberations on enhancing the safety, security, and environmental protection of the Straits of Malacca and Singapore.

The 2005 Jakarta Meeting

The Jakarta meeting endorsed the Batam Joint Statement and the importance of engaging the states bordering the funnels leading to the straits (in particular, India and Thailand). The meeting also recognized that there could be an establishment of a TTEG on Maritime Security to complement the work of the TTEG on Safety of Navigation. The Jakarta meeting agreed on four particular issues.

First, it was agreed that a mechanism be established by the three straits states to meet on a regular basis with user states, the shipping industry, and others with an interest in the safe navigation through the Straits of Malacca and Singapore. Such regular meetings would discuss issues relating to the safety, security, and environmental protection of the straits and facilitate cooperation in keeping the straits safe and open to navigation, including exploring possible options for burden sharing.

Second, it was agreed that efforts should be made by the three littoral states to establish and enhance mechanisms for information exchange within and between them building, where possible, on existing arrangements such as the TTEG mechanisms so as to enhance maritime domain awareness in the straits and thus contribute to the enhancement of cooperative measures in the areas of safety, security, and environmental protection.

Third, it was agreed to promote, build on, and expand cooperative and operational arrangements of the three littoral states, including the TTEG on Maritime Security and coordinated maritime patrols in the straits through maritime security training programs and other forms of cooperation such as maritime exercises, with a view to further strengthening capacity building in the littoral states to address security threats to shipping.

Finally, the meeting invited the IMO to consider, in consultation with the littoral states, convening a series of follow-on meetings for the littoral states to identify their needs and for user states to identify possible assistance to respond to those needs, which might include information exchange, capacity building, training, and technical support, with a view to promoting and coordinating cooperative measures.

The memorandum of understanding (MOU) among the governments of Indonesia, Malaysia, and Singapore and the IMO for the implementation of the Marine Electronic Highway (MEH) demonstration project in the Straits of Malacca and Singapore was signed at the Jakarta meeting. The MEH is a navigation support and management system that integrates marine environmental management and protection systems (EMPS) and state-of-the-art marine navigation technologies.¹⁰ The MEH will provide vital marine information, such as tides and currents, to ships on a real-time basis and allow integrated electronic navigation. The EMPS will be able to map out the trajectory of oil and chemical spills, provide spill damage assessments, monitor coastal and ocean environments, and provide environment impact assessments. The MEH enables accurate navigation for every ship under the overall traffic management system, which will significantly improve the security of shipping and safety of navigation and, consequently, reduce the risk of accidents that may result in catastrophic environmental pollution.

The demonstration project of the MEH is run by the IMO and will take between 4 and 5 years to complete. The project will cost a total of US\$17 million, with the World Bank and Global Environment Facility (GEF) providing grants to the IMO and Indonesia amounting to US\$8.3 million, and with in kind cofinancing by the three littoral states, the International Association of Independent Tanker Owners (INTERTANKO) and the International Chamber of Shipping (ICS) of US\$8.7 million.¹¹ Only upon successful conclusion of the demonstration project will a full-scale MEH system be developed for the straits. It was envisaged that users may have to contribute to the funding of operations for the full-scale system.

The interplay of interests of the different stakeholders was apparent at the Jakarta meeting. Because the Joint War Committee (JWC) of the Lloyd's Market Association had put the Malacca Strait on its list of areas where ships were at risk of war, terrorism, or other perils in June 2005,¹² the littoral states were keen to show that they had taken sufficient measures to ensure security of shipping in the Straits of Malacca and Singapore through national actions as well as through bilateral and multilateral cooperation. An example was

the Malacca Strait Patrols (MSP) that were comprised of sea and air patrols and intelligence and information sharing between the three littoral states.¹³ At the Jakarta meeting, the United States was more concerned about improving the security of shipping plying the straits. The United States indicated that it would like to see in place an effective framework that incorporated enhanced awareness of the maritime areas, an increased operational presence of littoral states to enhance deterrence, and improvements in abilities to respond in a timely manner.¹⁴ The shipping industry, represented by the ICS and the International Transport Workers Federation (ITWF), were also concerned about security of shipping plying the straits.¹⁵ Besides being concerned about the security situation in the straits, Japan wanted equitable cooperation from the other major stakeholders in the maintenance of aids to navigation in the straits, particularly since they had been the only user state to do so.¹⁶ The Malacca Strait Council of Japan had contributed more than US\$130 million toward enhancing the safety of navigation in the straits and, in recent years, had been spending US\$500,000 annually toward the maintenance of aids to navigation in the straits.

The 2005 Jakarta meeting set the stage for future meetings to reconcile the interests of the different stakeholders in developing a framework of cooperation to enhance the safety of navigation, environmental protection, and security in the Straits of Malacca and Singapore.

