International Cooperation to Enhance Environmental Protection in the Straits of Malacca and Singapore: Developments and Prospects

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Background

The Straits of Malacca and Singapore (hereafter Straits) is one of the most important straits in the world. It is the major route between the Indian Ocean and the East Asia. More than 90,000 vessels of more than 100 dead weight tonnes transit the Straits of Malacca and Singapore annually. Ships transiting the Straits of Malacca and Singapore carry a third of the world's trade and one-half its oil supplies. This includes more than 20,000 oil tankers per year. Traffic in the Straits of Malacca and Singapore is expected to increase substantially as trade in Asia increases in response to the rise of China and India. The increasing traffic through the Straits of Malacca and Singapore poses significant risks to the biodiversity and the marine environment, to the livelihood of the coastal communities and to the fishing and tourism industries.

Measures by the littoral States and the IMO

The safety of navigation in the Straits of Malacca and Singapore is inextricably linked to ship-source pollution. Any measures to enhance the safety of navigation will decrease the risks of collisions and groundings, and thereby protect the marine environment from ship-source pollution.

The three littoral States of Indonesia, Malaysia and Singapore have been co-operating since the early 1970s to enhance navigational safety in the Straits of Malacca and Singapore. Various measures to enhance navigational safety and environmental protection in the Straits of Malacca and Singapore have been proposed by the three littoral States and adopted by the IMO. The measures adopted by the IMO in the Straits of Malacca and Singapore include the following:

- Sea lanes and Traffic Separation Schemes
- Vessel Traffic Systems
- Mandatory Ship Reporting System
- Routeing measures such as under keel clearance requirements and deep water routes

Assistance from Japan to enhance safety and environmental protection

Much of the traffic in the Straits of Malacca and Singapore is “through traffic” which benefits user States and shipping companies but does not benefit any of the three littoral States. Nevertheless, the three littoral States have had to bear responsibility for maintaining navigational safety in the Straits. Until 2007, the only user State that assisted the littoral States in enhancing safety and environmental protection in the Straits was Japan, which has made very significant contributions for more than 30 years.

The first form of assistance from Japan has been to the safety of navigation in the Straits through assistance with hydrographic surveys and aids to navigation. Between 1970 and 1982, the Malacca Strait Council together with the Japan International Cooperation Agency (JICA) and the three littoral States conducted a hydrographic survey of the Straits of Malacca and Singapore. Under the joint survey programme, six sheets of Common Datum Charts were drawn up between 1976 and 1982. Between 1996 and 1998, a resurvey was carried out by Japan and the governments of the littoral States at a cost of JPY 6.0 billion. Its findings and those from the earlier survey led to extension of the traffic separation scheme in the Straits of Malacca and Singapore in 1998 between One Fathom Bank and Horsburgh Lighthouse. Japan has
also assisted in the establishment and maintenance of aids to navigation in the Straits of Malacca and Singapore. More than three-fifths of the aids to navigation used by mariners in the Straits were installed by the Malacca Strait Council as part of the international cooperation extended by Japan to Indonesia and Malaysia. These installations cost more than JPY 5.4 billion, with some 41 buoys, beacons and lighthouses installed at 30 locations. The Malacca Strait Council also works closely with the two coastal nations in the maintenance and replacement of these aids.¹

Japan has also contributed to environmental protection in the Straits of Malacca and Singapore in two ways. First, in 1981, Malacca Strait Council contributed JPY400 million to the three coastal States of Indonesia, Malaysia and Singapore in the form of a 'Revolving Fund'. The Fund allows any of the three coastal States to take a cash advance for combating accidental oil spills from a ship. When the State receives compensation from ship owner’s insurers, the amount is repaid to the Fund. Second, Japan has provided assistance to assist the three littoral States in preparing for a major oil spill. In 1990, the Japan Association of Marine Safety (JAMS) organized a project on Oil Spill Preparedness and Response known as the OSPAR Project. Its purpose was to promote the establishment of an international cooperation mechanism that can respond to major oil spills in the ASEAN sea area including the Straits of Malacca and Singapore. This project was undertaken under the leadership of Japanese Ministry of Land, Infrastructure and Transport (MLIT) with financial support from the Nippon Foundation and the Japanese Shipowners’ Association.²

