DIRECTORATE GENERAL OF SEA TRANSPORTATION
MINISTRY OF TRANSPORTATION
REPUBLIC OF INDONESIA

UPDATES ON STRAITS PROJECT

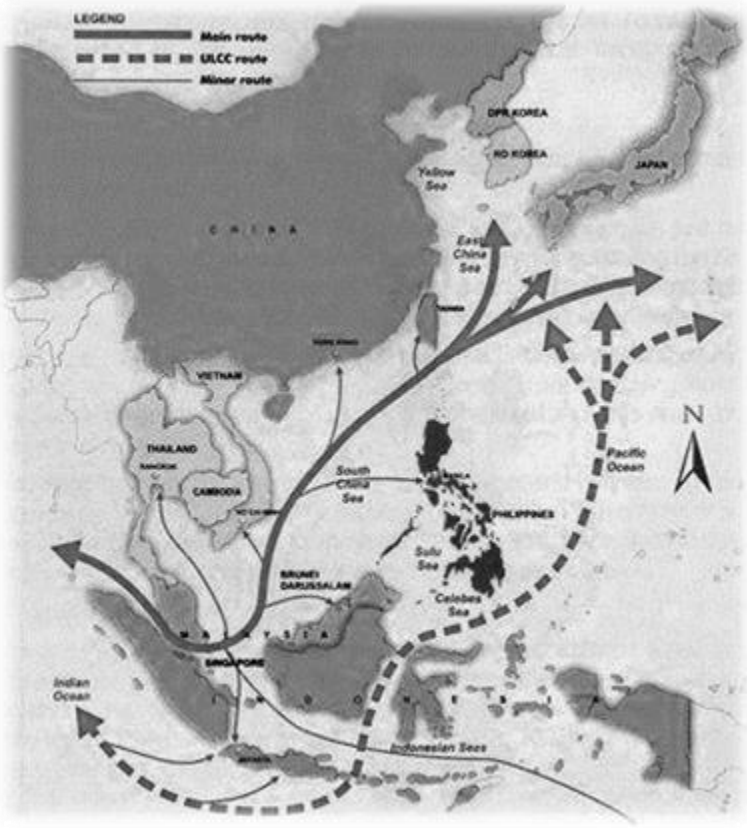
Project 10 : Study of the Blueprint for the Future Development of Safety of Navigation and Marine Environment Protection in the SOMS

11th COOPERATION FORUM
SINGAPORE
24 - 25 SEPTEMBER 2018

BACKGROUND

- Straits used for International Navigation (UNCLOS part III)
- 81.000 vessels/year (2015)

  (incl. 5,324 VLCC/Deep Draft, 18,470 Tanker vessel;)
- Dangerous features within the 650 NM length of the Straits
- Requires measures to assure Safe, Secure & Smooth Navigation and the protect marine environmental protection.
- Taking into consideration the International requirements, initiatives and future perspectives



OBJECTIVES

- To provide well examined reference for future works and programs of the Cooperative Mechanism that assures the accomplishment of its goals.
- To develop program and strategic works of the Cooperative Mechanism
- To timely provide provision of policies, systems and infrastructures in the Straits to meet the growing requirement of the conventions, needs, standard, and technology.
- To achieve higher assurance on the successful provision of safety of navigation and marine environmental protection in the Straits

PROJECT OUTPUTS

Burden-Sharing: Ensuring SoN & MEP in SOMS Through Enhanced IMO Compliance and SOMS Information Sharing

Roadmap for future cooperation in SOMS, regarding SoN & MEP

Identifying specific projects to be undertaken in SOMS by the Littoral States and stakeholders

PROGRESS OF BLUE PRINT PROPOSAL ON THE TTEG AND CM MEETINGS

- Proposal was presented during the 7th Cooperation Forum, Langkawi, Malaysia, in 2014.
- Adopted as a new Straits Project during the 39th TTEG Meeting, Langkawi, Malaysia, in 2014.
- Update was Presented during the 8th Cooperation Forum, Singapore, in 2015, on 9th Cooperation Forum, Indonesia in 2016, and 10th Cooperation Forum, Indonesia in 2017.
- Discussed on the 8th Project Coordination Committee, Singapore, in 2015 and 9th Project Coordination Committee, Indonesia in 2016.
- Technical Working Group was establish during the 10th Project Coordination Committee to further discuss the implementation project

