

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 PROJECT COORDINATION COMMITTEE SINGAPORE 28 SEPTEMBER 2018

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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





<u>PROJECT OUTPUTS</u>



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



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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)



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

No. of Vessel Accidents Reported per State

- 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.





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DATA COLLECTION IN SOMS (2)

Vessel Transit Reported to STRAITREP



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

<u>Oil Spill in The Strait of Malacca and</u> <u>Singapore</u>

- 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 –	Crude	100,000	Collision
Ocean Blessings			
Evoikos – Orapin Global	Crude	175,000	Collision
Sun Vista	Fueloil	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 –	1º 12' 80" N/103º 53' 20" E	Unknown
Arabian Express		
Hebei Loyalty	1º 17' 40'' N/104º 00' 80'' E	3 L
Atlantico Hero –	1º 15' 62'' N/103º 57' 54'' E	100 MT
Oriental Pioneer		
Fei He – Lime	1º 12' 09" N/103º 39' 63" E	281 MT
Galaxy		
Hammonia	1º 11' 00" N/103º 50' 00" E	70 MT
Thracium		
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



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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 PROJECT (1)

No	Proposed Projects	Description
1	Marine Spatial Planning	This project ensures resilient and healthy marine ecosystem of the SOMS that support sustainable economic, recreational, and cultural opportunities for present and future coastal stakeholders of the SOMS.
		Singapore has completed its own MSP. Malaysia and Indonesia, with expert guidance from Singapore, can establish their own MSPs.
		The MSPs must allocate waters for commercial, recreational, and artisanal fisheries, aquaculture, recreation and tourism, military uses, marine research and monitoring activities and potential new or expanded uses such as marine renewable energy, dredging and dredge disposal, marine product extraction, and mining.
		For those parts of the SOMS used for marine transportation, navigation, and infrastructure, particularly in view of launch of unmanned vehicles which may require a separate fairway and port facilities, the Littoral States must engage in common discussions to ensure SON in the SOMS.



INDICATIVE LIST OF PROPOSED PROJECT (2)

No	Proposed	Description
	Projects	
2	Routeing System	This project addresses predicted increase in vessel traffic
	Rationalization	traversing the SOMS and cross-traffic concerns. The Littoral
		States must jointly determine TSS extension, unmanned
		vehicles fairway, precautionary areas, two-way routes,
		recommended tracks, areas to be avoided, and other traffic
		routes for safer transits across the SOMS.
3	Joint Surveillance	The Littoral States must pool and harmonize the operations of
	of SOMS	their technological systems, resources and infrastructure
	Routeing System	similar to the Dover's CNIS, to provide 24-hour surveillance
		of the SOMS area, particularly the TSS and routeing system.
4	Ballast Water	The Littoral States should come up with joint guidelines for
	Management	Ballast Water Exchange and Same Risk Area Designation.
	System	
5	Green Seas	The Littoral States should establish common guidelines to
	Initiative	implement 2020 Sulfur Reduction standard.
6	TTEG Data	The TTEG must establish a center for data collection,
	Center	collation, analysis and dissemination, necessary for the work
		of the CM and research and development data requirements
		of the Littoral States.



RESULT OF THE PRELIMINARY STUDY (3)

A Way Forward

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





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THANK YOU



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