### Increased concern with maritime security after 2001

The September 11, 2001 terrorist attacks in the United States raised world-wide concern about the threat of maritime terrorism. Maritime Security was incorporated into maritime safety by the IMO. Maritime Security became a high priority at the IMO, and measures were taken to enhance the security of ships and ports. A new comprehensive security regime for international shipping was adopted by the IMO in December 2002 and entered into force on 1 July 2004. The mandatory security measures include a number of amendments to the International Convention for the Safety of Life at Sea, 1974³ (SOLAS). They include the new International Ship and Port Facility Security Code (ISPS Code), which contains detailed security-related requirements for Governments, port authorities and shipping companies in a mandatory section (Part A), together with a series of guidelines about how to meet these requirements in a second, non-mandatory section (Part B).

As security in ports was enhanced under the ISPS Code adopted under SOLAS 1974, concern increased about the vulnerability of vital sea lanes such as the Straits of Malacca and Singapore to terrorist attacks. The Indian Navy reportedly escorted vulnerable vessels through the Straits of Malacca and

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Singapore at the request of the United States. The United States took various initiatives with coalitions of willing partners, including the Container Security Initiative and Proliferation Security Initiative, the latter of which raised some concerns in Asia about whether UNCLOS provisions on sovereignty and jurisdiction would be respected. A remark by a US Admiral about the establishment of a Regional Maritime Security Initiative in Southeast Asia was met with suspicion and hostility in Indonesia and Malaysia.

Piracy and armed robbery against ships in the vicinity of the Straits of Malacca and Singapore had been a matter of concern to the international community for many years. Although most of the reported hijackings involved smaller vessels such as tugs, barges and fishing boats, there have been serious incidents in which large cargo vessels and tankers were hijacked. An example is the Alonda Rainbow, a Japanese-owned Panama-registered ship loaded with aluminium ingots that was attacked and hijacked by armed pirates on 22 October 1999, shortly after departing from Kuala Tanjung in Indonesia for its destination in Japan. The ship’s crew of two Japanese and 15 Filipinos were forced to drift off in a small boat, and were later rescued off the coast of Thailand. The Alonda Rainbow was subsequently captured by the Indian navy on 16 November 1999 after a high seas chase in which shots were fired. The ICC International Maritime Bureau reported 75 incidents of piracy or armed robbery in the Straits of Malacca and Singapore in 2000.

The 2002 Annual Report of the ICC International Maritime Bureau reported a drop in piracy attacks in the Malacca Strait from 16 reported incidents in 2002 compared to 75 in 2000. However, in 9 of the reported incidents the ships were very serious incidents in which ships were hijacked. The apparent ease with which pirates boarded ships in Southeast Asia raised concern that terrorist could easily board ships and use them to cause serious damage and disrupt the flow of ships passing through the Straits of Malacca and Singapore.

In 2004 the number of incidents of piracy and armed robbery against ships in the Straits of Malacca and Singapore increased. Of the total number of incidents of piracy and armed robbery against ships reported to the IMB Piracy Reporting Centre in Malaysia in calendar year 2004, eight were in the Singapore Strait, 37 were in the Malacca Strait, and 93 were in Indonesia. The IMB reported that the number of attacks in the Malacca Strait was the second highest since the IMB began compiling statistics in 1991, and that many of the attacks in the Malacca were serious and involved vessels being fired upon and crew kidnapped for

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5 The Container Security Initiative (CSI) was launched in 2002 by the U.S. Bureau of Customs and Border Protection (CBP), an agency of the Department of Homeland Security. Its purpose was to increase security for container cargo shipped to the United States. For information, see <www.cbp.gov/xp/cgov/border_security/international_activities/>, 13 September 2007.
ransom.8 The increase in piracy and armed robbery against ships resulted in the Malacca Strait being declared a war-risk zone by Lloyds in June 2005.9