PHASES OF THE WORKS

1. Preliminary Study;
2. Workshop;
3. Working Group;
   - Consider views and practical approach of international organization, related association, industries, user states, users and stake holders.
   - Scientific and academic approach.
4. Final Report of the Preliminary Study is expected to be presented during the 11th Project Coordination Committee Meeting
5. Follow Up Study;
   - Site surveys and data collection;
   - Risk assessment and formulation of risk management & control;
   - Identification of gaps between current condition and requirement;
   - Defining technology, policies, regulation and measures

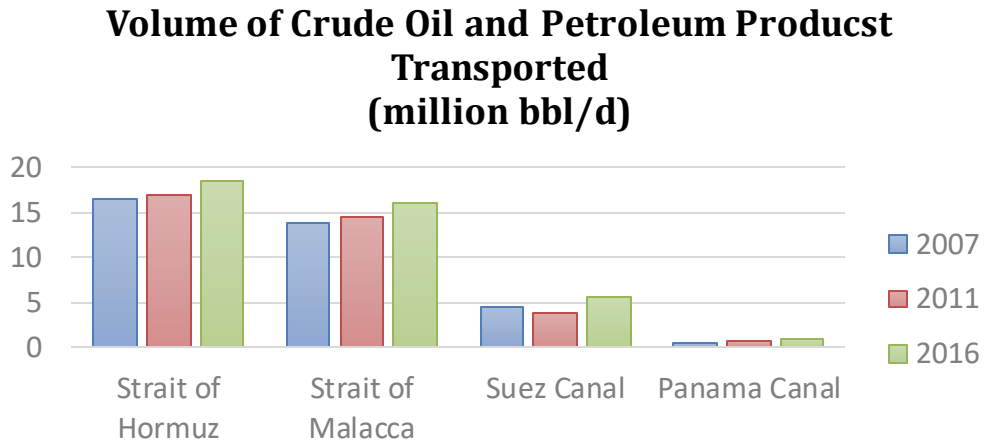
PROPOSED SCHEDULE

	2016	2017	2018	2019
1. Preliminary Study				
2. Workshop				
3. Working Group				
4. Final Report of the Preliminary Study Presentation				
5. Follow Up Study				

Consultation Taken Place

- In Singapore, the Ocean Law and Policy Team (OLPT) of the Center for International Law (CIL), National University of Singapore, the NMC and SSA, and the MPA were consulted.
- In Malaysia, MIMA was consulted together with the Marine Department Malaysia, Malaysian Ministry of Transportation and other Stakeholders
- In Indonesia, the DGST led numerous meetings with the officials from the stakeholders including academics and experts.

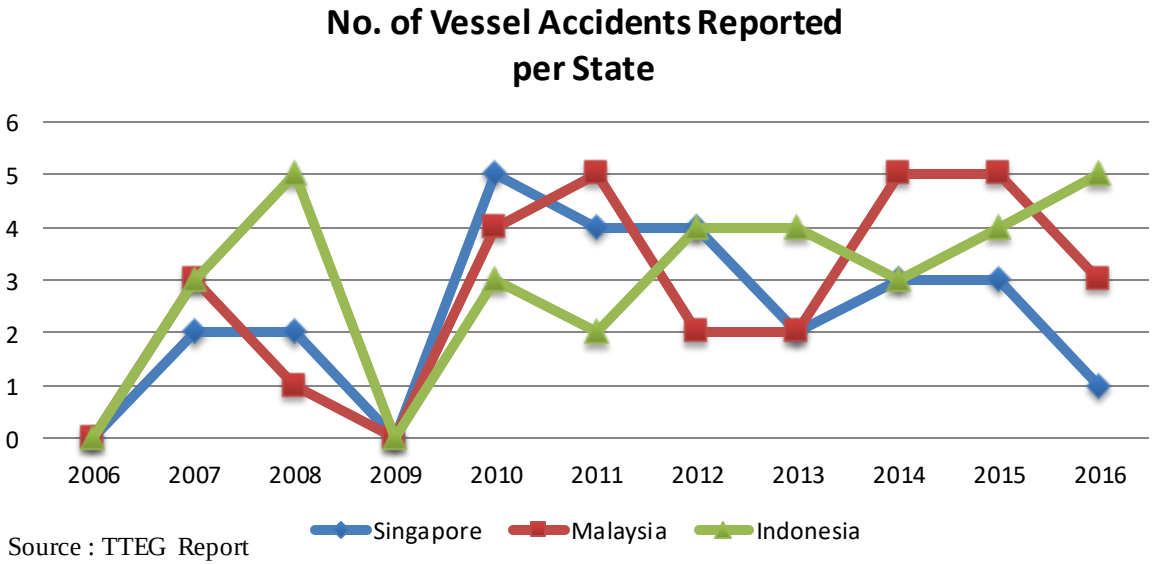
DATA COLLECTION IN SOMS (1)



