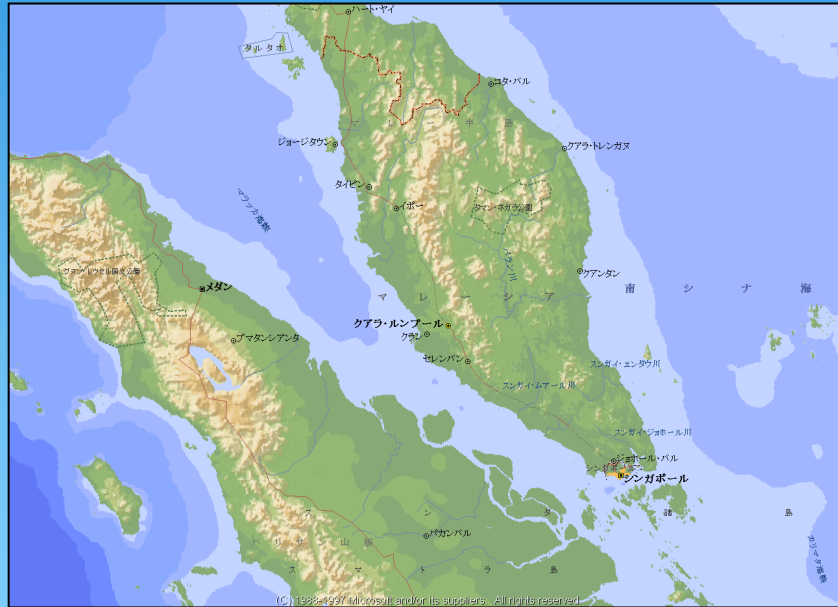


# Contribution to the Straits of Malacca and Singapore by MSC



**The 14<sup>th</sup> Co-operation Forum**

**31<sup>st</sup> July - 1<sup>st</sup> August 2023**

**Singapore**

**Mr. Kenji Nagamatsu**

**Executive Director**

**Malacca Strait Council of Japan**

# Content of Presentation

1. Significance of Straits of Malacca and Singapore (SOMS) for Japan and the world economy

2. About the Malacca Strait Council of Japan (MSC)

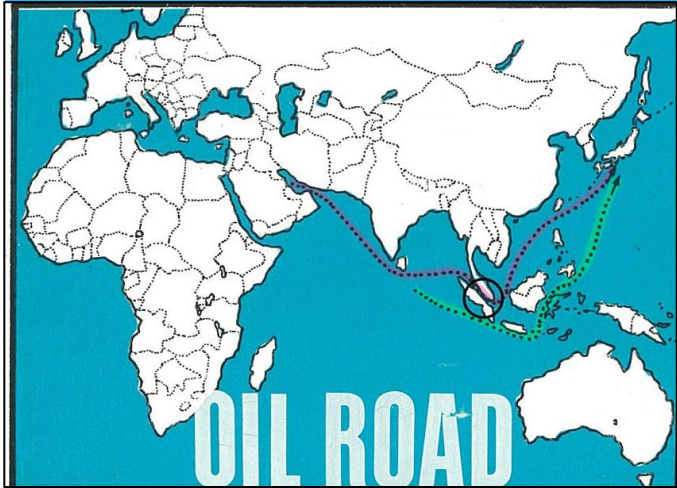
- Background of the establishment of MSC
- Main cooperative activities of MSC in the early stage etc.

3. MSC's cooperation under the framework of TTEG and the Cooperative Mechanism

- Aids to Navigation Fund (ANF)
- Joint Hydrographic Survey etc.

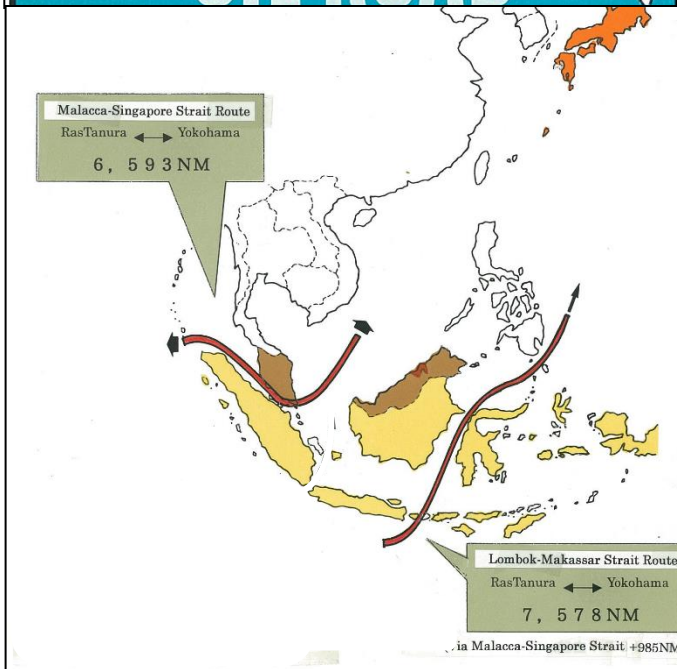
4. MSC's Perspective on the Cooperation in the SOMS

# 1. Significance of the Straits of Malacca and Singapore (SOMS) for Japan and World Economy



- 90% of Japan's imported crude oil Middle East → (VLCC tankers) → SOMS → Japan
- Trade goods : Japan ↔ EU vessels transiting SOMS.
- SOMS → Important sea lane of communication for the Japanese economic security

- VLCC : 19 to 20 days to Japan via SOMS (6,593NM)
- If SOMS is unable to navigate → VLCC chooses Lombok /Makassar Straits route (7,578NM)  
→ requires 983 more NM (3 more days)  
→ additional costs USD 30 million.

