

**STUDY ON BLUE PRINT FOR FUTURE DEVELOPMENT
OF SAFETY NAVIGATION AND MARINE ENVIRONMENT PROTECTION
IN STRAITS OF MALACCA AND SINGAPORE**

Submitted by Indonesia

SUMMARY

Executive Summary: This document proposes a study on blue print for future development of safety navigation and marine environment protection in Straits of Malacca and Singapore which is intended to provide clear and consistence direction for the Cooperative Mechanism's ways forward on the enhancement for safety of navigation and marine environmental protection in the Straits of Malacca and Singapore.

Proposed Solution: paragraph 22, 23, 24, 25 and 26

Action to be taken: paragraph 33, 34

Background

1 According to the part III of the United Nation Convention on the Law on the Sea (UNCLOS), the Straits of Malacca and Singapore (the Straits) is recognized as straits used for international navigation, and the 3 Littoral States bordering the Straits demonstrate vigorous supports and efforts to improve the safety of navigation for vessels exercising innocent passage through the Straits

2 The Straits roles as the most efficient passage for vessels transiting from the Middle East region of Asia, Mediterranean, Western Part of Europe, and Africa to the Far East Asian region, South East Asia region, Pacific area, and vice versa. Marine traffic transiting through the Straits is consistently growing in number, types and size of vessels where at present the number of navigating vessel in the strait has approach 100.000 vessel per annual including the largest size of 300.000 DWT vessel - the MalaccaMax.

3 The 650 NM Straits from Andaman Sea to Horsburgh is characterized with shallow waters, narrow channels, and navigational hazard, irregular tides, shifting bottom topography, the existence of fishing zones, wrecks, sub marine cables and pipes, and offshore constructions.

4 With respect to the Chapter IV and Chapter V of the Safety of Life at Sea Convention (SOLAS) that requires certain safety measures shall be adopted to assure the safe, secure, and smooth navigation, the 3 Littoral States tirelessly carry out efforts to improve safety of navigation and marine environmental protection in the Straits which have resulted in a number of policies, measures, and concepts.

5 International requirement, initiatives and future perspectives on the development and the use of modernized technologies in marine navigation activities are sustainably increased in line with the requirement on higher level of safety, security, accuracy, efficiency of navigation.

Overview on measures and policies for the improvement of safety of navigation and marine environmental protection in the Straits

6 Establishment of the TTEG in 1971 has successfully consolidated the 3 Littoral States' measures and policies on the improvement of safety navigation and marine environment protection in the Straits while at the same time respects the international rights of navigation through the Straits.

7 Establishment of Traffic Separation Scheme (TSS) in 1977 through the IMO Resolution A.375(X) and the extension of the TSS in 1981 through the IMO Resolution A.476(XIII) has provided more organized navigation along the critical passage of the Straits.

8 Implementation of the Mandatory Ships Reporting System in TSS in 1998 through the IMO Resolution MSC.73(69) adopted on 19 May 1998 has improved control, monitoring and organizing the TSS traffic by the authority and improved also the communications and provision of information among them.

9 Establishment of Cooperative Mechanism (CM) through the Singapore Meeting in 2007 opens wide opportunity to User States, Users, and Stake Holders to participate along with the 3 Littoral States for the improvement of safety navigation and marine environment protection in the straits, which has successfully finalized 4 projects, and at present is progressing the other 4 projects.

.1 Finalized CM's Projects:

- 9.1.1 Project-3: Demonstration project of class B Automatic Identification System (AIS) transponder on small ships (By Singapore).
- 9.1.2 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 (By Singapore)
- 9.1.3 Project-7: Feasibility Study on Emergency Towing Vessel (ETV) Service in SOMS (By Singapore)
- 9.1.4 Project-8: Concept Study on Real-time Monitoring of Under-Keel Clearance in the SOMS (by Singapore)

.2 On Going CM's Projects:

- 9.2.1 Project-1: Removal of wrecks in the Traffic Separation Scheme in The Straits of Malacca and Singapore (By Malaysia)
- 9.2.2 Project-2: Cooperation and capacity building on hazardous and noxious substance (HNS) preparedness and response and response in The Straits of Malacca and Singapore (By Malaysia)
- 9.2.3 Project-5: Replacement and maintenance of aids to navigation in the Straits of Malacca and Singapore (By Indonesia)
- 9.2.4 Project-6: Replacement of aids to navigation damaged by the tsunami disaster of December 2004 (By Indonesia)

10 Implementation of the Marine Electronic Highway Demonstration Project (MEH-DP) in the Straits that has been accomplished provides ability to collect meteorological, oceanographic and hydrographic data in real time and to deliver data and information for the benefit of traffic movement to the vessel navigating in the Straits and the environment protection as well.