Source : eia.gov

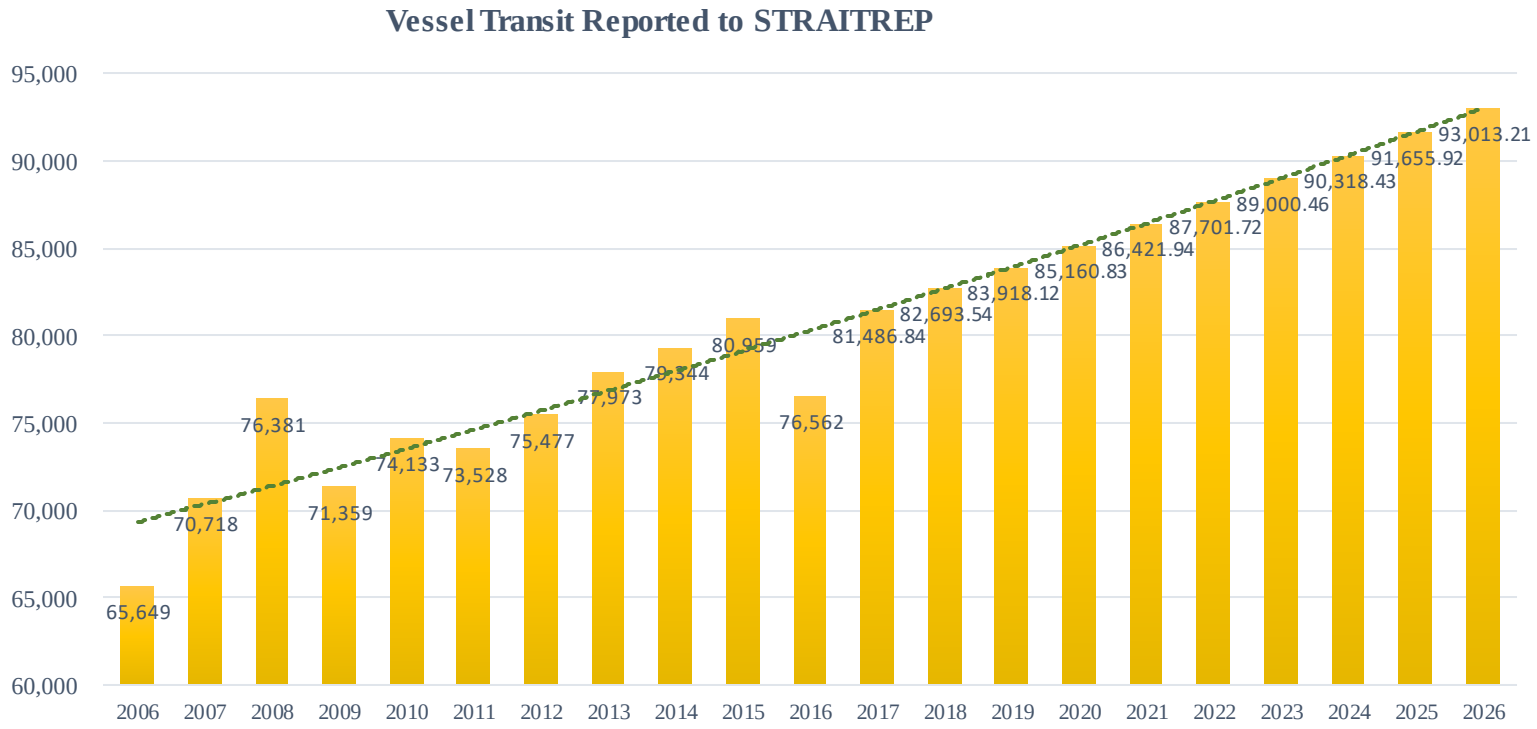
SOMS become the second-largest oil trade checkpoint in the world after the Strait of Hormuz

- Container vessels are reported to have the highest average percentage of accidents, followed by tankers and motor vessels.
- The most frequent causes of accidents over 2007-2012 are collisions with a mean of 3.9, followed by grounding at 1.9, sinking at 1.5 and fire at 1.3.
- In 2015 alone, sinking made up half of the causes of vessel accidents recorded.