The 2006 Kuala Lumpur Meeting

The second meeting on enhancing the safety, security, and environmental protection of the Straits of Malacca and Singapore, organized by the IMO and the three littoral states of Malaysia, Singapore, and Indonesia, was held in Kuala Lumpur, September 18–20, 2006. The purpose of the Kuala Lumpur meeting was to further discuss the safety, security, and environmental protection of the straits with the aim of developing mechanisms and programs to facilitate cooperation in keeping the straits safe and open to navigation, including the possible options for burden sharing.¹⁷ During the Kuala Lumpur meeting, a mechanism for cooperation (the Cooperative Mechanism) between the user states and the littoral states, in accordance with Article 43 of the LOS Convention, was proposed.¹⁸

The Cooperative Mechanism

The proposed Cooperative Mechanism consisted of three components.¹⁹ The first was the Forum for Cooperation under the TTEG on Safety of Navigation to be comprised of senior officials and technical experts from the maritime authorities of Indonesia, Malaysia, and Singapore. The forum would provide the main avenue for interested user states and other interested parties to meet and cooperate with the littoral states. Any outcomes of the forum would be transmitted to the IMO.

The second component was a package of six projects proposed by the littoral states for which funding and participation from the user states and interested parties were invited.²⁰ The six projects were:

1. A proposal by Malaysia for the removal of 11 shipwrecks in the Straits of Malacca and Singapore over a 5-year period involving a one-time cost of US\$6.3 million and a removal cost of US\$5 million per wreck.²¹
2. Another proposal by Malaysia for cooperation and capacity building on hazardous and noxious substances (HNS) preparedness and response in the Straits of Malacca and Singapore, including the setting up of HNS Response Centres over 2 years at a projected cost of US\$3.5million.²²

3. A proposal by Singapore for a demonstration project of Class B automatic identification system (AIS) transponders on small vessels of less than 300 gross tonnes, which are currently not required to do so under the regulations of the Safety of Life at Sea Convention.²³ The demonstration project would allow the tracking of the movements of small craft in the Straits of Malacca and Singapore and would be carried out over 18 months at a cost of US\$99,000.²⁴
4. Another proposal by Singapore for the setting up of a tide, current, and wind measurement system for the Straits of Malacca and Singapore to enhance navigational safety and marine environment protection over a period of 6 years at a capital cost of US\$774,400 and an annual maintenance cost for the first 4 years of US\$803,000.²⁵
5. A proposal by Indonesia for the replacement and maintenance of 22 aids to navigation in the Straits of Malacca and Singapore at US\$28.2 million over a period of 10 years.²⁶
6. A proposal by Indonesia for the replacement of seven aids to navigation damaged by the 2004 tsunami at a cost of US\$2.6 million.²⁷

The contributing parties could participate in the projects in close cooperation with the relevant littoral states through the Project Coordination Committee (PCC) to be established under the TTEG on Safety of Navigation.

The third component was the setting up of the Aids to Navigation Fund where interested stakeholders could volunteer financing of the maintenance of the critical aids to navigation in the straits. The operation of the fund was not worked out by the end of the Kuala Lumpur meeting.

Response of the User States and China's Emerging Role at the Kuala Lumpur Meeting

It was clear at the Kuala Lumpur meeting that the People's Republic of China viewed itself as a major regional player. China was one of only two countries that committed to one of the proposed projects, even offering to undertake in whole the Indonesian proposal to replace navigational aids damaged by the 2004 tsunami. China was interested in participating in the Singaporean proposal to set up a tide and wind measurement system and also the Malaysian proposal to develop an HNS preparedness and response capability. The United States was the other country that pledged support for the projects and, in particular, offered its expertise to build up capacity of the littoral states in handling HNS in the Straits of Malacca and Singapore.

Significantly, at the Kuala Lumpur meeting, China also presented details of its bilateral cooperative agreements and programs with the littoral states, which signaled its increasing interest in the region.²⁸ The agreements included: the MOU between China and Indonesia on maritime cooperation signed on April 25, 2005; the MOU between China and Malaysia on maritime cooperation signed on August 25, 2006; and the establishment of a mechanism for exchange on the security of the Malacca Strait with Singapore signed in late 2006.²⁹

The United States and Japan both had specific interests at the Kuala Lumpur meeting. The United States, along with the shipping industry at the meeting, was interested in upholding the transit passage regime set out in Article 38 of the LOS Convention to ensure that the shipping of goods, raw material, and energy remained unimpeded. They were also ready to oppose any attempt to impose compulsory tolls or charges for transiting the Straits of Malacca and Singapore. Preserving the freedom of navigation was a laudable goal, but the lack of a response on how the user states could contribute was a setback. The United

States had hosted the Alameda Conference in February 2006,³⁰ which was designed to facilitate possible assistance from the user states and sectors of the industry to enhancing the capability and capacity of the straits states. The United States ought to have revealed the conclusions of the Alameda Conference at the Kuala Lumpur meeting.