Current related international issues and works

11 The International Maritime Organization (IMO), along with member states, associate member, intergovernmental organization and non-governmental organization are sustainably conduct serious efforts to provide better solutions for the improvement of safe, secure and efficient navigation as well as marine environment protection, and at present focus are given, but not limited, to the following issues:

- .1 Development of e-Navigation
- .2 Modernization of the Global Maritime Distress Safety System (GMDSS)
- .3 Long Range Identification and Tracking (LRIT) of Ships
- .4 Wider utilization of satellite and information technology
- .5 More accurate positioning, navigation and timing
- .6 Future standard of electronic charts
- .7 Marine Environment Protection
- .8 Provision of more useful Marine Safety Information

Localities

12 Growth of population and sustainable growth of connectivity among the three littoral states during the last decades trigger the occurrence of new transit destinations and increased number of crossing navigations in the straits.

13 Occurrence of new ports as well as the increased number of ships calling the main ports consequently stimulate the needs on the well-organized ship's routing system, STS area, and anchorage area, lay up area and place of refuge as well.

14 Fishing activities in particular the traditional fishing boats activities and the presence of local coastal navigations has to be entitled proper rights of using the waters of the Straits.

15 Growing number of submarine cables and pipes as well as offshore constructions that have according to the UNCLOS possess a right to occupy the waters, have to be secured from any potential danger of navigation.

16 The rich marine biodiversity of the Straits is compulsorily has to be protected.

Global Demands and Trends

17 Increasing trend and demand on the use of larger size of vessel

18 ASEAN Economic Community (AEC) that will be effective on 31 December 2015. AEC could stimulate higher flow of human and goods across the regional waters and would potentially affected the international traffic routes within the region including the Straits of Malacca and Singapore,

19 Global and regional economic development as well as the occurrence of new industrial and economic spots in particular at the regions that are connected to other regions through the Straits.

20 Global movement and perspective on the establishment of modern technology and integrated onboard and ashore communications and information system to facilitate safe and secure navigation and shipping process including the future development of national and global single windows.

Challenges

21 Timely develop and establish appropriate and harmonized measures to cope with future challenges in securing the implementation international right of navigation and simultaneously ensure safety of navigation and marine environmental protection in the Straits.

Way Forward

22 Identification of gaps to be addressed and future needs in ensuring safety of navigation and marine environmental protection in the Straits for the interest of international navigation who exercise transit and innocent passage through the Straits in respect with the provision of the United Nation Convention of the Law on the Sea (UNCLOS).

23 Conduct risk assessment and formulate risk management and control options to cope with marine characteristics of the Straits, traffic characteristics of the international and local navigation in the Straits, increased number, size and draft of vessels, future navigation system and technology, and future international standards and policies on safety of navigation and marine environmental protection.

24 Study and formulation of Blue Print on future development of safety navigation and marine environment protection in Straits of Malacca and Singapore that would role as a fundamental reference for the future works of the Cooperative Mechanism.

Methods

25 The three littoral states with the support of user states, users and stake holders, under the spirit of Article 43 of the UNCLOS, conduct possible efforts to meet the agreed objectives, among other through:

- .1 Site surveys, workshops, data collecting, comprehensive study etc.
- .2 Establishment of working group and/or correspondence group and/or experts group.
- .3 Invite views and practical approach of international organization, related association, industries, user states, users and stake holders
- .4 Scientific and academic approach

26 Formulation of Blue Print on future development of safety navigation and marine environment protection in Straits of Malacca and Singapore.

Benefits

27 Clear and consistent direction of the Cooperative Mechanism's works and programs.

28 Availability of well examined reference for future works and programs of the Cooperative Mechanism that assure the accomplishment of its goals.

29 Well programmed and well scheduled strategic works of the Cooperative Mechanism

30 Timely provision of policies, systems and infrastructures in the Straits to meet the growing requirement of the conventions, needs, standard, and technology.

31 Higher assurance on the successful provision of safety of navigation and marine environmental protection in the Straits.

32 Higher assurance on more convenient international navigation through the Straits

Action Requested to the Cooperation Forum

33 The meeting is requested to deliver views and opinion on the proposal for further consideration and decision by the TTEG on its way forwards.

34 Interested user states, users and stake holders of the Straits are invited to participate and to contribute in such ways that possible according to the provision of the rule and procedure of the Cooperative Mechanism, to materialize the agreed way forwards.