Source : TTEG Report

DATA COLLECTION IN SOMS (2)

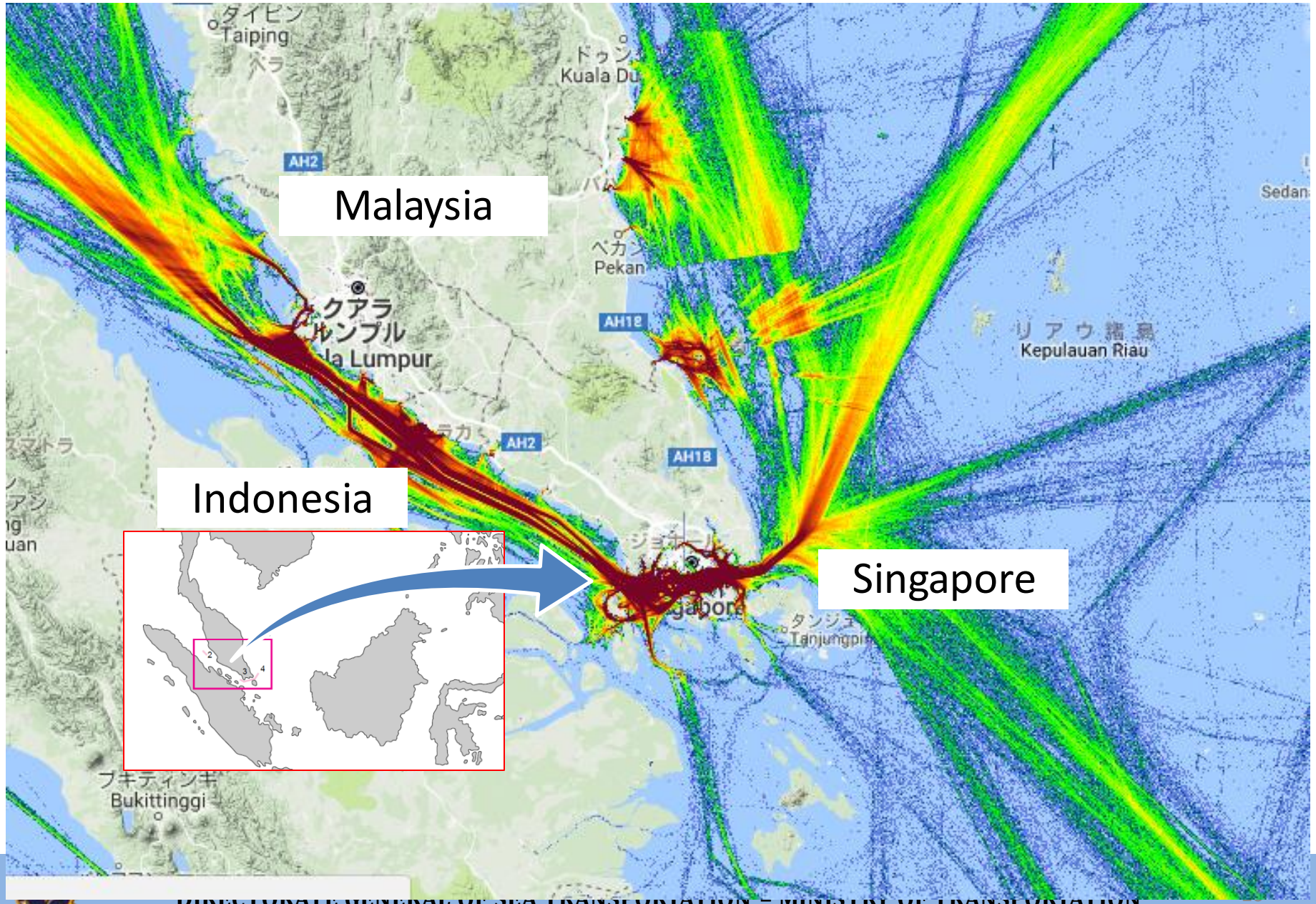


Source : Zifa Consultant

Projected Vessel Traffic 2020 - 2026

The number of projected ship traffic through the Straits of Malacca and Singapore for the next ten years experienced a significant rise with an increase rate of 2% per year