Establishment of a new Cooperative Mechanism for the Straits

CALL INCREASED COOPERATION BY THE IMO IN 2004

The impetus for international cooperation in the Straits of Malacca and Singapore came from the Secretary-General of the IMO, Mr. Efthimios E Mitropolous, with the support of IMO Council. At its 92nd session in June 2004 the IMO Council addressed concerns about the security of vital shipping lanes, and requested the Secretary-General to work on the issue in collaboration with the parties concerned.10 The IMO Secretariat undertook a study of vital shipping lanes, and gave special consideration to the Straits of Malacca and Singapore. At its 93rd session in October 2004 the Secretary-General submitted a document analyzing the key issues involved in protecting vital shipping lanes against terrorist attacks. The document included a profile of the Straits of Malacca and Singapore. The IMO Council agreed that the organization had and could play a role in the protection of shipping lanes of strategic importance and significance.11

In March 2005, the Secretary-General delivered the keynote address at the ASEAN Regional Forum--Confidence Building Measures Meeting in Singapore on Regional Co-Operation on Maritime Security. In his address the Secretary-General stated that as part of his efforts to push forward collaboration on maritime security in the region, he had initiated a round of consultations with the three littoral States and some user States. He also referred to the planned IMO-sponsored meeting that would be hosted by Indonesia in September 2005, and stated that it would provide a unique opportunity for the littoral States, user States and other stakeholders to work enhance the safety of navigation, environmental protection and overall security in the Straits.12

At its 94th session in June 2005 the IMO Council reaffirmed its mandate to the Secretary-General to continue work relating to the protection of shipping lanes of strategic importance and significance. Working under this mandate the IMO Secretary-General and the Government of Indonesia convened a meeting in Jakarta on 7 and 8 September on the Enhancement of Safety, Security and Environmental Protection in the Straits of Malacca and Singapore.13

9 In June 2005 the Joint War Committee (JWC) part of the Lloyd’s Market Association in London, declared the Malacca Strait a war-risk zone. The decision to add the Straits of Malacca to JWC’s list was taken following recommendations by a private defense consultant, Aegis Defence Services, which carried out risk assessments on the area and suggested that it was a potential site for a terrorist attack.
11 Note by the Secretary General, Protection of Vital Shipping Lanes, IMO Doc C93/15, 7 October 2004. Document includes Annex, Profile of the Straits of Malacca and Singapore.
It should be noted that although the IMO Secretary-General’s call for increased cooperation was due primarily to concerns about maritime security in the Straits of Malacca and Singapore, the meeting scheduled in Jakarta was broadened to the enhancement of “safety, security and environmental protection” in the Straits of Malacca and Singapore. This was presumably because it was felt that the three areas of safety, security and environmental protection were closely linked.

**BATAM JOINT STATEMENT, AUGUST 2005**

On 1-2 August 2005 the foreign ministers of the three littoral States met in Batam, Indonesia to discuss matters pertaining to the safety of navigation, environmental protection and maritime security in the Straits of Malacca and Singapore. The meeting had been convened at the initiative of the Foreign Minister of Indonesia. This was the first time since the 1970s that a tri-lateral ministerial level meeting of the three littoral States was held on the Straits.

The Batam Joint Statement sets out the respective roles of the littoral States, user States and international agencies such as the IMO in enhancing safety, security and environmental protection in the Straits. It reaffirms that the three littoral States have sovereignty and sovereign rights in the Straits, and primary responsibility for the safety of navigation, environmental protection and maritime security in the Straits. At the same time, the statement acknowledges the interests of user States and the relevant international agencies (e.g., the IMO), and the role they could play in respect of the Straits. In this regard, it states that any cooperative measures taken in the Straits of Malacca and Singapore must be in conformity with international law including the United Nations Convention on the Law of the Sea, 1982 (UNCLOS 1982).

With respect to the possible roles of user States and others in cooperative arrangements, the statement provides that bearing in mind the responsibility and burden of littoral States and the interests of user States, the Ministers welcomed the assistance of the user States, relevant international agencies, and the shipping community in the areas of capacity building, training and technology transfer, and other forms of assistance in accordance with UNCLOS 1982.