As already noted, Japan had been a major contributor in maintaining the safety of navigation and environmental protection in the straits and, ultimately, came away from the Kuala Lumpur meeting disappointed that few of the other user states or stakeholders had indicated they were going to share their burden. Through the Malacca Strait Council, Japan had contributed a total of 13.2 billion yen (US\$113 million) for the maintenance of navigation aids from 1968 to 2005 and a total of 1.5 billion yen (US\$13 million) for environmental protection from the period 1973 to 2005.³¹ The Malacca Strait Council receives funding from four sources:³²

1. the Nippon Foundation, which funds 74% of the activities of the Malacca Strait Council;
2. the Japanese Maritime Foundation, which funds 9% of its activities;
3. the Japanese government, which funds 5% of its activities; and
4. the Association of Related Industries (comprised of the Japanese Shipowner's Association, the Petroleum Association of Japan, the General Insurance Association of Japan, and the Shipbuilder's Association of Japan), which funds 12% of its activities.

Due to a competitive business environment, the Japanese maritime industries had indicated that they may have to reduce their funding for such maintenance activities, particularly since more users had been benefiting from the use of the aids to navigation. A study done by the Japanese Ministry of Land, Infrastructure and Transport and the Nippon Foundation indicated that owners of shipping companies in Greece, China, Germany, South Korea, Taiwan, India, Malaysia, Belgium, Israel, Switzerland, and Cyprus had increased their usage of the straits while the Japanese had seen a decrease of usage over the 10-year period from 1994 to 2004.³³

Besides the lack of support for the funding of safety-related projects, security measures were not discussed at the Kuala Lumpur meeting. This was probably because of the steady decline in the incidents of piracy and armed robbery following the 2005 Jakarta meeting and the removal of the Malacca Strait from the Lloyd's JWC's list of war risk areas in August 2006.³⁴ The low number of incidents has been attributed to the security measures undertaken by the three littoral countries under the framework of the MSP. There was also tacit understanding between the three littoral states that security matters would be addressed in the MSP forum, managed by the navies of the three littoral states, even though the rationale for the IMO-littoral states meetings was primarily to address the vessel security issues in the Straits of Malacca and Singapore. Although the Kuala Lumpur meeting noted the continuing efforts to establish the TTEG on Maritime Security as had been proposed at the Batam meeting and the Jakarta meeting, no concrete proposals were tabled for discussion.

As a result of the setback at the Kuala Lumpur meeting in getting the users (in particular, the shipping industry) to contribute to maintain aids to navigation, the Nippon Foundation subsequently organized a symposium to convince and persuade the shipping industry to contribute.³⁵ During the symposium, the Nippon Foundation appealed to the shipping industry to exercise their corporate social responsibility³⁶ and showed that the benefits would outweigh the costs of contributing. The Nippon Foundation also proposed a

voluntary contribution formula of one cent per dead weight tonne be paid for maintaining aids to navigation by ships transiting the straits. Yohei Sasakawa, chair of the Nippon Foundation, claimed that such a small contribution from each of the shipping companies would not impact freight rates, but would raise a significant US\$40 million a year toward the replacement and maintenance of aids to navigation in the straits.³⁷ However, the shipping industry representatives present were not warm to the idea of contributing.

The 2007 Singapore Meeting

The third and final leg of the IMO-littoral states series of meetings was held in Singapore, September 4–6, 2007.³⁸ During the Singapore meeting, the three littoral states presented: the actions that had been taken in enhancing safety, security, and environmental protection in the Straits of Malacca and Singapore following the Kuala Lumpur meeting; the details of the Cooperative Mechanism that had been established following the outline provided at the Kuala Lumpur meeting; and the progress made with regard to securing sponsors for the six projects on enhancing the safety of navigation and environmental protection in the straits presented at the Kuala Lumpur meeting.

The Cooperative Mechanism was officially launched at the Singapore meeting and, in particular, details of how the three components of the Cooperative Mechanism would operate, terms of reference, and rules of procedure were presented.³⁹ Significantly, the Cooperative Mechanism—comprised of the Forum for Cooperation, the PCC, and the Aids to Navigation Fund—was to be established within the framework of the TTEG on Safety of Navigation in the Straits of Malacca and Singapore, signifying that the primary responsibility over the safety of navigation and environmental protection in the straits sat with the three littoral states. The Cooperative Mechanism also recognized the interests of the user states and other stakeholders and the role they could play with respect to the straits, and that such cooperation should be on a voluntary basis. In addition, to assuage potential contributors that the Aids to Navigation Fund would be well managed, the meeting stated that the fund would be managed using the best international financial practices of transparency and accountability and would include a clearly defined scope of application, an independent audit, annual reporting to the contributors, and the disbursement of the Aids to Navigation Fund based on an approved work plan.

