

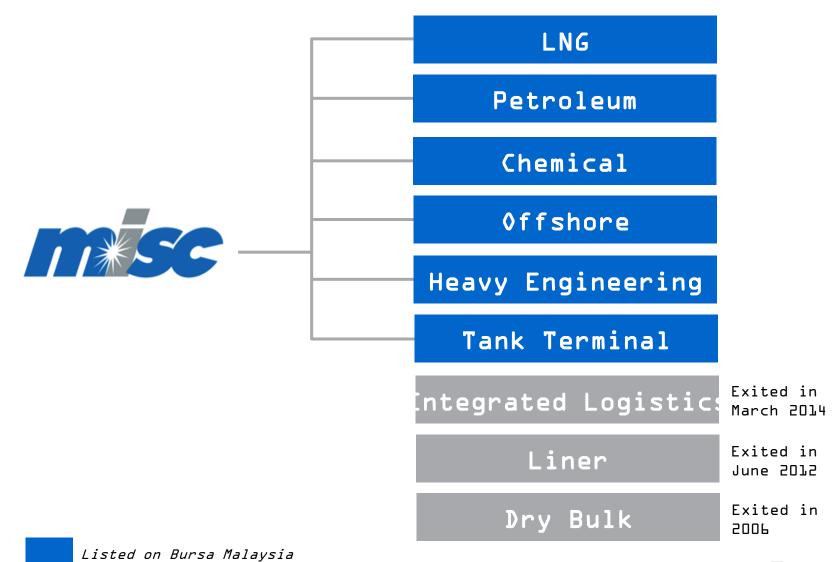
QAHSSE, FMS

MISC Berhad

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MISC is a Shipping Conglomerate





We are the Second Largest Shipping Conglomerate in the World by Market Capitalisation

As at 28 February 2014

Rank	Companies	Country	Mkt Cap USD mil	Category
ī	A.P. Moeller-Maersk A/S	Denmark	52,640,329,72 8	Conglomerate
2	MISC Berhad	Malaysia	8-658-954-240	Conglomerate
3	Nippon Yusen Kabushiki Kaisha	Japan	5,414,706,688	Conglomerate
4	China COSCO Holdings Company Limited	China	5,160,596,992	Conglomerate
5	Mitsui 0.5.K. Lines, Ltd.	Japan	4,987,290,624	Conglomerate
Ь	China Shipping Container Lines Co Ltd	Hong Kong	3,754,310,656	Container
7	Orient Overseas (International) Limited	Hong Kong	3,076,151,552	Container
B	Qatar Navigation	Qatar	2,877,596,672	Conglomerate
9	China Shipping Development Company Ltd.	Hong Kong	2,273,899,520	Conglomerate
10	Dampskibsselskabet NORDEN A/S	Denmark	2,120,284,288	Conglomerate
11	Hyundai Merchant Marine Co∙₁Ltd	Korea	2,119,692,160	Conglomerate
15	Kawasaki Kisen Kaisha Ltd.	Japan	2,116,762,368	Conglomerate
13	Evergreen Marine Corporation	Taiwan	2,063,299,840	Container

Source: As at 28 February 2014 A Bloomberg; List excludes (ruise/Ferry companies e.g. Carnival Corp (USA),

Norway
1,973,627,392
Conglomerate

MISC vessels are transiting SOMS regularly with an average of 313 port calls within SOMS per year.

Whereas MISC subsidiary AET vessels are doing pendulum run with 724 transit in 2013 alone.





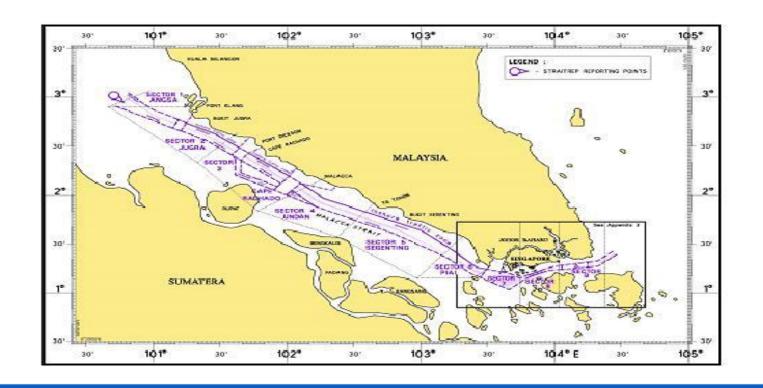




The Straits of Malacca/Singapore - Area of coverage

The Straits of Malacca/Singapore (SoMS), which is bordered by Malaysia, Indonesia and Singapore.

