SAFE PASSAGE
THE STRAITS OF MALACCA AND SINGAPORE

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Today, the Straits of Malacca and Singapore (SOMS) is one of the world’s busiest shipping lanes, carrying about one third of the world’s traded goods. Projections show that this stretch of water will see a significant increase in maritime trade and it is ready to handle vessel traffic safely and efficiently.

To ensure the safety and efficiency of vessels plying these waters, all stakeholders must continue to cooperate mutually. Navigating safely results in the protection of the marine environment.

This pamphlet has been prepared to give you a quick guide to ensure a safe passage for ships in the SOMS. The purpose is to help you to navigate along the 435 mile long busy and narrow waterway in a safe manner by drawing attention to several measures and local conditions that mariners should be aware of.

You will find detailed guidelines, regulations and instructions in the following references:

1. International Regulations for Preventing Collisions at Sea, 1972 (COLREGs).
2. Singapore Port Information (by Maritime and Port Authority of Singapore)
4. Passage Planning Guide – Malacca and Singapore Straits (by Witherby Publishing Group)
5. Ships’ Routeing (by IMO)
   - Part B Section V Traffic Separation Scheme (TSS)
   - Part F (Associated Rules and Recommendations on Navigation – Rules for Vessels Navigating through the SOMS)
   - Part G Section I/14 (STRAITREP)
6. IMO Circulars and Resolutions
   - SN.1/Circ 317 (3 green lights)
   - SN.1/Circ.282 (Anchoring in the SOMS)
   - Resolution A.954(23) (Caution on Use of VHF)
   - Resolution A.917(22), Resolution A.956 (23) (Operational Use of AIS)
7. Admiralty Sailing Directions, Malacca Strait and West Coast of Sumatera Pilot (by UK Hydrographic Office)
8. Cooperative Mechanism (www.cooperativemechanism.org.my)

It should be noted that this pamphlet in no way substitutes or replaces prevailing internationally agreed regulations and guidelines.

This pamphlet is a product of the Co-operative Mechanism for the SOMS.
Mariners know that there are many considerations that must be taken into account when navigating through the SOMS.

Whilst there are international requirements regulating vessels’ safe operation and navigation, and ensuring that paper charts and electronic navigational charts (ENC) are up to date, there are various local characteristics found in the SOMS such as the challenges created by cross-traffic, involving small local craft whose personnel are not familiar with internationally agreed regulations and practices of seafarers.

The pamphlet provides general guidelines on the measures to be observed and local conditions to be aware of to assist transiting ships enjoy a safe passage.

**Shipmaster’s General Guidelines**

- **Collision Prevention**
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- **Routeing Measures**
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Collision Prevention

The SOMS are in places narrow and busy, where a large number of vessels transit daily, carrying about one-third of the world’s traded goods.

These vessels include bulk carriers, container vessels, ferries, tankers, very large crude carriers (VLCC), barges under tow and fishing vessels.

COLREGs

The International Regulations for Preventing Collisions at Seas (COLREGs) are to be complied with by ships navigating the SOMS. Mariners’ attention is drawn to the very important Rule 7(a) which states that “every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists”. In doing so, they are to take note of the following concerning VHF and AIS.

Precautions When Using VHF and AIS

PRECAUTIONS WHEN USING VHF AND AIS

VHF

Many investigations worldwide have revealed that VHF communication is one of the contributing factors in collisions at sea.

In many of the so called “VHF assisted” collisions, the “VHF communication” between ships had created misunderstandings leading to close quarter situations or collisions.

Mariners are reminded that compliance with COLREGs is a much more effective way to avert a collision than the use of VHF communications.

Reference: IMO Resolution A.954(23)

AIS

AIS information may be used to assist in collision avoidance decision making, bearing in mind two cautionary points:

- AIS is an additional source of navigational information. It does not replace, but supports, navigational systems such as radar target-tracking and VTS
- The use of AIS does not negate the responsibilities of the mariners to comply at all times with COLREGs.

In addition, mariners are to take note that not all ships are fitted with AIS. Also at times, AIS may be switched off or the information provided by AIS may be incomplete or incorrect.

Reference: IMO Resolution A.917 (22), Resolution A.956 (23)
Routeing Measures

Traffic Separation Scheme

The IMO-adopted Traffic Separation Scheme (TSS) was established in the SOMS between Permatang Sedepa (One Fathom Bank) and the entrance to the South China Sea in the vicinity of Horsburgh Lighthouse, a total distance of 250 nm. Designated routes for deep-draught vessels and Precautionary Areas are laid down on the charts.