The Singapore meeting also updated the participants on the progress made with the projects since the Kuala Lumpur meeting.⁴⁰ China had held extensive and detailed consultations with Indonesia in relation to the implementation of the project concerning the replacement of aids to navigation damaged by the 2004 tsunami and would undertake the project in its entirety. Also, China and the United States had undertaken a needs assessment exercise to refine the project proposal for the establishment of adequate capacity in the straits for preparedness and response to pollution incidents from HNS such that the project could be implemented in stages and in a modular manner by multiple sponsors. Australia undertook to participate in Phase 1, the project design, of the demonstration project of Class B AIS transponders on small ships. In addition, the littoral states had reviewed the remaining projects to provide greater clarity as well as to divide the projects into smaller components, with more manageable costs, to facilitate participation by user states and other users of the straits.

To indicate to user states as well as members of the shipping community that security continued to be an important agenda for the three littoral states, representatives from the security agencies of the three states presented a report on the cooperative work that had been undertaken under the MSP.

Response of the User States at the Singapore Meeting

The United States continued to be concerned about the possible imposition of compulsory tolls in the development of the Cooperative Mechanism and was happy that toll implementation was omitted from the discussion of the mechanism's implementation.⁴¹ Despite recognition that measures undertaken by the three littoral states had improved maritime security in the straits, the United States continued to emphasize the importance of security and highlighted the importance of improving or maintaining maritime situational awareness in order to combat future threats from the sea. In particular, the United States highlighted its role in improving security in the straits by helping Indonesia develop its awareness of the maritime situation through the provision of 10 surface search radars being installed along the eastern coast of Sumatra Island from Sabang at the northern tip of Aceh Province to Bengkalis near the south. The United States also urged states to become a party to the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA Convention) and its 2005 Protocols.⁴²

Japan, as at the Kuala Lumpur meeting, was keen to get other user states and stakeholders involved in the maintenance to the aids to navigation in the straits. Japan appealed for other user states to contribute based on the rationale of equity noting that Japan's use of the straits as a proportion of overall traffic had decreased from 1994 to 2004.⁴³ The proportion of usage by other user states was expected to increase given that traffic volumes in the straits was projected to increase by 50% from 94,000 to 141,000 in terms of number of vessels and by 62% from 4 billion to 6.4 billion dead weight tonnes from 2004 to 2020 based on a study conducted by the Japanese government and the Nippon Foundation in 2004. In particular, the Nippon Foundation appealed to other members of the maritime industry to contribute based on the concept of corporate social responsibility, but did not advocate a formula for contribution.

Unlike at the Kuala Lumpur meeting, there was a greater expression of interest by user states and organizations in participating in the Cooperative Mechanism. In particular, the following countries or organizations expressed commitment to contribute to the projects or the Aids to Navigation Fund.

1. Australia would participate in the project by establishing an HNS preparedness and response capability and capacity in the littoral states in addition to the demonstration project on Class B AIS transponders.⁴⁴
2. Germany would participate in projects by providing experts, exchange experiences, and the sharing of information systems.⁴⁵
3. Japan would provide assistance for the demonstration project on Class B AIS transponders as well as contribute to the project on the replacement and maintenance of aids to navigation.⁴⁶
4. The Nippon Foundation would contribute to the Aids to Navigation Fund up to a third of the costs associated with the funding of the maintenance and repair of the aids to navigation during the initial 5-year period. In particular, the amount contributed is approximately US\$1.4 million to fund the cost of the site survey.⁴⁷
5. South Korea would participate in the demonstration project on Class B AIS transponders as well as in the replacement and maintenance of aids to navigation and would contribute financially to the Aids to Navigation Fund. The amount that South Korea has pledged amounted to US\$100,000.⁴⁸
6. India would share its expertise on safety and environmental protection.⁴⁹

7. The United Kingdom was supportive of the Cooperative Mechanism and would explore ways in which it could assist.⁵⁰
8. Panama would make available more information from ships flying its flag to the littoral states and was also considering other ways to cooperate.⁵¹
9. The ICS would participate in the Forum for Cooperation and would make contributions in kind to the projects by providing expertise and would support capacity-building efforts.⁵²
10. INTERTANKO would participate in the Forum for Cooperation to provide the industry's perspective and would contribute to the work of the littoral states through the Cooperative Mechanism.⁵³
11. The International Tanker Owners Pollution Federation Limited (ITOPF) would provide its expertise on oil spill response and provide information relating to the tidal response of oil spills.⁵⁴
12. Subsequent to the Singapore meeting, Greece announced that it would contribute US\$1 million to fund the activities adopted under the Cooperative Mechanism, but that its contribution would be made through the IMO trust fund.⁵⁵
13. The United Arab Emirates and the Middle East Navigation Aids Service (MENAS) pledged US\$100,000 and US\$1 million, respectively, to the Aids to Navigation Fund.