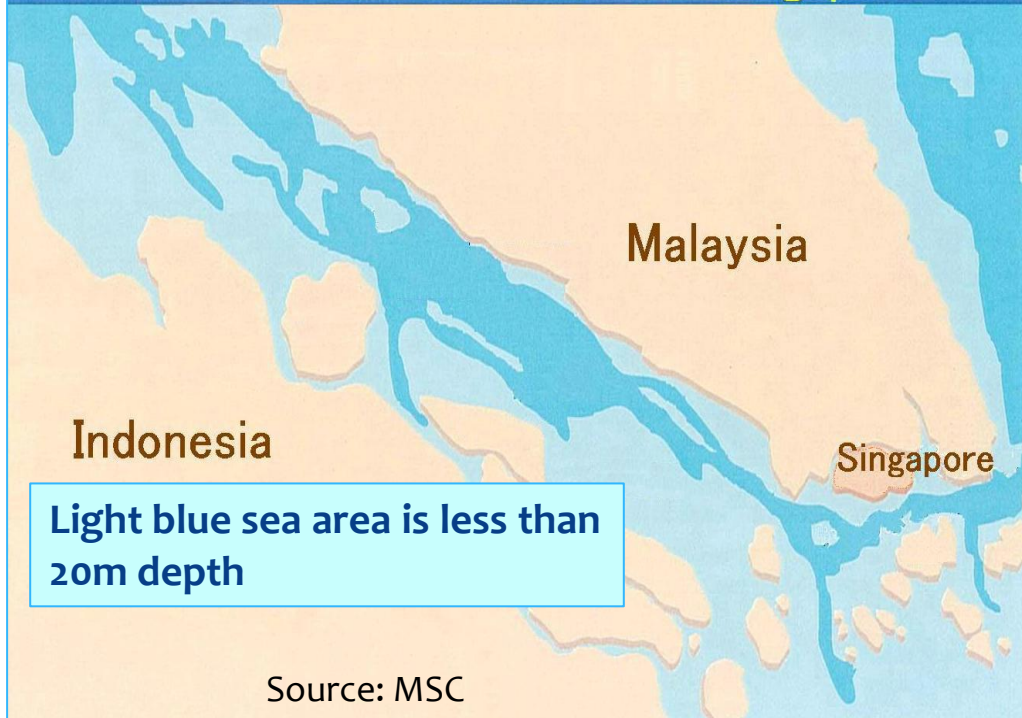


- Sea lane is critically important for Japan  
→ SOMS should be kept open and safe to all the users.

# Shipmasters' carefulness in transiting SOMS

- Eastern half of SOMS → 500 km is the area with many shallow waters of less than 20m deep .
- These areas are territorial waters of Indonesia, Malaysia and Singapore,
- Requires STRAITREP to VTS center of the respected states.
- 3.5m Under Keel Clearance is required

## The Straits of Malacca and Singapore



- More than 100 thousand vessels/year transiting SOMS → One of the busiest Straits in the world.
- Many transiting vessels → different types and different speed.
- Complicated flow of the tidal current.
- Many crossing vessels and many small fishing boats.
- Some malfunctioned Aids to Navigations → due to ship's collision, lightning strikes, vandal theft from the AtoN facilities.
- Risk of encountering piracy.

## 2. About the Malacca Strait Council of Japan (MSC)

1. Established in 1969. More than a half-century of history.
2. Public Interest Incorporated Organization: quasi-governmental organization
3. Main purposes are; ensuring the safety of navigation and protection of the marine environment in the important straits, canals and sea areas
4. Main activities are; hydrographic survey to create an accurate navigation chart, removal of shipwrecks, installation of Aids to Navigation (AtoNs), support maintenance of AtoNs, donation of tender vessels and etc..



# Background of the Establishment of MSC

1. 1960<sup>th</sup> the large size tanker( VLCC) → Torrey Canyon incident in England: worst oil spill → Industry side requested the update of accurate Navigational Charts of SOMS to Japan → Japan was then the main user state of SOMS.

2. The government of Japan consulted with the littoral States for possible support from Japan for hydrographic survey

→ Consideration about the surrounding circumstances of the littoral States

→ Appropriate way is to establish the public organization in Japan to conduct technical cooperation for safer navigation

→ Public organization is capable of accepting funding support from the Japanese stakeholders.

3. 1969, public organization Malacca Strait Council of Japan (MSC) established

→ Cooperation from Japan started through MSC

→ Funding support for the cooperation is from the Nippon Foundation, the Japanese Shipowners' Association, etc.

