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## Shipping and the Environment in the Straits of Malacca and Singapore: Future Perspective

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### Presentation outline

- Present situation.
- Trends in shipping and environment.
- Shipping and environment in the Straits.
- Conclusions.



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## Introduction

- Number of vessels transiting the Straits continue to grow.
- Despite global action towards safer navigation, incidents continue to occur.
- Littoral States and users have moved towards closer co-operation in safety of navigation and environmental protection.
- However, changing trends in shipping, environmental management and international law necessitates continuous examination of issues.



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## Trends in shipping and environment

- Trends in international shipping comes in many different forms:
  - regulations, technology, market supply, labour, political environment and economics.
  - where shipping and the environment are concerned the focus is currently on the impact of the industry on the marine environment.
  - this impact, or lack of it resulted from a number of discernable trends in the shipping industry.



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## Trends in shipping and environment

1. Continued growth in seaborne trade and shipping in line with global economic growth.
  - world seaborne trade reached 7.4 billion ton in 2006 on the back of 4% world GDP growth.
  - world fleet expanded by 8.6% to 1.04 billion dwt at the beginning of 2007.
  - despite recent economic downturn, seaborne trade is expected to continue growing.



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## Trends in international shipping

- Consolidation of shipping routes.
  - the world's main shipping routes are concentrated around a small number of routes and straits.
  - hub-and-spoke route structure for container ports.
  - choke points.
  - pressure on already congested waterways.





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## Trends in shipping and environment

- Technology
  - bigger, more streamlined, more efficient and cleaner vessels are being built and utilised.
  - 70% of containers carried by vessels of 2,000 TEUs or larger
  - however 1,900 single hulled tankers still ply the oceans. This is 26% of the world's tanker fleet.



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## Trends in shipping and environment

- Concern over impact of shipping on the marine environment.
  - air pollution and climate change
  - ballast water
  - anti-fouling
  - oil spills



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## Trends in shipping and environment

- New regulations are being put in place to address concerns but port state and flag state control are vital.
- Ratification of conventions is an essential step towards enhanced environmental protection.



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### Status of Ratification of IMO Conventions by littoral States

	Indonesia	Malaysia	Singapore
COLREG Convention 72	x	x	x
MARPOL 73/78 (Annex I/II)	x	x	x
MARPOL 73/78 (Annex III )			x
MARPOL 73/78 (Annex IV)			x
MARPOL 73/78 (Annex V )		x	x
MARPOL 73/78 (Annex VI )			x
CLC Convention 69	x	x	d
CLC Protocol 76		x	x
CLC Protocol 92	x		x
FUND Convention 71	d	x	
FUND Protocol 76			
FUND Protocol 92			x
FUND Protocol 2003			
OPRC Convention 90			x
HNS Convention 96			
OPRC/HNS 2000			x
ANTI FOULING 01			
BALLASTWATER 2004			

Source: IMO, 2008.





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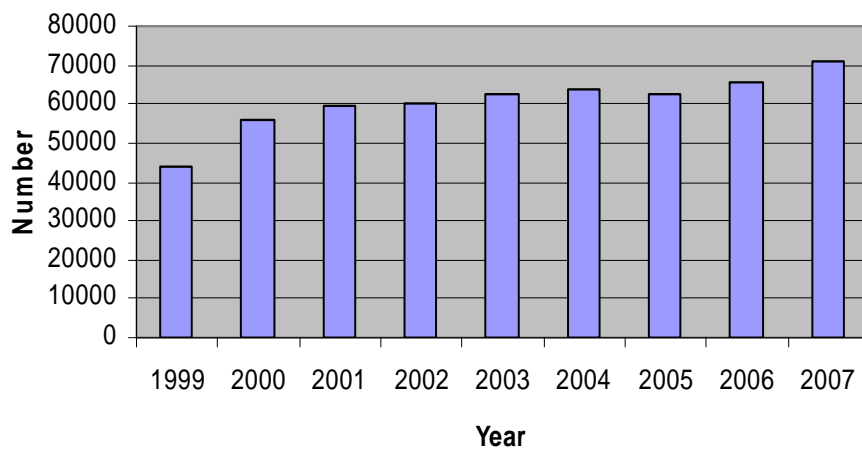
## Shipping and environment in the Straits

- Main concern and area of co-operation now appear to be safety of navigation.
- Rightly so because as the number of vessels continues to increase so would the risk of accident.