That more users were willing to step forward to contribute, either financially or in kind, bears testimony to the hard work undertaken by the three littoral states. Through the terms of reference and the rules of procedure for the three components of the Cooperative Mechanism, the three littoral states were able to convince users that funds received would be well managed with full transparency and accountability and with contributors having a say of how the funds would be used.

Moving Forward

The Cooperative Mechanism developed by the littoral states after the three IMO-sponsored meetings was a breakthrough in terms of enhancing maritime cooperation between the users of a strait used for international navigation and the countries bordering the strait. Singapore's ambassador-at-large, Tommy Koh, president of the Third UN Conference on the Law of the Sea, hailed the Cooperative Mechanism as a historic breakthrough noting that Article 43 of the LOS Convention was being implemented for the first time in any part of the world.⁵⁶ That the Cooperative Mechanism was successful was due to the fact that the three littoral states were able to address the issues that have been raised at previous IMO-sponsored conferences on implementing Article 43.⁵⁷ In particular, three reasons stand out. First, the three littoral states avoided defining "the user," but decided to adopt an inclusive approach to include user states and shipping organizations as well as other stakeholders who had an interest in the safety of navigation in the straits. Second, the three littoral states assured potential contributors that they would have a voice in the management of the funds contributed, that there would be transparency and accountability, and that the best international accounting practices would be adopted in the management of the funds. Last, the imposition of compulsory charges was avoided in favor of a voluntary scheme.

In order to maintain the momentum generated by the successful launch of the Cooperative Mechanism, the following points are suggested on how to sustain the process of dialogue and cooperation between the users and the littoral states.

First, the 2007 Singapore meeting was planned to be the last of the high-profile IMO-littoral states meetings with future dialogue between the littoral states and the user states, shipping industry, and other stakeholders conducted through the Forum for Cooperation under the rubric of the TTEG on the Safety of Navigation. However, as the TTEG is comprised of senior officials and technical experts from only the three littoral states, the Forum for Cooperation will not have the same visibility and profile as that of the IMO-sponsored series of meetings. The low visibility of the Forum for Cooperation may make it difficult for the littoral states to maintain the momentum already established and to convince more stakeholders to contribute to the projects and the Aids to Navigation Fund. It therefore may be necessary to regularly raise the profile of the Forum for Cooperation by elevating it to the same level as that of the IMO series of meetings that had been conducted. Besides the issue of visibility of the Forum for Cooperation, the littoral states may also have to divide the larger projects into smaller parts that contributors may find more amenable for contribution. In particular, the projects involving the removal of wrecks and the replacement and maintenance of aids to navigation could be subdivided into more manageable components.

Second, the littoral states will have to show that they are playing their part since they have obligations under the LOS Convention. The three states must show a willingness to adhere to international conventions that enshrine international expectations and standards for the provision of safety, security, and environmental protection. In particular, the littoral states should ratify: the 1979 Convention on Maritime Search and Rescue (SAR Convention);⁵⁸ the SUA Convention, and its 2005 Protocols;⁵⁹ the Annexes to the International Convention for the Prevention of Pollution from Ships (MARPOL) 73/78;⁶⁰ the 1990 Oil Pollution and Preparedness Convention;⁶¹ the 1996 Convention on Liability and Compensation for Damages in Connection with the Carriage of Hazardous and Noxious Substances by Sea;⁶² as well as the Regional Cooperation Agreement on Combating Piracy and Armed Robbery Against Ships in Asia (ReCAAP).⁶³

Finally, the interests of Japan and the littoral states to burden share their maintenance of the navigational aids in the Straits of Malacca and Singapore should be supported. Although ships calling at the Port of Singapore and the ports along the west coast of the Malay Peninsula pay port dues, and part of the port dues have been used for the maintenance of the aids to navigation in the Straits of Malacca and Singapore, more than half of the ships that transit the straits do not call on any local port. Hence, most of the transiting ships are free riders—they benefit from the increased safety provided by the aids to navigation without having to bear the cost. As ships from more countries have increased their usage of the straits, they should bear part of the burden as well. Although the participation of shipping companies in the Cooperative Mechanism might create a precedent in the other straits used for international navigation in the world, it is still in their best interests to participate since their ships benefit directly from improved aids to navigation. In particular, shipping companies should exercise their corporate social responsibility. A useful guideline for voluntary contributions would be the Nippon Foundation's proposal of one cent per dead weight tonne. However, to encourage more users to contribute, it may be necessary for the littoral states to find ways to recognize the contributions of the various stakeholders.