It extends about 250 nautical miles between One Fathom Bank off Port Kelang in the west and Horsburgh Lighthouse in the east.





Vessel Transit

There were an average of 75, 000 vessels transit in Singapore and Malacca Straits yearly.

It is about 205 vessel transit per day.

Number of Reported Vessel under STRAITREP until December 2013

Vessel Type	2008	2009	2010	2011	2012	2013
VLCC	4040	4221	4333	4539	4732	4825
Tanker Vessel	15894	16398	16247	16233	17345	18296
LNG Vessel	15894	16398	16247	16233	17345	18296
Cargo Vessel	8794	8560	8445	7996	7950	7613
Container Vessel	26359	22310	24806	25552	24639	24658
Bulk Vessel	10256	11186	11642	10851	11678	12658
RO-RO Vessel	3455	2394	2624	2545	2980	2998
Passenger Vessel	2074	1250	1071	877	861	1063
Live Stock Vessel	48	43	45	47	38	55
Tug Boat	566	598	545	414	529	563
Government Vessel	82	67	37	57	50	58
Fishing Vessel	48	61	20	20	52	27
Others	1039	941	739	577	609	911
TOTAL	76381	71359	74133	73538	75477	77973

High Density Traffic - Malacca and Singapore Straits

Key waterway linking Asian and European trade.

Traffic volumes in the Straits saw an all time high in 2013.

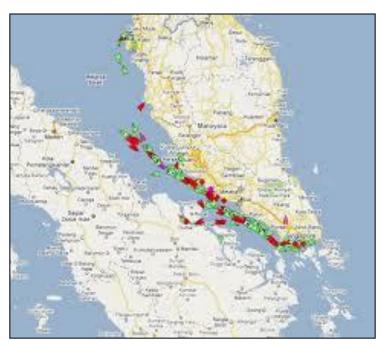
77,973 vessels (>300 GRT) transited in 2013 compared to 62,621 in 2005.

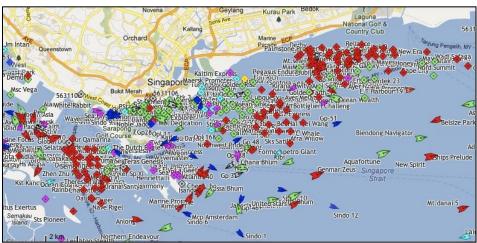
An increase of 24.5% in 8 years.



High Density Traffic - Malacca and Singapore Straits

On a normal day the traffic may look like this







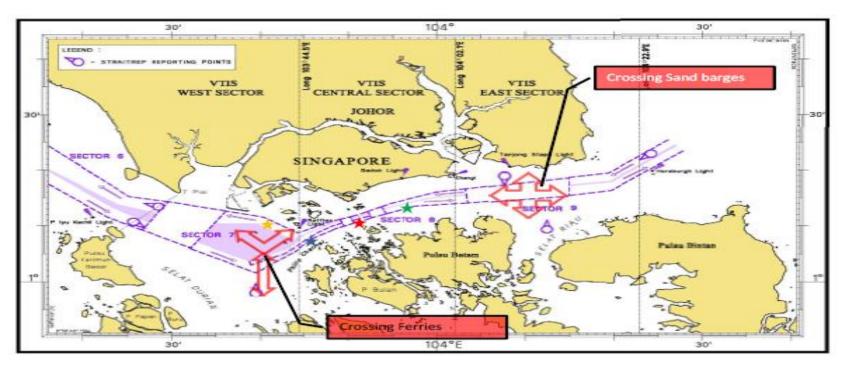
Risk of Collision





4 Major Collisions within December 2013 - February 2014 in the Straits

Various contributing factors leading to incidents requires a re-evaluation on Safety of Navigation in the area.