→ Consultation with the littoral States in implementing the actual cooperation

→ Close collaboration with the government of Japan and industries

→ Various cooperation had been conducted since then

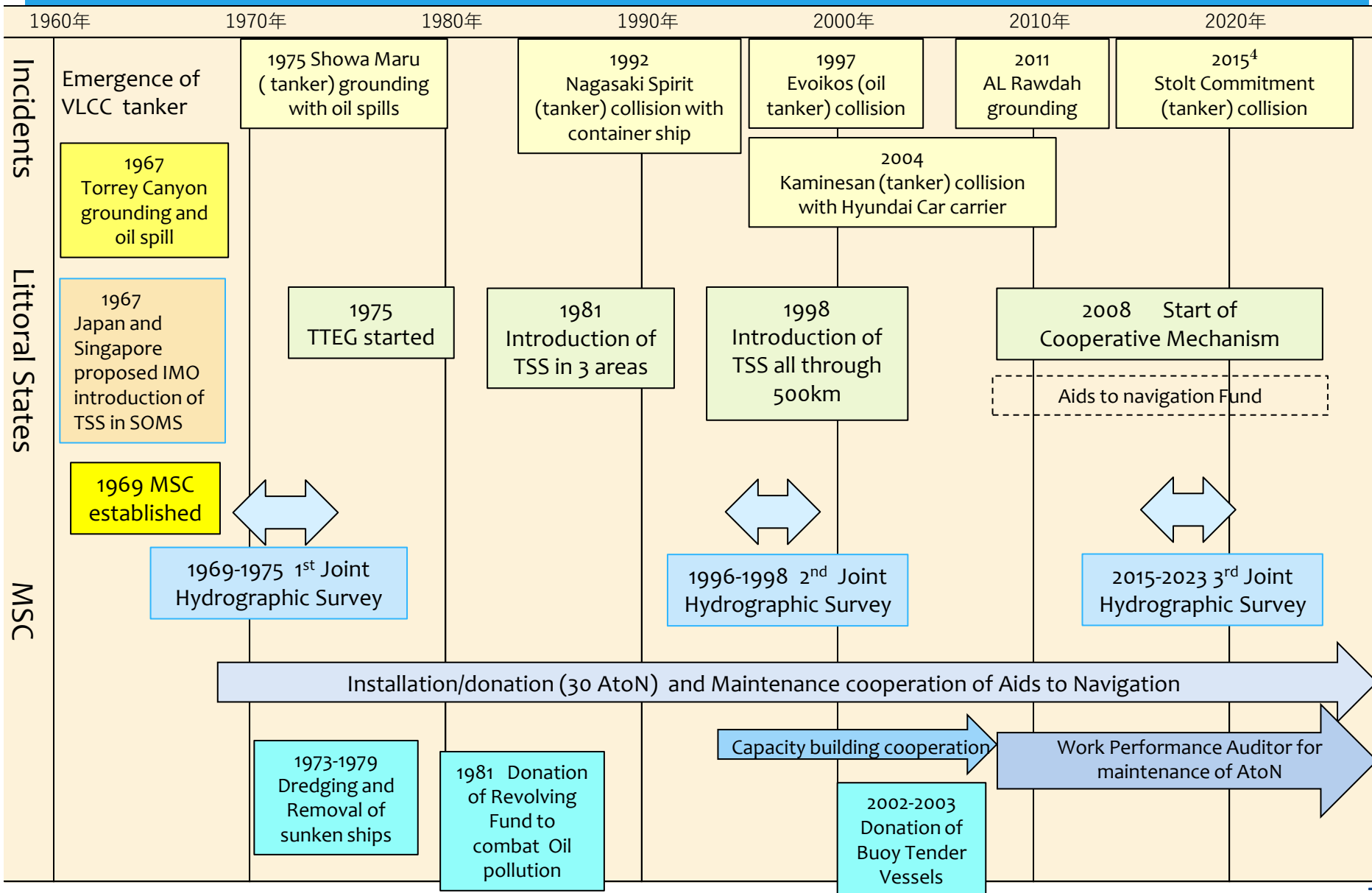
# Main Cooperation by MSC in the Early stage

Main cooperation by MSC in its early stage is as follows.

Large part of funding support is from the Nippon Foundation.

- \* Joint Hydrographic Survey in the SOMS  
1969~1975, 1978, 1996~1998    3.5 billion yen
- \* Removal of Sunken Ships  
1973~1978    1.4 billion yen
- \* Installation of Aids to Navigation (total 45 times in 30 sites)  
1969~2000    2.8 billion yen
- \* Cooperation in Maintenance of Aids to Navigation  
1969~2002    2.5 billion yen
- \* Donation of Oil Skimming Vessel to Singapore  
1973    50 million yen
- \* Donation of the Buoy Tender vessels to Malaysia and Indonesia  
1976, 2002 & 2003    2.1 billion yen
- \* Dredging works in the Strait of Singapore  
1979    1 billion yen
- \* Donation of Revolving Fund to Combat Oil Pollution  
1981    400 million yen

# History of major cooperation by MSC and Japan





## Cooperation of the Installation and Maintenance of AtoN

- 51 Aids to Navigation ( AtoNs) → critically important for the introduction of TSS
- 30 out of these 51 AtoNs → installed and donated by MSC (funding support by the Nippon Foundation)
- Other 21 AtoNs → installed by the respective littoral States