**JAKARTA MEETING AND STATEMENT, SEPTEMBER 2005**

The Government of Indonesia and the IMO convened a meeting in Jakarta on 7 and 8 September, 2005 on enhancing safety, security and environmental protection in the Straits of Malacca and Singapore. The meeting was organized in co-operation with the Governments of Malaysia and Singapore. The statement of the meeting, known as the Jakarta Statement, noted several points of agreement relating to safety and environmental protection in the Straits of Malacca and Singapore. First, it was agreed that the

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15 Jakarta Statement on Enhancement of Safety, Security and Environmental Protection in the Straits of Malacca and Singapore, Jakarta, Indonesia, 8 September 2005, IMO Doc IMO/JKT 1/2, 8 September 2005
work of the Tripartite Technical Experts Group (TTEG) on Safety of Navigation should continue and be supported and encouraged, including its efforts in relation to the implementation of article 43 of UNCLOS. Second, it was agreed that the three littoral States should establish a mechanism to meet on a regular basis with user States, the shipping industry and other stakeholders to discuss the issues of safety, security and environmental protection in the Straits of Malacca and Singapore and to facilitate co-operation, including exploring the possible options for burden-sharing. Third, it was agreed that efforts should be made through the three littoral States to establish and enhance mechanisms for information exchange within and between States so as to enhance maritime domain awareness and contribute to the enhancement of co-operative measures. It was agreed that where possible, these mechanisms should build on existing arrangements such as the TTEG mechanisms.

KUALA LUMPUR MEETING AND STATEMENT, SEPTEMBER 2006

The Kuala Lumpur Meeting was convened by the Government of Malaysia and the IMO and was held from 18 to 20 September 2006 in Kuala Lumpur, Malaysia. It was convened pursuant to decisions of the Jakarta Meeting and of the IMO Council and was organized in co-operation with the Governments of the other two littoral States. The countries and organizations attending the meeting were similar to those that had attended the Jakarta meeting. The purpose of the meeting was to provide an opportunity for further discussions on recent developments relating to safety, security and environmental protection in the Straits of Malacca and Singapore with the aim of developing mechanisms and programmes to facilitate co-operation in keeping the Straits of Malacca and Singapore safe and open to navigation, including the possible options for burden sharing. 16

At the Kuala Lumpur Meeting the three littoral States submitted a paper advising participants of the development of a co-operative mechanism between the three littoral States and user States on safety and environmental protection in the Straits of Malacca and Singapore. The co-operative mechanism proposed by the three littoral States consists of three elements. First, the three littoral States agreed to establish a Forum for Co-operation to promote open dialogue and discussions between the littoral States, user States and other interested parties. The Forum for Co-operation will be the main avenue for interested user States and other interested parties to be invited to meet and co-operate with the littoral States. Second, the three littoral States agreed to propose the Implementation of six Projects to enhance safety and environmental protection and requested user States to cooperate directly in these projects. One of the most important developments at the KL meeting was that two major user States, China and the United States, expressed interest in participating in the three of the proposed projects. Third, the three littoral States agreed to establish an Aids to Navigation Fund that would enable user States and other stakeholders to make financial contributions to enhance navigational safety and environmental protection. The main purpose of the Fund is to provide a channel for

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user States and other interested parties to co-operate by providing financial support for the provision and maintenance of critical aids to navigation in the Straits.

**2007 IMO MEETING AND THE SINGAPORE STATEMENT, SEPTEMBER 2007**

The third and final IMO Meeting on Enhancement of Safety, Security and Environmental Protection in the Straits of Malacca and Singapore was convened by the IMO and the Government of Singapore from 4-6 September 2007. During the meeting the littoral States formally launched the cooperative mechanism announced at the Kuala Lumpur meeting and they provided more details on its three components. They also briefed participants on the progress made to secure sponsors for the six projects have been proposed by the three littoral States. Participants were also updated on the measures being taken by the defence forces of the three littoral States to enhance security in the Straits. The Singapore meeting was attended by representatives from 50 countries and 17 maritime-related organizations.