Conclusion

In a world of growing economic interdependence, local disruptions can have global ramifications. Disruptions to the flow of shipping traffic in the Straits of Malacca and Singapore could come in the form of: terrorist acts at sea or at port; transnational crimes, like piracy

or armed robbery; international or internal armed conflict; natural disasters; accidents due to navigational errors; gridlock; and restrictions to passage, either through excessive sovereignty claims or through excessive control of shipping. One study has estimated that the cost of rerouting tankers to Japan could increase the cost of doing business by US\$88 million (for a 3-day diversion away from the Malacca Strait) or by US\$1.2 billion (for a 2-week diversion away from Indonesian waters).⁶⁴

If the impact to other economies were taken into account, the amount would be significantly more because two-way trade between Asia and other parts of the world has been increasing at an annualized rate of 31% for the period of 2002 to 2004.⁶⁵ This figure includes two-way trade between Asia and Europe, Asia and the Middle East, and Asia and Africa. This annualized figure is set to increase in the future as the global economic center of gravity continues to shift to Asia. As a result, beneficiaries from the increasing openness of the global trading system, be it states or corporations, will have to increasingly share the costs of maintaining this global trading system in order to continue benefiting from it. As Joseph E. Stiglitz, a nobel laureate in economics, has suggested, globalization has increased the inequality between the skilled and the unskilled, giving rise to a growing gap that could derail globalization itself.⁶⁶ One way to make globalization work is for the winners to compensate the losers. From the perspective of the Straits of Malacca and Singapore, the major maritime nations and shipping corporations will have to step up when it comes to enhancing the safety, security, and environmental protection of the straits.

The success of the Cooperative Mechanism has demonstrated that it is possible to manage the interests of major powers, the shipping industry, and the coastal states to forge an outcome that is beneficial to all. The success can be attributed to a transparent principles-based process involving all stakeholders conducted under the auspices of a recognized and competent broker (the IMO), and the adoption of guidelines consistent with the LOS Convention, an international regime recognized by all the participants. Hence, the Cooperative Mechanism could indeed become a model for cooperation between the various stakeholders in other straits used for international navigation.

Notes

1. The International Maritime Bureau (IMB) Piracy Reporting Centre in Kuala Lumpur reported that for the year 2004, there were 8 incidents of piracy and armed robbery in the Singapore Strait, 37 in the Malacca Strait, and 93 in Indonesia. In particular, the number of attacks in the Malacca Strait was the second highest since the IMB began compiling statistics in 1991. ICC International Maritime Bureau, "Piracy and Armed Robbery Against Ships," *Annual Report*, 1 January–31 December 2004.

2. "IMO to Take Straits Initiative," 93rd Session of IMO Council, 15–19 November 2004.

3. U.N. General Assembly, Resolution 59/24, 17 November 2004, para. 49.

4. 1833 *U.N.T.S.* 397.

5. David Boey, "More Countries Urged to Join 'Eyes in Sky' Patrols" *The Straits Times*, 14 September 2005.

6. "The Batam Joint Statement of the 4th Tripartite Ministerial Meeting of the Littoral States on the Straits of Malacca and Singapore," Batam, Indonesia, 1–2 August 2005, IMO/SGP1/INF. 3, Annex 3.

7. *Ibid.*

8. The Tripartite Technical Experts Group (TTEG) on Safety of Navigation comprised technical experts and senior officials from the maritime authorities of Indonesia, Malaysia, and Singapore. The TTEG examines and implements guidelines relating to enhancing the safety of navigation, promoting close cooperation and coordination of antipollution policy and measures in the straits, and

initiates consultation with the IMO on the Traffic Separation Scheme and with users of the straits. See Yee Cheok Hong, "The TTEG on Safety of Navigation: How It Has Evolved, What It Is, What It Has Achieved and What Are the Plans for the Future," IMO/KUL 1/INF.29/1, 19 September 2006.

9. The Revolving Fund Committee (RFC) is comprised of technical experts and senior officials from the maritime authorities of Indonesia, Malaysia, and Singapore that manage a Revolving Fund which is used for cleanup operations in the event of an oil spill caused by a ship in the straits and for capacity-building activities. The Revolving Fund was set up in 1981 by a memorandum of understanding between the governments of Indonesia, Malaysia, and Singapore and the Malacca Strait Council (MSC), which acts on behalf of Japanese nongovernmental organizations. See H. Hariyogi, "The Revolving Fund Committee: How It Has Evolved, What It Is, What It Has Achieved and What Are the Plans for the Future," IMO/KUL 1/INF.30, 19 September 2006. Also regarding the Malacca Strait Council, see *infra* notes 31–32.

10. See Koji Sekimizu, "The Marine Electronic Highway Demonstration Project," IMO/JKT 1/INF.21, 8 September 2005.

11. Koji Sekimizu, "Recent Developments in Relation to the Implementation of the MEH Demonstration Project for the Straits," IMO/SGP 1/INF.13, 4 September 2007.