- ★ 28 Dec 2013- Collision between LNG Al Gharrafa and Hanjin Italy
- 30 Jan 2014 Collision between Lime galaxy and Feihe
- ★ 30 Jan 2014 Collision between NYK Themis and AZ Fuzhou
- ★ 10 Feb 2014 Collision between Mammonia Thracium and Zoey



Causational Factors

High Density Traffic - Key Hazards

Crossing Vessels

Crossing Ferries, tugs, tows and sand barges running across the straits pose a significant concern to merchant vessels transiting the straits.

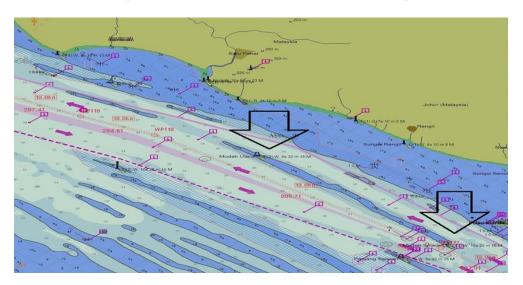
Fishing Vessels

The fishing industry of Malaysia is substantially concentrated in the Malacca Straits. Nearly 70% of the fishermen in an estimated 139 fishing villages in Peninsular Malaysia are located.



Causational Factors

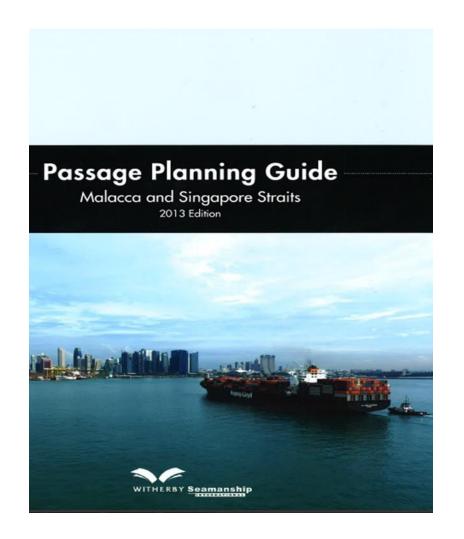
Choke Points/Narrow Passage/Sandbars and Controlling Depths:

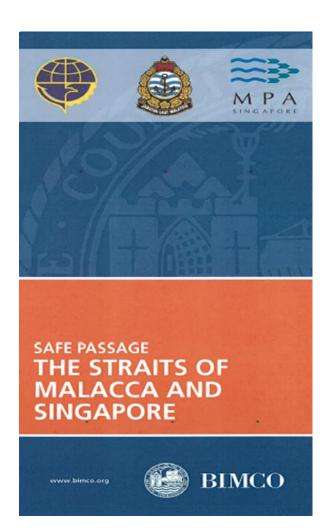


- Shifting sand banks and shoals
- Choke points and bottlenecks
- Multiple marine activities
 - Seismic surveying, buoyage maintenance, laying and other navigational activities by Authority
 - Dredging and port operations
 - yachting and leisure crafts
 - Fishing and exploration

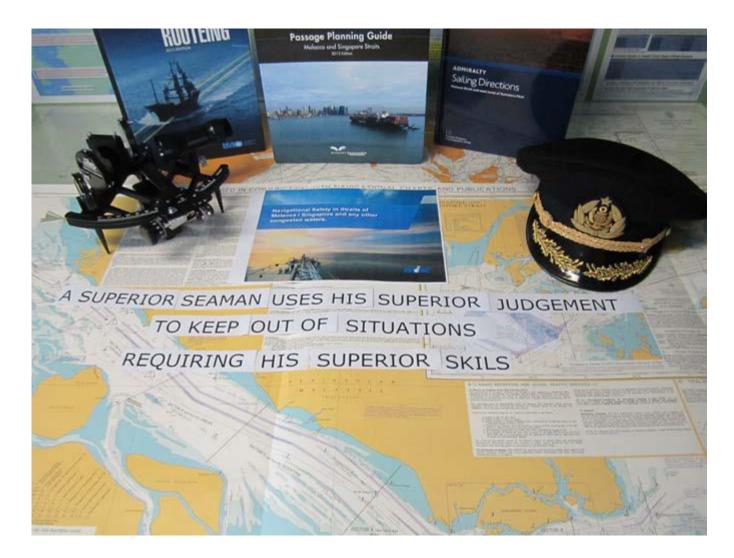


Usage of Passage Planning Guide











INTERTANKO Working Group

MISC working together with INTERTANKO Working Group came with recommendations for further enhancing the Safety of Navigation in the Straits of Malacca and Singapore.