Reference: IMO Ships’ Routeing, Part B Section V

Night Signals for Vessels Crossing the TSS in the Singapore Strait

Vessels crossing the TSS and Precautionary areas in the Singapore Strait are recommended to display the night signals consisting of 3 all-round green lights in a vertical line.

Displaying the night signals shall not exempt the crossing vessel of its obligation to give way to other vessels in a crossing situation or any other rules under the COLREGs

Reference: IMO SN.1/Circ. 317

Rules for vessels navigating through the Straits of Malacca and Singapore

The Rules have been established for vessels navigating through the SOMS.

Mariners must comply with the rules concerning:

- Deep draft vessels and VLCCs navigating within the TSS
- Vessels having defects affecting operational safety
- Action to be taken in an emergency or breakdown of a vessel in the traffic lane
- Radio broadcast on movements of vessels constrained by their draught
- Safe speed
- Participating in ship reporting system

Reference: IMO Ships’ Routeing, Part F
The IMO-adopted Mandatory Ship Reporting System known as STRAITREP has been established in the SOMS to enhance navigational safety and to protect the marine environment. In general, all passenger vessels, vessels carrying hazardous cargo, vessels of 300 gross tonnage and above and all vessels of 50 metres and above are required to participate in the ship reporting system.

**Participating in STRAITREP**

The operational area of the STRAITREP is divided into 9 sectors with each sector operating on a different VHF channel.

- Sector 1 – VHF Channel 66
- Sector 2 – VHF Channel 88
- Sector 3 – VHF Channel 84
- Sector 4 – VHF Channel 61
- Sector 5 – VHF Channel 88
- Sector 6 – VHF Channel 88
- Sector 7 – VHF Channel 73
- Sector 8 – VHF Channel 14
- Sector 9 – VHF Channel 10

**Vessel Traffic Service**

The VTS Authorities provide the following services to vessels participating in the STRAITREP.

- **Information Service** (e.g. information on Deep Draft Vessel & VLCC transiting through the Deep Water Route)
- **Navigational Assistance** (e.g. advice to individual vessels on potential close quarter situation)
- **Navigational broadcast** (e.g. information on unlit or damaged buoys/beacons)
- **Meteorological Information** (e.g. warnings on haze, adverse weather conditions)

In addition, the Singapore VTS provides vessels with information on traffic situation at the Pilot Boarding Grounds at the Port of Singapore so as to assist Mariners navigate safely to embark their pilots.

A master who provides or receives information with STRAITREP is not relieved from any of his duties and responsibilities as a master.

Reference: IMO Ships’ Routeing, Part G Section I/14
**Anchoring**

There has been a proliferation of vessels anchoring within the TSS and Precautionary Areas in the SOMS as well as between the landward limits of the TSS and approaches to the ports. These vessels pose a risk to the safety of navigation by obstructing traffic flow and port approaches. Mariners are advised of the following concerning anchoring in the SOMS:

**No Anchoring**

Mariners are therefore reminded not to anchor in any areas in the TSS of the SOMS (Ref.: Rule 10 (g) of COLREGs); as well as between landward limits of the TSS and approaches to the port. Vessels entering any port in any of the littoral States shall anchor in the anchorages designated by the respective littoral States.

The Maritime Authorities of Indonesia, Malaysia and Singapore closely monitor the identities and locations of vessels that are anchoring indiscriminately. The relevant authority will take appropriate action including reporting to the Flag State of the vessel.

**Emergencies**

In exceptional circumstances such as an emergency where anchoring cannot be avoided, shipmasters are advised to carefully ascertain the location of pipelines, submerged installations and submarine cables from nautical charts and publications to avoid anchoring over these objects.

Reference: IMO SN.1/Circ. 282

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**Visibility**

Visibility in the SOMS could be restricted due to the following conditions:

**Haze**

SOMS has been affected by severe smoke haze periodically due to forest fires in the region. The haze can be made worse by the dry seasons, change in wind directions and precipitation, especially during the Southwest Monsoon Season which causes the visibility to be severely restricted.

**Local weather**

Sudden thunderstorms with heavy rain may occur during the monsoon periods between June and August and between October to December and cause the visibility to be severely restricted.

During periods of restricted visibility, shipmasters are advised to keep a proper lookout and navigate with caution. Ships shall comply with the COLREGs and in particular, Rule 19, Rule 20 and Rule 35 concerning conduct of vessels in restricted visibility, exhibition of navigation lights and sound signals in restricted visibility, respectively.
Local Traffic Considerations

When navigating in the SOMS, shipmasters will encounter the following local traffic conditions and are advised to keep a proper lookout and navigate with caution:

Tugs and Barges

There are numerous tugs and barges which travel at low speed in the SOMS. In the Singapore Strait, they are usually observed in the vicinity of Batu Berhanti in the morning crossing the TSS bound for the Port of Singapore.