# Donation of the Buoy Tender Vessels

Malaysia: “PEDOMAN” May 2002

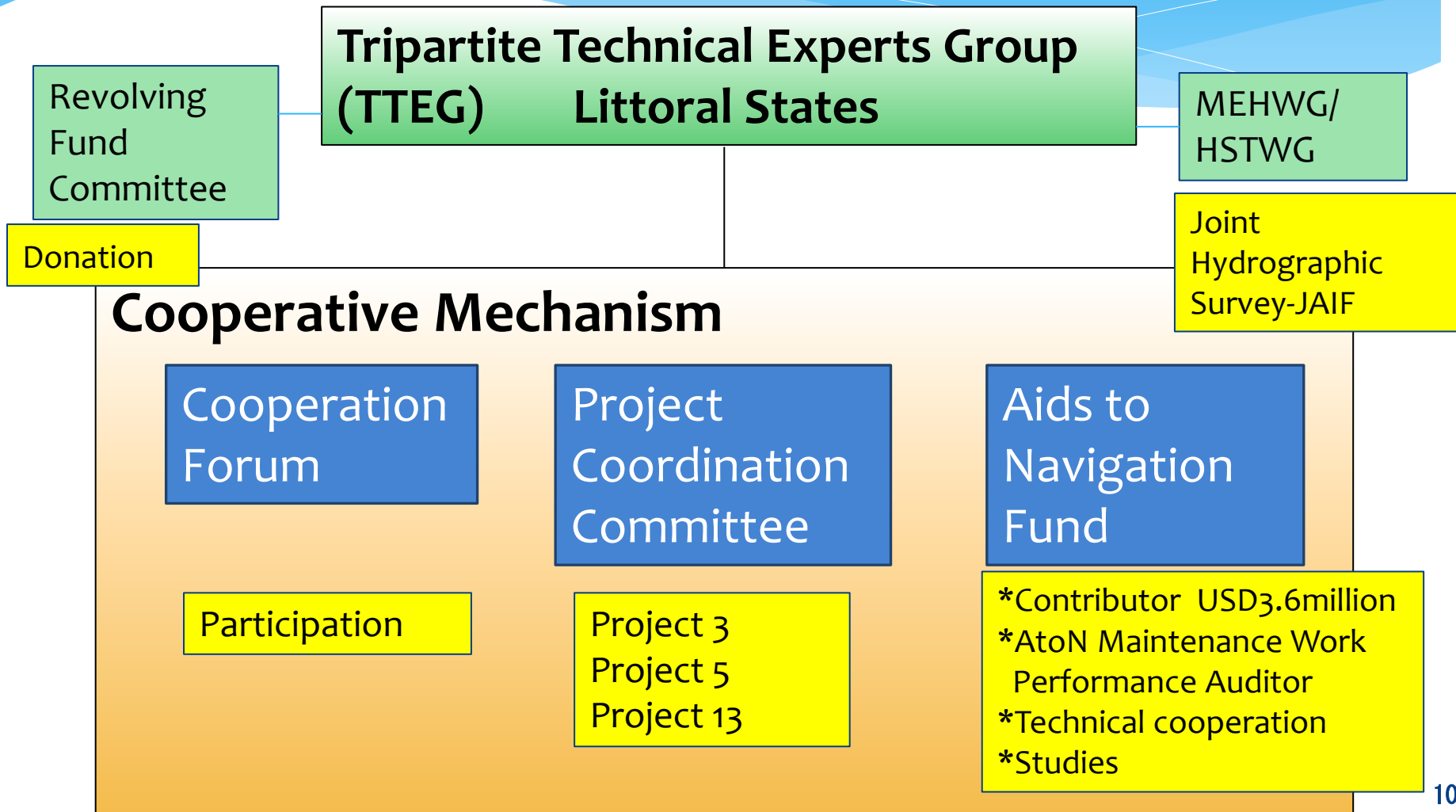


Indonesia: “JADAYAT” Oct. 2003



### 3. MSC's Cooperation under the Framework of TTEG and Cooperative Mechanism

**\* Cooperative Mechanism started in 2008**



# Japanese Side Cooperation for ANF

## Japanese Side Cooperation

**Nippon  
Foundation**

- Japanese Shipowners' Association.
- Petroleum Association of Japan
- Others

**Malacca  
Strait  
Council**

**Work  
Performance  
Auditor**

**Government  
of Japan  
(Ministry of  
Land,  
Infrastructure  
Transport and  
Tourism)**

**Aids to Navigation Fund  
(Aids to Navigation Fund  
Committee)**

**Capacity  
Building  
Maintenance  
Work  
Inspection**

**Financial  
Cooperation**