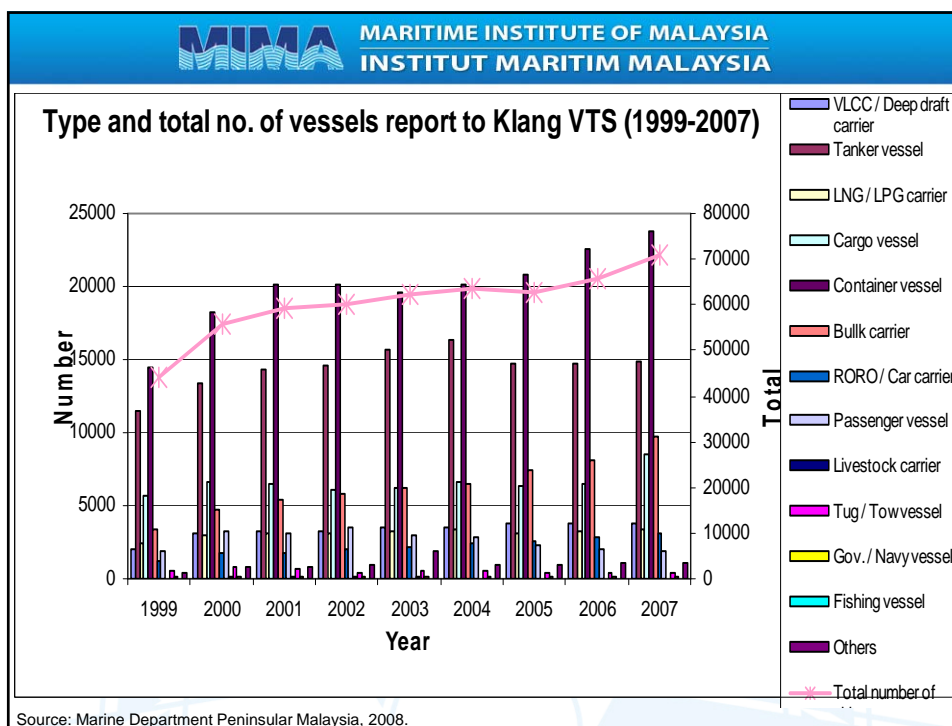


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**Total vessel report to Klang VTS (1999-2007)**



Source: Marine Department Peninsular Malaysia, 2008.



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## Shipping and environment in the Straits

- Given global trends in marine environment protection some long term thinking should start on the following:
  - understanding the impact of non-oil pollution i.e., ballast, anti-fouling paint and air emission on the Straits.
  - a more uniformed approach to ratification of IMO conventions among the littoral States.
  - single hulled tankers?





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## Shipping and environment in the Straits

- More uniformed ratification would ensure commonality and predictability in standards and response.
- Ratification could be viewed as a financial boon and bane for the littoral States.
- However, there are technical and capacity building benefits.
- And the opportunity to enhance co-operation.



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- On the other hand, all parties concerned my want to see newly forged co-operation succeed before embarking on new areas.
- Understandable given the complexity of building the current co-operative mechanism.
- A gradual or incremental approach could be considered in that the present mechanism is used as the foundation for future co-operation in wider areas.



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## Conclusions

- The relationship between shipping the environment continues to evolve.
- Changes in technology and regulation will address many of the issues but problem areas remain.
- In the Straits safety of navigation would continue to be the priority.
- But long term consideration should also be given to emerging issues.
- Use present arrangement as building block to build confidence among all parties.



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**Thank You**