Crossing Traffic

Vessels transiting the SOMS may encounter crossing traffic, particularly in these areas:

There are frequent ferries crossing the SOMS in the following areas:

- Approaches to Port Dickson Harbour Limit
- Approaches to Melaka Harbour Limit
- Approaches to Muar Harbour Limit
- Approaches to Batu Pahat Harbour Limit
- Between Kukup and Pulau Karimun

- Main Straits
  (01 11’.6 N , 103 51’.7E )
- Approaches to Sisters’ Fairway
  (01 12’’.8 N , 103 50’.7E )
- Approaches of East Keppel Fairway
  (01 13’’.1N, 103 52’.9E)
- Approaches to Tanah Merah Ferry Terminal
  (01 15’’.3N , 103 59’.1E & 01 17’’.0N 103 58’.8E)
- Between Tanah Merah Ferry Terminal and Pulau Bintan
  (01 15’.5N , 104 05’.1E)

Crossing Traffic is also expected to be encountered at the following precautionary areas:

- Off Sultan Shoal Lighthouse
  (103 26’.7E to 103 36’.1E)
- Off Pulau Sebarok/Belakang Padang
  (103 49’.1E to 103 50’.7E)
- Off St John’s Island/Pulau Sambu
  (103 52’.2E to 103 54’.3E)
- Off Tanjong Septapa/Pulau Bintan
  (104 03’.2E to 104 14’.9E)
- Off Tanjung Ru/Port Klang Harbour Limit
- Off Port Dickson/Port Dickson Harbour Limit
- Off Tanjung Keling/Sungai Udang Harbour Limit
- Off Tanjung Piai/Johor Bahru Harbour Limit

Vessels in the westbound lane near the vicinity of Singapore Pilot Eastern Boarding Ground “A” (01 13’.5N, 103 53’.4E and Pilot Eastern Boarding Ground “B” (01 15’.6N, 103 57’4E) may encounter vessels from the eastbound lane crossing the westbound lane to head for these pilot boarding grounds.

VLCCs in the deep water route bound for the Shell SBM in the Port of Singapore cross the TSS in the vicinity south-east of the Raffles Lighthouse (01 09’.6N, 103 44’.5E).

Fishing Boats

Poorly lit small fishing boats may be encountered in the SOMS. This is particularly true in the western part of the Singapore Strait. Mariners are reminded that often small fishing boats do not follow COLREGs.
In September 2007, under the International Maritime Organization (IMO)’s “Protection of Vital Shipping Lanes” initiative, the maritime authorities of Indonesia, Malaysia and Singapore established a historic agreement to successfully launch a Co-operative Mechanism (CM) for the Straits of Malacca and Singapore (SOMS). The mechanism is a ground-breaking initiative in international co-operation.

The CM is the key platform in the SOMS for the littoral States, user states, stakeholders and the industries to dialogue, exchange information and share their valuable perspectives on important SOMS safety and environmental issues.

Since 2007, the CM has overseen many projects aimed at achieving these goals, gathering the views and expertise of the three littoral states working closely with all stakeholders.

The promotion of safety of navigation and the protection of the marine environment dominate the work of the CM.

One concrete demonstration of co-operation and burden sharing is the number of projects which have been jointly initiated. These involve everything from wreck removal to the maintenance of aids to navigation.

www.cooperativemechanism.org.my

BIMCO – An ocean of expertise...

BIMCO is the oldest of the international shipping associations, comprising a membership of a broad range of stakeholders with vested interests in the shipping industry, including ship-owners, managers, brokers and agents. The shipowner segment alone operates about 65 per cent of the world’s merchant fleet measured in deadweight tonnage. The association’s main objective is to facilitate the commercial operations of its global membership through the provision of quality information and advice, education and training. While promoting fair business practices and developing standards for contract terms, BIMCO is a strong advocate for harmonisation and standardization of all shipping related activity, whether at sea, in ports or ashore. In support of its commitment to ensure a level playing field for all actors within the global shipping industry, the association promotes the development and application of internationally agreed regulatory instruments. In acknowledgement of its constructive contributions to the regulatory process, BIMCO is accredited as a Non-Governmental Organisation (NGO) with all relevant United Nations agencies. In the pursuit of reaching its objectives, the association maintains a close dialogue with Governments and diplomatic representations around the world including maritime administrations, regulatory institutions and other stakeholders.