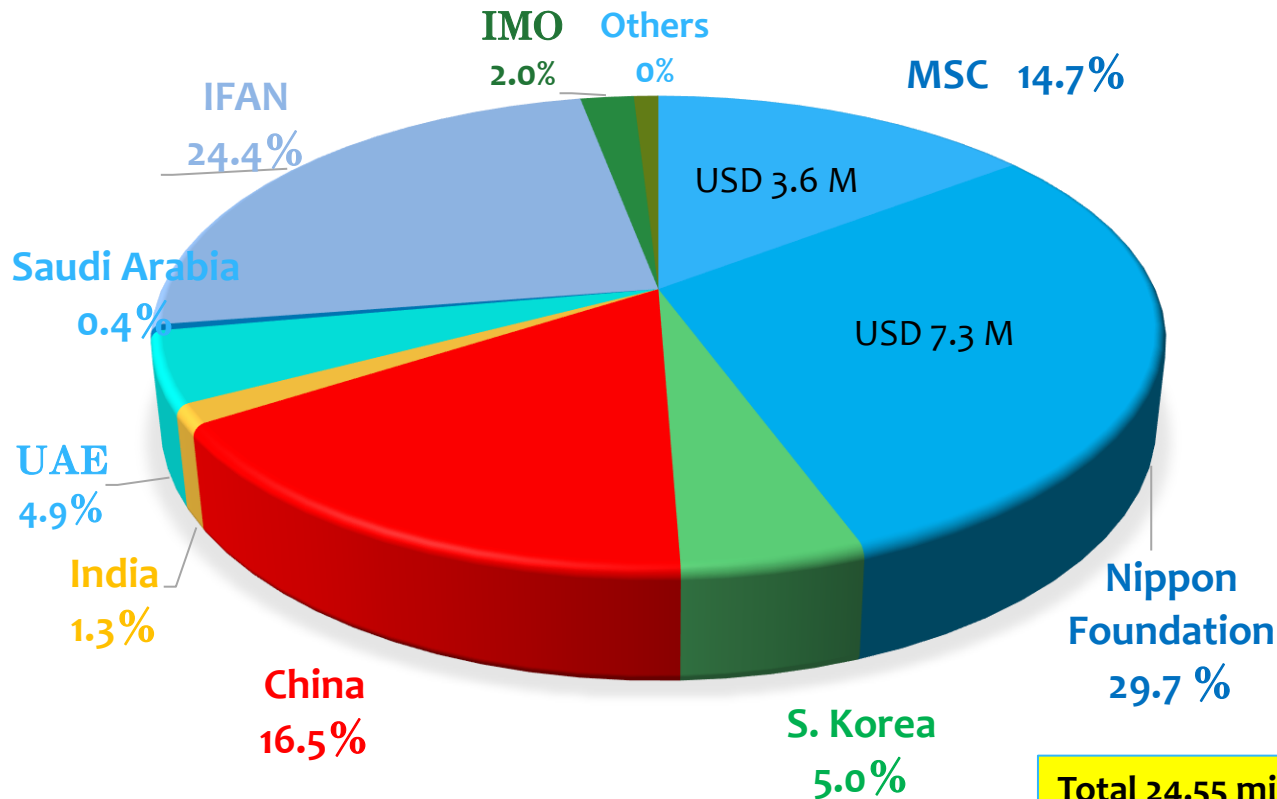
**Technical  
Cooperation**



# Amounts of Contributions to the Aids to Navigation Fund

The ANF is used for the Strait Project 5 → the replacement and maintenance of the critical Aids to Navigations for the TSS → Approval of Aids to Navigation Fund Committee meetings (twice a year).

2008 - 2022, Total amount of contribution to ANF → USD 24.55 million USD → 45% of the total amount is from Japan (MSC 15%, The Nippon Foundation 30%)



Source: MSC

Total 24.55 million USD  
by end of 2022



# Auditor for Aids to Navigation Maintenance Work

MSC works together with the government staff of the littoral States as

- 1) the technical cooperation provider
- 2) the Maintenance Work Performance Auditor( appointed by Aids to Navigation Fund Committee )