Traffic Density of the Vessel in the SOMS



OIL SPILL ACCIDENT

Oil Spill in The Strait of Malacca and Singapore

- With the high-density traffic TSS by larger tanker and carries chemicals cargo increase the risk of disposal harmful wastewater from vessel, both from operational of the vessel as well as waste from vessel accident;
- Oil spill data recorded from 2003 to 2017 with a total of 7 oil spill accidents and the total volume of oil spilled is 721 M

Vessel	Load	Volume (barrel)	Cause
Showa Maru	Crude	54,000	Grounding
Tadotsu	Crude	293,000	Unknown
Nagasaki Spirit – Ocean Blessings	Crude	100,000	Collision
Evoikos – Orapin Global	Crude	175,000	Collision
Sun Vista	Fuel oil	14,000	Sinking
Natuna Sea	Crude	49,000	Grounding
Indah Lestari	Phenol	89	Sinking
MV Waily – MV Bunga Kelana	Light crude oil	18,000	Collision

Largest Oil Spill in The Strait of Malacca and Singapore (MIMA)

Vessel	Coordinate	Volume
Sea Liberty – Arabian Express	1º 12' 80'' N/103º 53' 20'' E	Unknown
Hebei Loyalty	1º 17' 40'' N/104º 00' 80'' E	3 L
Atlantico Hero – Oriental Pioneer	1º 15' 62'' N/103º 57' 54'' E	100 MT
Fei He – Lime Galaxy	1º 12' 09'' N/103º 39' 63'' E	281 MT
Hammonia Thracium	1º 11' 00'' N/103º 50' 00'' E	70 MT
Castle – Dumun	1º 14' 60'' N/103º 57' 10'' E	Unknown
Sinica Graeca	1º 25' 90'' N/104º 29' 27'' E	270 MT

Total Volume Oil Spill in The Strait of Malacca and Singapore (IMO)

BENCHMARKING AND LEGAL ASPECT ASSESSMENT

Benchmarking

- Dover Strait;
- Norway;
- Tokyo MoU

Legal Aspect Assessment

- Regime of Straits Used for International Navigation

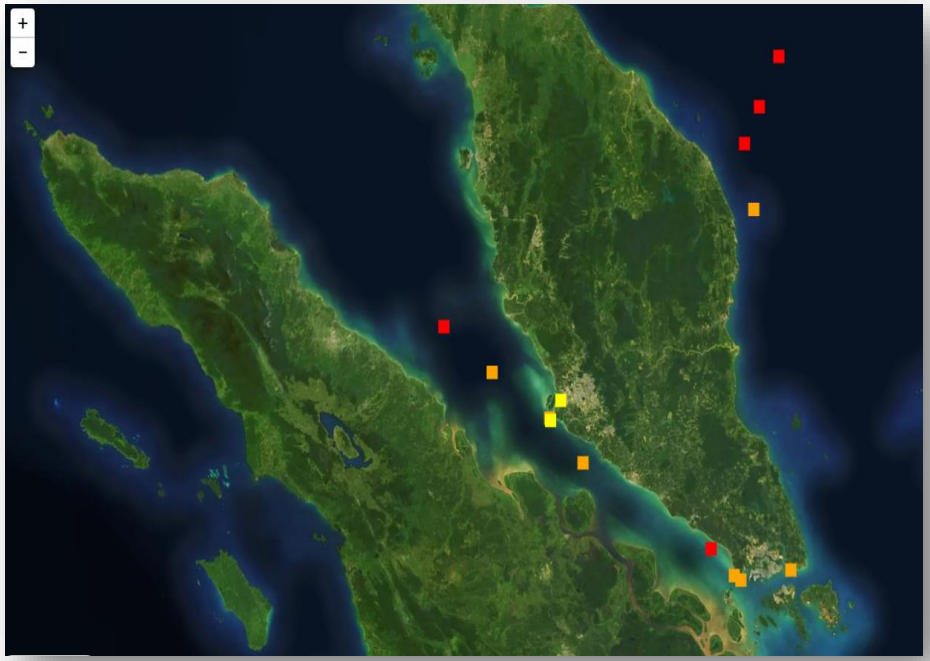
  Straits used for international navigation, such as the SOMS, are governed primarily by Part III of the LOSC, which has 3 sections and 9 articles.