The recommendations were consolidated by INTERTANKO secretariat from the INTERTANKO member's report when transiting the Straits. This will maintain confidentiality of such reports to be maintained.

INTERTANKO encourages those who have a direct influence over operational and navigational safety in the region to establish similar schemes in which information can be shared.

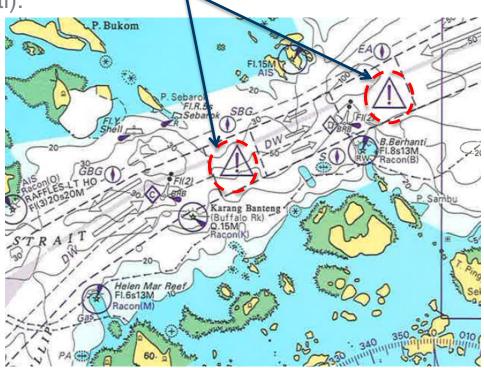


Small Vessel Traffic:

- Ensure compliance with night signals for small craft (as per COLREGS).
- Avoid impeding the safe passage of other vessel when crossing the TSS.
- Implementation of AIS class B transponders.

Introduction of 'no fishing zone' in certain parts of TSS (eg. Buffalo Rock &

Batu Berhanti).





Vessel Traffic Information System (VTIS): share and review by user.

- VTIS operator training.
- Communication and response to VTIS instruction by small craft and larger crossing vessels.
- Consider embarking the VTIS to VTMS.



Traffic Separation Schemes (TSS):

- Mandatory safe speed limit of 12 knots for all vessels in specific areas within TSS (to be defined).
- Reporting requirement for vessels to confirm vessel speed, master on bridge and vessel in hand steering.
- Monitoring of Deep Water Routes that only deep draft vessels use these routes.
- Restricting the overtaking of vessels in the deep water channel. Restriction marked on all relevant charts.



Traffic Separation Schemes (TSS):

- Vessel calling Singapore must be reminded to keep to the right side of Westbound Separation Traffic Zone.
- To reduce risk of collision at the entrance to Malacca Straits, off Pulau Rondo.
- Converging traffic north east of Horsburgh and eastbound TSS.





Pilotage in Singapore Straits:

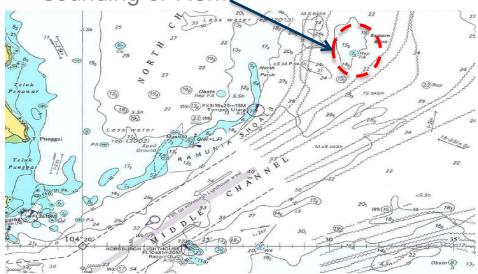
- Minimise the congestion at designated Pilot Boarding Grounds minimise delay in pilot boarding, review communication with vessels and utilise VTIS information.
- Immigration and clearance made simple and efficient.
- Confidential near-miss reporting by pilot



Hydrographic and Navigational Information:

- AIS information, to include the vessel exact destination.
- Changes in tidal stream and current due to substantial reclamation done.
- Western approaches to Singapore Straits require larger scale chart to supplement BA 3831.
- Review the designated anchorage areas to ensure sufficient room and margin.

 Establishment of 'isolated danger beacon' in the Eastern Bank at the sounding of 7.3m.





Loaded VLCC:

- Fully loaded VLCC should transit Singapore Straits during day light only.
- Loaded VLCC should come / leave anchorage during day light only.
- Loaded VLCC should avoid bunkering at Singapore.
- Loaded VLCC to minimise waiting period at Singapore anchorage.
- Company should provide marine advisor to loaded VLCC when transiting Singapore Straits.