MALAYSIAN TEAM



INDONESIAN TEAM

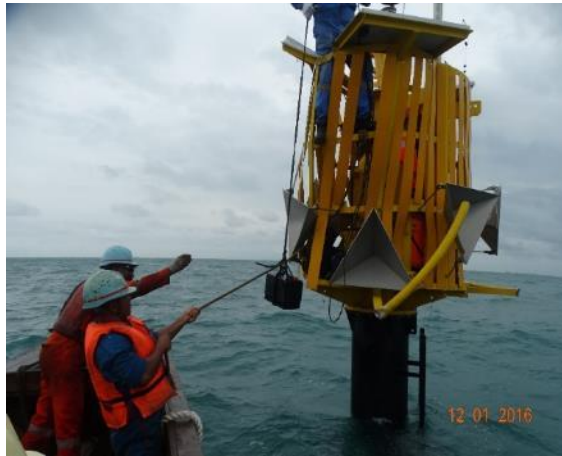


SINGAPOREAN TEAM





# Auditor for Aids to Navigation Maintenance Work

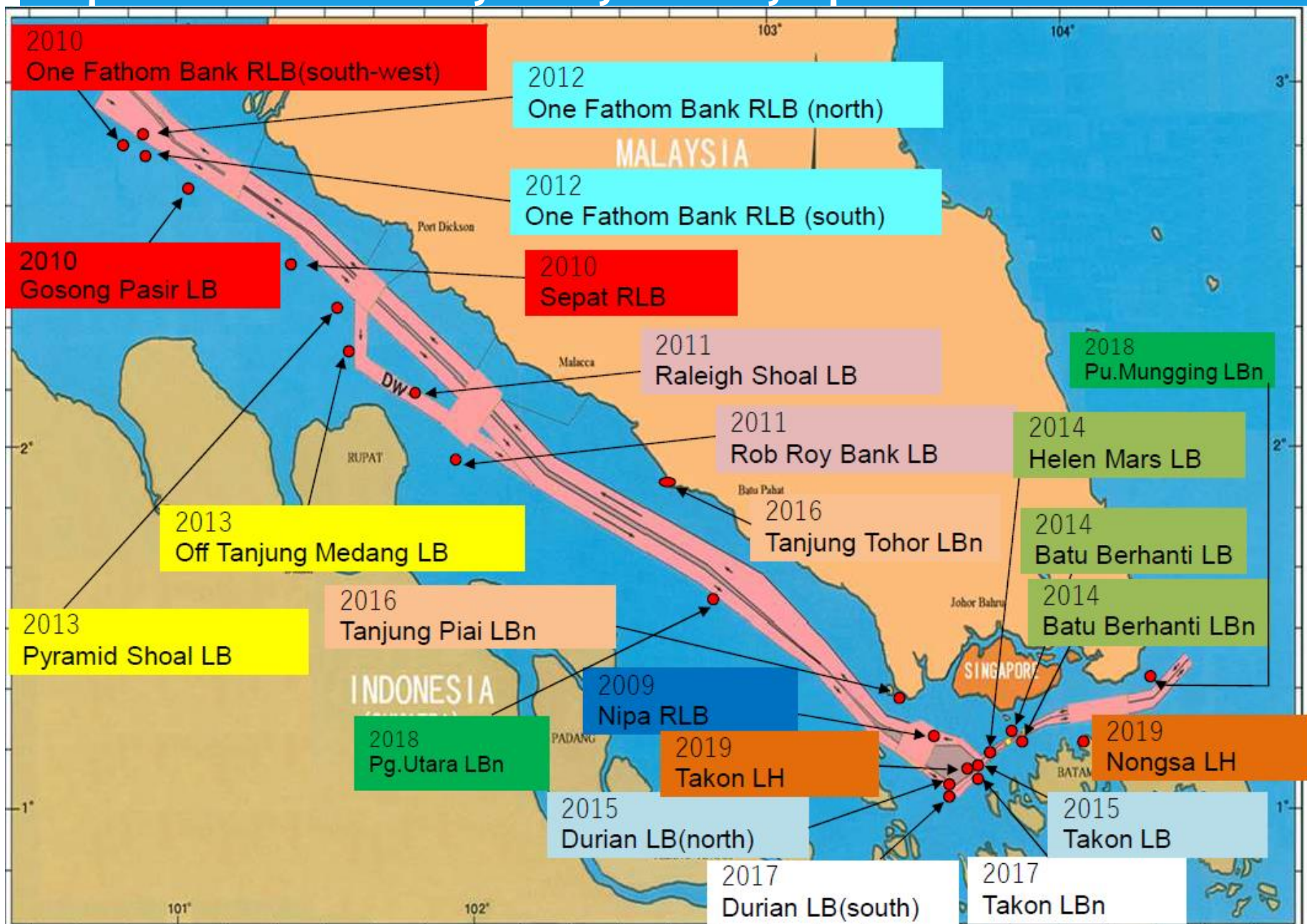


# The Result of the Functional Inspection 2022

									
Classification	Light	Racon	AIS	Light	Racon	AIS	Light	Racon	AIS
Total No.	28	10	3	18	6	18	3	3	3
1 <sup>st</sup> ROUND Unlit/Off Air	6	6	2	0	2	0	0	0	0
									
2 <sup>nd</sup> ROUND Unlit/Off Air	2	6	1	0	3	1	0	0	0



# Cooperation for Preliminary Survey Works by Japan for Renewal of AtoN



# Overview Study for Aids to Navigation in 2023

## Objectives

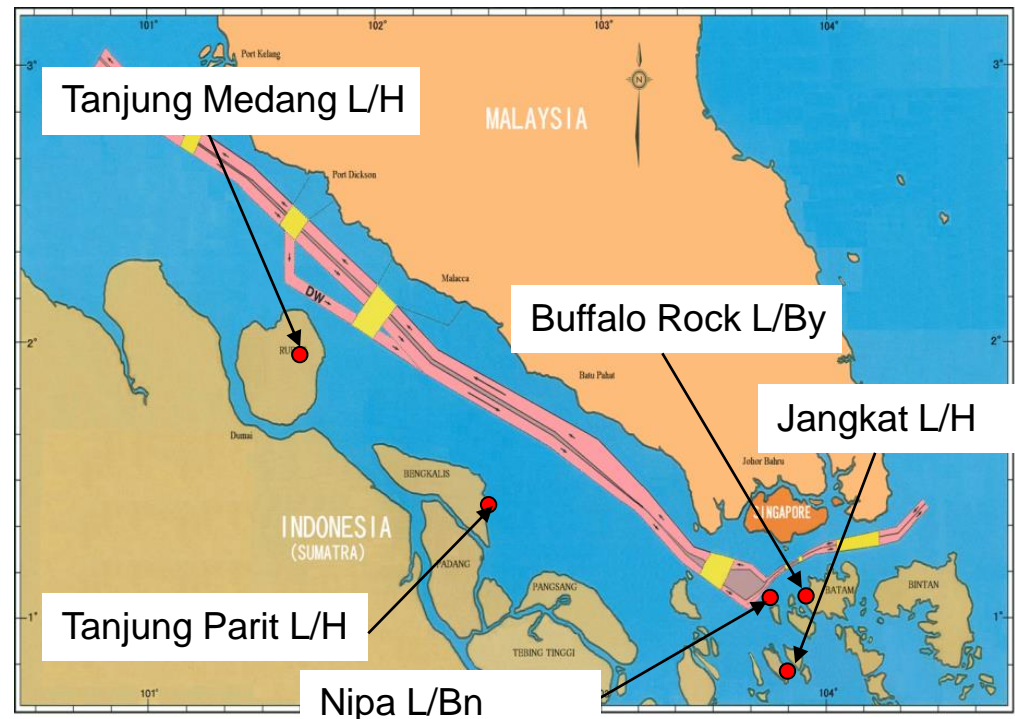
- ✓ To promote the realization of efficient and economic renovation and maintenance of AtoNs in order to improve the safety of navigation in the SOMS.