The Singapore Statement affirmed the sovereignty, jurisdiction and territorial integrity of the littoral States over the Straits, and that the littoral States have primary responsibility for safety, security and environmental protection in the Straits. At the same time, the Statement acknowledges the role of the IMO, the user States, the shipping industry and other stakeholders in cooperating with the littoral States in promoting and enhancing safety of navigation and environmental protection, and in ensuring the uninterrupted flow of traffic in the Straits. It also invites the IMO to participate in the cooperative mechanism, to continue to cooperate with the littoral States and to provide assistance in attracting sponsors for the projects and contributors to the Aids to Navigation Fund. However, it also makes it clear that the initiative is being driven by the littoral States and that the IMO has a secondary role.

The Singapore Statement also makes it clear that the cooperative mechanism that has been devised builds upon and enhances existing cooperative arrangements. This is important in the regional context, as Indonesia usually favours building upon existing cooperative mechanisms rather than developing new mechanisms. Therefore, because the TTEG on the Safety of Navigation had worked successfully for years, the littoral States decided to build upon it and enhance its functions.

The Singapore meeting did not establish anything new. Rather, it clarified and solidified what had been agreed to in the two previous meetings and formally launched the cooperative mechanism. In particular, the littoral States were able to provide more details on the cooperative mechanism, and to publicly announce that user States had come forward to support 5 of the 6 projects and the Aids to Navigation Fund. Support for one or more of the projects came from China, Japan, Korea and the United States. In addition, Korea and the United Arab Emirates announced that they would contribute to the Aids to Navigation Fund. Several other States, including Germany, announced that they would try to find ways to participate in the projects.

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The support from private industry and other stakeholders for the Aids to Navigation Fund was disappointing. The IMO Secretary-General stated in his opening address that he found it disappointing that no voluntary contributions have been announced. He stated that the main challenge is how to sensitize interested parties to kick-start the required process. However, the one exception, as expected, was the Nippon Foundation of Japan. Consistent with its past generosity, it announced that it would be prepared to contribute to the Aids to Navigation Fund by providing up to a third of the costs of maintaining and repairing the aids to navigation during the first five-year period.

**SIGNIFICANCE OF THE NEW COOPERATIVE MECHANISM**

In his opening address at the IMO Singapore meeting, Mr. Efthimios E. Mitropoulos, the IMO Secretary-General, stated that he views the mechanism as “an historic breakthrough of great significance”. He stated that the cooperative mechanism constitutes the first attempt to put in place a formal framework to promote implementation of the both the spirit and intent of article 43 of UNCLOS.

The cooperative mechanism devised by the littoral States in consultation with the IMO and user States is indeed an historic breakthrough. It addresses or side-steps all of the concerns raised in the conferences and workshops held from 1994 to 1999 on the implementation of article 43 in the Straits. The cooperative mechanism is open to user States without attempting to define the meaning of user States. The cooperative mechanism also goes beyond article 43 in two ways. First, it clarifies that the IMO has a role of the IMO in the mechanism. Second, it calls for participation by private entities, including the shipping industry and other stakeholders.

User States and other stakeholders are likely to be willing to participate in the Cooperation Forum, as it will enable them to exchange ideas with the littoral States on how to enhance safety, security and environmental protection in the Straits. The International Association of Independent Tanker Owners (INTERTANKO) was the first to recognize the potential of the Cooperation Forum. At the Singapore meeting, it stated that it considers its involvement in the Cooperation Forum as a key opportunity, and that it is eager to contribute its time and resources to the Cooperation Forum and its future work by acting as a link between the littoral States, user States and the tanker industry. The Cooperation Forum will also enable user States and other stakeholders to work together with the littoral States in identifying new projects and new cooperative measures to enhance safety, security and environmental protection in the Straits.

User States and other stakeholders who contribute to the Aids to Navigation Fund will also have a voice in the management and operation of the Fund. A Committee comprising the littoral States and contributing users will be established to manage and operate the Fund. In addition, user States who contribute to specific projects will be able to sit as members of the Project Co-Ordination Committee. These mechanisms will ensure that user States and other stakeholders who cooperate with the littoral States will be given a voice in both the Projects and the Fund as well as in the Cooperation Forum.