- Domestic Legal Regimes Assessment

  The three littoral States are members of IMO, and as consequence, their domestic laws and regulations substantively reflect obligations consented to under IMO and other international conventions which they have acceded to.

TECHNICAL ASPECT ASSESSMENT

Frequency analysis of accidents in areas with high historical vessel accident results in that the area has a higher frequency of vessel accidents compared to other areas outside the high-risk zone. The 20 years analysis using an IWRAP Risk Assessment tools resulting in higher vessel collision frequency. These results indicate the necessary mitigation needed to reduce the frequency of vessel accidents in these areas.



Area With History of Vessel Collisions

STRATEGIC DIRECTION OF COOPERATIVE MECHANISM

Strategic Direction of CM

- ✓ The CM has been a convenient avenue to pursue the Littoral States' common goal of ensuring the safe passage of vessels and the protection of the marine environment of the SOMS, and has been by and large successful as an institution of cooperation.
- ✓ Marked by open communication and transparent engagement, it has implemented 13 projects since 2007 which have greatly improved the SON and MEP of the SOMS.
- ✓ However, the digitalization of the maritime industry and the need to continue keeping the waters of the SOMS pollution free have made it imperative to articulate a new strategic direction for the institution.
- ✓ The Littoral States must now deepen their collaboration and transform from a flexible form of engagement to an outcome-based approach as they pursue the CM's mandate under Article 43 UNCLOS.

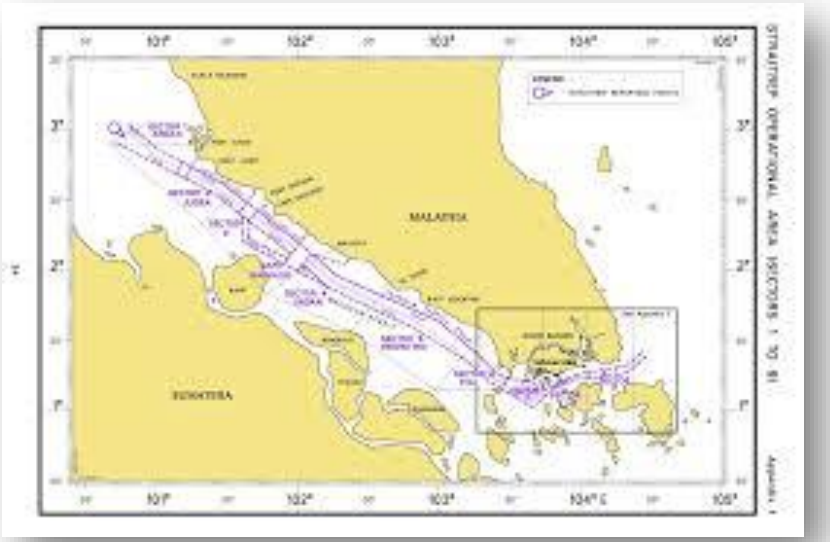
Proposed Measures

- Project Coordination Committee
  - Vest power to establish working groups on the PCC for better implementation, management, and control of projects
  - Establish a permanent secretariat (PS) to support timely implementation of projects
  - Appoint the PS as documenting body, repository and custodian of all information related to the conduct of TTEG and CM meetings
  - Upon request by the Chair State, the PS can also serve as Ad hoc Secretariat for TTEG and CM meetings hosted by the Chair.

INDICATIVE LIST OF PROPOSED PROJECTS AND A WAY FORWARD

Indicative List of Proposed Project

- Marine Spatial Planning;
- Routeing System Rationalization;
- Joint Surveillance on SOMS Routeing System;
- Ballast Water Management System;
- Green Seas Initiatives;
- TTEG Data Centre



A Way Forward

- More in depth and comprehensive follow up study on each area;
- Invite stakeholders to participate/involve on the follow up study.

THANK YOU