## Outline of the Overview Study

➤ **Period :**  
24<sup>th</sup> January to 4<sup>th</sup> February, 2023

➤ **Location :**  
AtoNs at five sites in Indonesia

- Jangkat L/H
- Tanjung Parit L/H
- Tanjung Medang L/H
- Nipa L/Bn
- Buffalo Rock L/By





# Capacity Building cooperation for AtoN staffs of the littoral States by Japan

Capacity building program for the staffs of the littoral States engaged in the maintenance work of AtoN started in 2012 by the government of Japan with cooperation from the Maritime Department of Malaysia and MSC.



At the entrance of MATRAIN



Lecture



VTS Center



On board Training

# Technical Workshop on the Aids to Navigation in the Straits of Malacca and Singapore

## Objectives

- ✓ To provide essential and necessary information and tools on the recent technological advancement of the Aids to Navigation (*hereinafter referred to as “AtoNs”*) to encourage proper installation and maintenance of the AtoNs
- ✓ To contribute to the development of human resources by transferring work skills, etc.

## Outline of the Technical Workshop

- **Date :**  
28<sup>th</sup> February to 9<sup>th</sup> March, 2023 (10days)
- **Venue :**  
Maritime Transport Training Institute (MATRAIN) , Port Klang, Malaysia
- **Participants :**  
Indonesia, Malaysia, Singapore and other countries

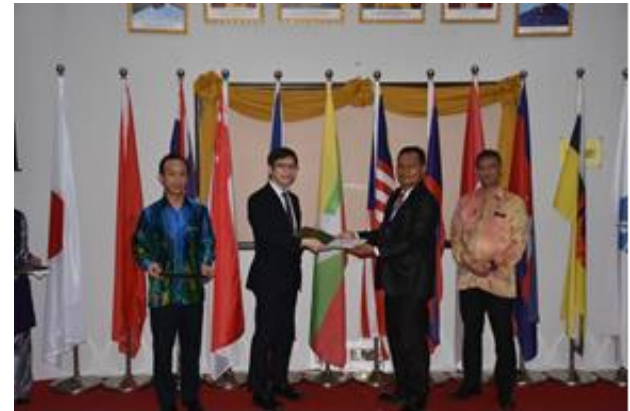




# Technical Workshop on the Aids to Navigation in the Straits of Malacca and Singapore

## Summary

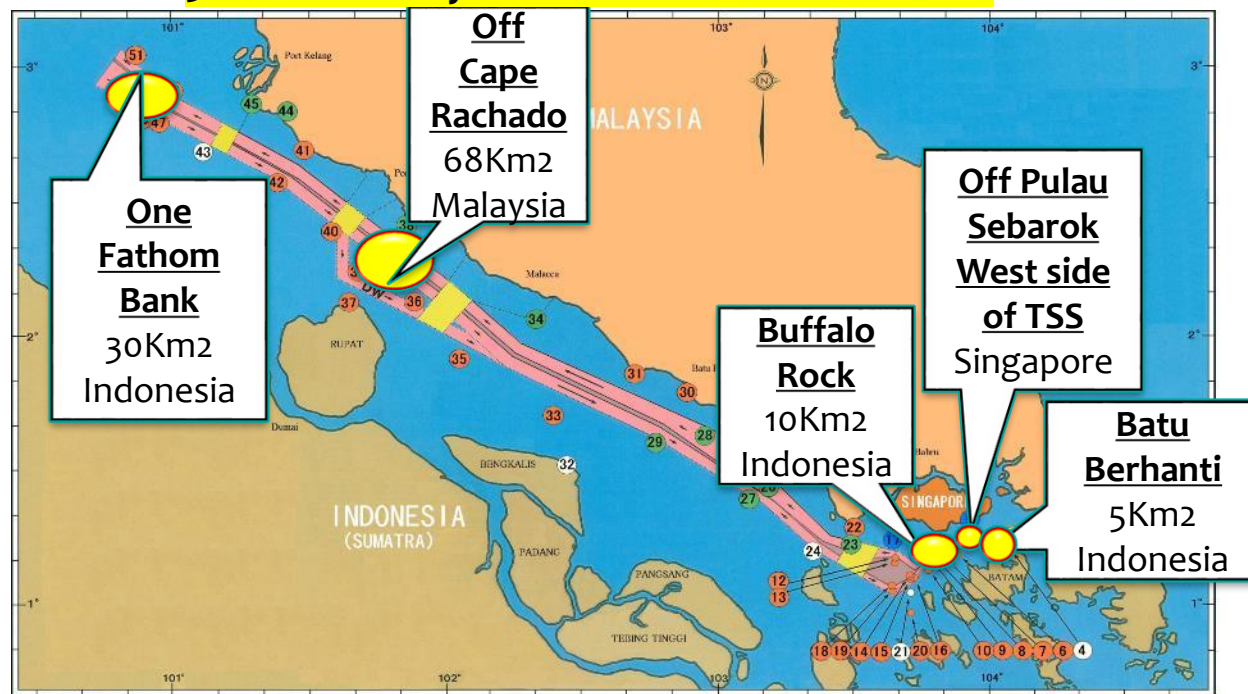
- Technical Workshop on the AtoNs receives a high reputation of being very valuable and meaningful for the maintenance and operation of the AtoNs to enhance navigational safety and preservation of marine environment in the SOMS.
- The future programme of Workshop is to be developed and improved through inputs from the participants, the lecturers and other concerns.