12. The classification by the Joint War Committee could potentially lead insurers to raise premiums and underwriters to withdraw their insurance coverage for vessels plying the Malacca Strait as their decisions are generally followed internationally. Greg Torode and Raymond Ma, "Ship Firms to Fight Malacca Strait 'War Risk' Rating; Decision on Trade Artery 'Shows Cost of Terrorism Starting to Bite,'" *South China Morning Post*, 31 July 2005.

13. Rear Admiral Sim Gim Guan, "Collaborative Initiatives to Enhance Maritime Security," IMO/JKT 1/INF.12, 7 September 2005.

14. Rear Admiral Charles Wurster, "The Malacca Straits: A Partnership in Security," IMO/JKT 1/INF.26, 8 September 2005.

15. Peter Hinchliffe, "Owning or Operating Ships Using or Transiting the Straits," IMO/JKT 1/INF.17, 7 September 2005 and John Bainbridge, "Protection of Seafarers in the Straits," IMO/JKT 1/INF.18, 7 September 2007.

16. Hiroshi Maruyama, "Japan's Perspective as a Major User State: Our Contributions and a Framework for International Cooperation," IMO/JKT 1/INF.15, 7 September 2007; and Fumio Kaneko, "Activities and Views of the Malacca Strait Council: Seeing Equitable Cooperation," IMO/JKT 1/INF.27, 8 September 2005.

17. "Kuala Lumpur Statement on Enhancement of Safety, Security and Environmental Protection in the Straits of Malacca and Singapore," IMO/KUL 1/4, 20 September 2006.

18. LOS Convention, *supra* note 4, art. 43 seeks to foster cooperation between states bordering a strait used for international navigation and the user states of the strait in the establishment, maintenance, and improvement of navigational and safety aids as well as the prevention, reduction, and control of pollution.

19. "The Establishment of a Cooperative Mechanism Between the Littoral States and User States on Safety of Navigation and Environmental Protection in the Straits of Malacca and Singapore," IMO/KUL 1/2.6/1, 17 September 2006.

20. "Identification and Prioritization of Needs for Projects on Safety of Navigation and Environmental Protection," IMO/KUL 1/3, 16 September 2006.

21. Rosnan Fathlal, "Updated Project 1: Removal of Wrecks in the Traffic Separation Scheme in the Straits of Malacca and Singapore," IMO/SGP 1/INF.15, 4 September 2007.

22. Rosnan Fathlal, "An Update on Project 2: Cooperation and Capacity Building on Hazardous and Noxious Substances Preparedness and Response in the Straits of Malacca and Singapore," IMO/SGP 1/INF.16, 4 September 2007.

23. 1184 *U.N.T.S.* 2.

24. Captain Daniel Yen Teck Foo, "Updated Project 3: Demonstration Project of Class B Automatic Identification System Transponder on Small Ships," IMO/SGP1/INF.17, 4 September 2007.

25. Captain Daniel Yen Teck Foo, "Updated Project 4: Setting Up Tide, Current and Wind Measurement Systems for the Straits of Malacca and Singapore to Enhance Navigational Safety and Marine Environment Protection," IMO/SGP1/INF.18, 4 September 2007.

26. Yuri Gunadi, "Updated Project 5: Replacement and Maintenance of Aids to Navigation in the Straits of Malacca and Singapore," IMO/SGP1/INF.19, 4 September 2007.

27. Yuri Gunadi, "Progress Report on the Implementation of Project 6: Replacement of Aids to Navigation Damaged by the Tsunami Disaster of December 2004," IMO/SGP1/INF.20, 4 September 2007.

28. "Agreements and Programmes on Cooperation Between the People's Republic of China and the Littoral States on Maintaining the Security of the Malacca Strait," IMO/KUL 1/3/1, 18 September 2006.

29. *Ibid.*

30. "Chairman's Report of the Meeting of User States to Identify Possible Assistance to Respond to the Needs of the Malacca Straits Littoral States," Headquarters, Pacific Area Command, United States Coast Guard, Coast Guard Island, Alameda, California, 15–17 February 2006.

31. Shigetaro Yamamoto, "Views of User States: Presentation by Japan," IMO/KUL 1/INF.17, 18 September 2006.

32. Malacca Strait Council, "Towards Enhancing the Navigational Safety and Preserving the Marine Environment in the Straits" (2005).

33. Kenji Nagamatsu, "Past and Present Vessel Traffic in the Straits of Malacca and Singapore—Trends in the Decade 1994–2004," IMO/KUL 1/INF.23, 19 September 2006.

34. "North Korea Could Be Made Risk Area by Joint War Committee," *Lloyd's List*, 24 October 2006.