The cooperative mechanism is likely to work for three reasons. First, the mechanism is initiated and driven by the littoral States, it recognizes the sovereignty and jurisdiction of the littoral States in the Straits, and it is consistent with international law including UNCLOS. Second, it recognizes that the IMO, user
States and other stakeholders have a role in cooperating with the littoral States, and it gives those who are cooperating a voice in the management and operation of the mechanisms. Third, because it is inclusive, open and flexible, it will be possible to adapt it to meet changing circumstances.

It should also be noted that the cooperative mechanism that was finally established for the Straits at the Singapore meeting is limited to measures to enhance safety and environmental protection and does not include measures to enhance maritime security in the Straits of Malacca and Singapore. This is consistent with the wording of article 43 of UNCLOS, as there is no mention of security in that article. It also reflects the fact that Indonesia did not believe that the new cooperative mechanism was an appropriate forum for enhancing cooperation on maritime security.

Prospects for enhancing environmental protection in the Straits

Once the cooperative mechanism is established, it is expected that the littoral States, in consultation with user States and other stakeholders, will identify additional projects to enhance safety and environmental protection in the Straits of Malacca and Singapore. Five of the six projects that have been approved relate to the safety of navigation. Additional projects are likely to be identified which would improve the safety of navigation in the Straits. Additional projects that might be considered to enhancement environmental protection in the Straits include:

1. assistance to littoral States in ratifying and effectively implementing all of the Annexes to MARPOL 73/78\(^{18}\), including the provision of adequate reception facilities in major ports in the littoral States, and the harmonization of national legislation implementing the MARPOL 73/78 and its annexes.

2. cooperative measures to combat intentional illegal discharges of oil or other hazardous and noxious substances in the Straits, including the increased use of port State control to investigate and prosecute ships responsible for intentional illegal discharges of oil in the vicinity of the Straits of Malacca and Singapore.

3. cooperative measures to ratify and effectively implement all of the IMO conventions on ship-source pollution, including OPRC 1990\(^{19}\), OPRC-HNS\(^{20}\), CLS 1992, Fund 1992;\(^{21}\) the Bunkers 2001\(^{22}\) and the Ballast Water 2004,\(^{23}\) and to consider whether it is desirable to harmonize their national implementing legislation on these conventions.

\(^{18}\) International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), text available free at www.imo.org under Information Resources.

\(^{19}\) International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC 1990), Australian Treaties Library, [1995] ATS 12


4. cooperative measures to develop contingency plans to deal with a major transboundary oil pollution incident in the Straits of Malacca and Singapore that is consistent with the OPRC 1990 and OPRC-HNS and to update the Standard Operating Procedures for a major pollution incident in the Straits of Malacca and Singapore. Such contingency plans should include oil companies, oil pollution response agencies, chemical companies and other relevant companies in the private sector.

If it is successful, the cooperative mechanism will enhance cooperation between the littoral States and the IMO, user States and other stakeholders in order to benefit the marine environment and international shipping, without threatening or undermining the sovereignty and territorial integrity of the littoral States.

As I noted in my paper at the SCA meeting in Okinawa, the concept of securing the oceans will have to be accepted as the basis of oceans governance in the long run if the region is to manage its oceans and their resources in a sustainable manner and establish good order at sea. However, this may take another generation or even longer. In the meantime, a gradual, incremental approach will be required. The time to start is now, and the place to start is confined areas like the Straits of Malacca and Singapore, where cooperation is essential to good governance, and where that the three littoral States, despite their differences, have a long history of good relations and cooperation. A practical first step will be to build on the enhanced cooperation among the three littoral States in developing the cooperative mechanism and extending it to include more measures to protect the Straits from ship-source pollution.

The Cooperative Mechanism can also be used as a model to promote cooperation in other areas in the Straits of Malacca and Singapore, including cooperation to combat piracy and armed robbery against ships, maritime terrorism and other crimes at sea. Further cooperation will not be possible, however, unless it is consistent with the three principles for cooperation set out by the three littoral States in the 2005 Batam Statement. The first principle is that the three littoral States have sovereignty in the Straits and primary responsibility for safety of navigation, environmental protection and maritime security in the Straits. The second principle is that the IMO, user States and other stakeholders have an interest in the Straits and can play a role in enhancing safety, security and environmental protection. The third principle is that any cooperative measures must be in conformity with international law including UNCLOS 1982.

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