# Joint Hydrographic Survey - Phase 1 (2015-2016)

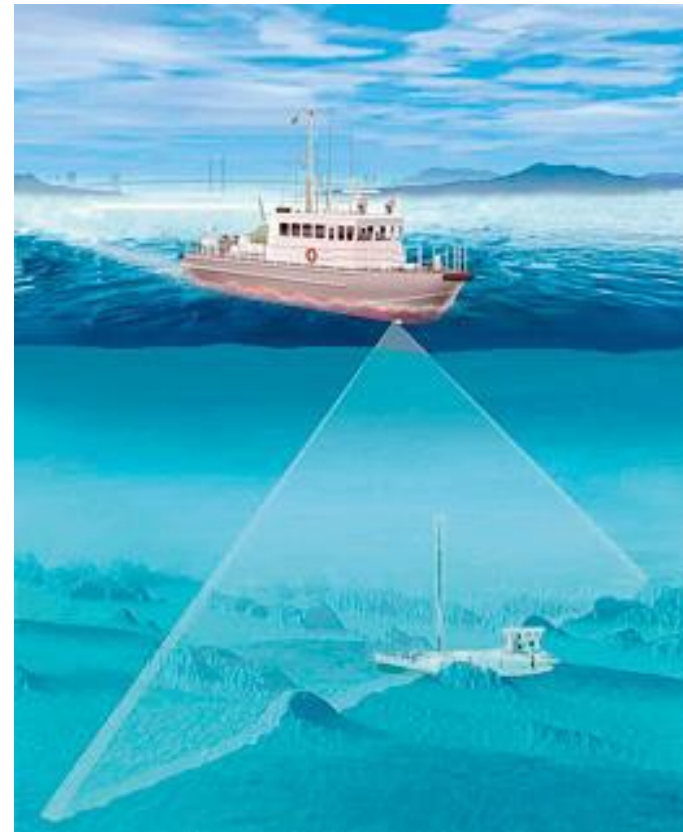
- MSC and the littoral States carried out the Joint Hydrographic Survey of 5 critical areas in SOMS that was successfully implemented from 2015 to 2016.
- This Joint Hydrographic Survey project is implemented under Marine Electronic Highway Working Group of TTEG.
- The new updated Electronic Navigation Chart reflecting the result of Phase 1 Survey was issued in November 2016.

## 5 critical survey areas in the SOMS in Phase 1



# Joint Hydrographic Survey - Phase 2 (from 2017)

- The littoral States of Indonesia, Malaysia, Singapore and MSC signed the MOU in October 2017 and started Phase 2 Joint Hydrographic Survey from 2017\*
- Financial support by the Japan-ASEAN Integration Fund (JAIF).
- Actual survey work has been conducted by MSC and a Japanese survey company with the supervision by the littoral States.
- Survey targets the shallow sea areas less than 30m in depth covering about 1/3 of the TSS.
- Survey is carried out using multi-beam eco-sounder device that can reproduce 3D image of the seabed.
- The actual survey operation was completed in Aug.2022 after the suspension due to the COVID-19 Pandemic.
- Updated 7<sup>th</sup> MSS-ENC was released in Jul. 2023.
- The ASEAN Hydrographic Survey Workshop will be held to demonstrate the results of the project in Jakarta on Sep. 13 2023.





# Photos of the Hydrographic Survey Operation



Launching Ceremony in Singapore on 3rd March 2018 ↑

Survey Vessel ↓



Mother Vessel ↑

Launching Ceremony in Malaysia on 13th March 2018 ↓



# Photos of the Hydrographic Survey Operation



MEH WG 22<sup>nd</sup> -23<sup>rd</sup> Aug. 2019 in Batam



Survey Vessel (2022)



Mother Vessel (2022)



Mother Vessel and Survey Vessel

## **4. MSC's Perspective on the cooperation in the SOMS**

**MSC recognizes the recent changes surrounding the SOMS as follows.**

- 1) Significant economic development of the littoral States and other ASEAN countries,**
- 2) Rapid technological development related to the safety of navigation,**
- 3) Increase of the number of vessels transiting the SOMS,**
- 4) Changes in the international political and economic environment surrounding the SOMS and the region.**

**\*The littoral States and Users need to maintain and develop “the Cooperative Mechanism” that will keep the SOMS free and open to all the users.**

**\*MSC, which has more than 50 years of experience in cooperation and joint work with the littoral States, will continue to participate in the cooperative activities in the SOMS in the future.**



# Thank you for your kind attention