35. The Symposium on the Enhancement of Safety of Navigation and the Environmental Protection of the Straits of Malacca and Singapore was held in Kuala Lumpur, 13–14 March 2007, and was organized by the Nippon Foundation; the Maritime Institute of Malaysia (MIMA); the Centre for Southeast Asian Studies (CSEAS), Jakarta; and the S. Rajaratnam School of International Studies (RSIS), Singapore.

36. See Robert Beckman, "The Role of Shipping Companies in Cooperative Mechanisms to Enhance Navigational Safety in the Straits of Malacca and Singapore," presentation at the Symposium on the Enhancement of Safety of Navigation and the Environmental Protection of the Straits of Malacca and Singapore, Kuala Lumpur, 13–14 March 2007.

37. Yohei Sasakawa, "Towards a New World Community: Cooperative Framework for the Future of the Malacca, Singapore Straits," *RSIS Commentary 17/2007*, 21 March 2007.

38. "Singapore Statement on Enhancement of Safety, Security and Environmental Protection in the Straits of Malacca and Singapore," IMO/SGP 1/4, 6 September 2007.

39. "The Cooperative Mechanism Between the Littoral States and User States on Safety of Navigation and Environmental Protection in the Straits of Malacca and Singapore," IMO/SGP 2.1/1/Rev.1, 4 September 2007.

40. "Identification and Prioritisation of Needs for Projects on Safety of Navigation and Environmental Protection," IMO/SGP 1/3, 4 September 2007.

41. Vice-Admiral Charles Wurster, "The Cooperative Mechanism: Remarks by the United States," IMO/SGP 1/INF.12/1, 4 September 2007.

42. 1678 *U.N.T.S.* 221.

43. Yasuhiro Okanishi, "Enhancing the Safety of Navigation and Environmental Protection: Emerging Trends in Vessel Traffic Through the Straits," IMO/SGP 1/INF.21, 5 September 2005.

44. Gary Andrew Prosser, "Views of User States: An Australian Perspective on Compliance to the OPRC HNS Protocol and Application of AIS Class B to Strategic Waterways," IMOSGP 1/INF.26, 5 September 2007.

45. Robert Kühner, "Views of User States: Presentation by Germany," IMO/SGP 1/INF.28, 5 September 2007.

46. Kosuke Shibata, "Views of User States: Presentation by Japan," IMO/SGP 1/INF.30, 5 September 2007.

47. Masazumi Nagamitsu, "Views of the Industry: Statement by the Nippon Foundation," IMO/SGP 1/INF.33, 5 September 2007.
48. Presentation by delegate from Korea at Session 5 on Views of User States, Singapore Meeting on the Straits of Malacca and Singapore: Enhancing Safety, Security and Environmental Protection, 4–6 September 2007.
49. Inspector General Achutan Rajasekhar, "Views of User States: Presentation by India," IMO/SGP 1/INF.29, 5 September 2007.
50. Presentation by delegate from the United Kingdom at Session 5 on Views of User States, Singapore Meeting on the Straits of Malacca and Singapore: Enhancing Safety, Security and Environmental Protection, 4–6 September 2007.
51. Presentation by delegate from Panama at Session 5, *ibid.*
52. Presentation by delegate from ICS at Session 6, *ibid.*
53. Presentation by delegate from INTERTANKO at Session 6, *ibid.*
54. Presentation by delegate from ITOFF at Session 6, *ibid.*
55. "Greece Announces US\$1 million Donation to Straits' Fund," *IMO Briefing* 42, 20 November 2007.
56. Tommy Koh, "New Milestone in Better Straits Cooperation: Article 43 of UNCLOS Helps Keep Malacca, Singapore Straits Safe, Secure and Clean," *Business Times*, 28 September 2007.
57. The IMO sponsored two conferences in conjunction with the Institute of Policy Studies, Singapore, in 1996 and 1999 to discuss issues relating to the implementation of Article 43 in the Malacca and Singapore Straits. The papers presented at both conferences and the rapporteur's reports summarizing the points made in the papers and the discussions were published in the *Singapore Journal of International and Comparative Law* 2 (1998); and in a Special Feature volume of the *Singapore Journal of International and Comparative Law* 3 (1999), "Implementing Article 43 of UNCLOS in the Straits of Malacca and Singapore."
58. 405 *U.N.T.S.* 97.
59. *Supra* note 42.
60. International Convention for the Prevention of Pollution from Ships (MARPOL) and Protocol of Amendment of 1978, 1340 *U.N.T.S.* 61.
61. 30 *I.L.M.* 733.
62. 35 *I.L.M.* 1415.
63. See at www.recaap.org.
64. Anthony Chin, "The Economic Impact of the Present and Projected Vessel Traffic in the Straits of Malacca and Singapore," IMO/KUL 1/INF.25, 19 September 2006.
65. *Ibid.*
66. Joseph E. Stiglitz, *Making Globalization Work* (New York: W. W. Norton, 2006).