GREENING OF THE STRAITS OF MALACCA

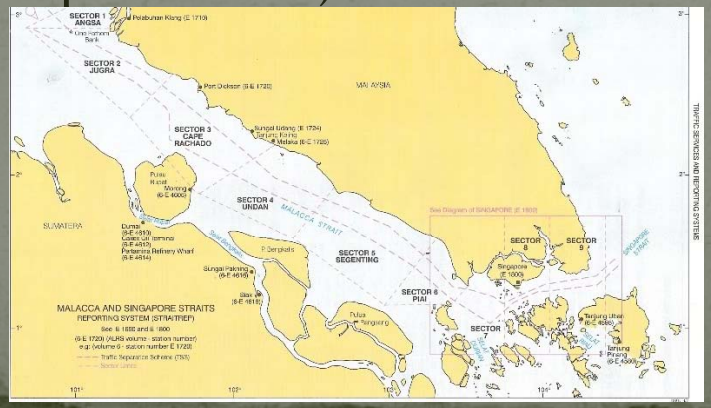
ISSUES...

- Increasing shipping traffic may have serious implication to the safety of the ships and quality of marine environment
- Littoral states will have to bear the consequences of the degraded marine environment reflected in reduced economic activities from fishing and tourism industries and the possible extinction of marine creatures
- There is an urgent need to take immediate action to mitigate the increase threat of ship-base pollution from the rising traffics in the Straits of Malacca

STRAITS OF MALACCA..
A STRATEGIC WATERWAY

BACKGROUND

- 500 miles long and width varies from 200 to 11 miles with irregular depth from 70 to 10 metres-connecting South China Sea to the Indian Ocean
- Used for international navigation since time immemorial facilitating movement of people, flow of goods and ideas and exchange of cultures
- A through route of 23 metres depth have been identified .The width at its narrowest navigable point is about 1.5 km (Phillips Channel)



THE IMPORTANCE...
SHIPPINGS, FISHING, TOURISM AND GEOPOLITICS

Shipping

- Three out of twenty busiest ports in the world are located in the Straits (Singapore, Port Kelang and Tg. Pelepas)
- An average of 200 ships daily or 70,000 ships pass the straits in a year
- It serves 30% of world trade and 50% of world oil supplies mainly to Japan, China and Korea
- In 2011 , 15.2 mil. bbl/ day of oil flows through the Straits compared to 13.8 mil. bbl/day in 2007
- Supertankers from Middle East to Japan save 1000 miles @ 3 days sailing instead of sailing through Lombok Straits

Fishing Industries

- The Straits produce 730,000mt of fish per year at a value of RM3.8 bil (2011)
- The brackishwater aquaculture production contributed 165,000 mt of fish, prawns and cockles value at RM1.7bil (2011)
- The presence of mangroves in coastal areas in the Straits of Malacca is vital to the sustaining near shore fisheries and act as crucial mediators in sustaining the health of marine environment where many species of prawns and crabs live apart from coastal fish variety

Tourism Industries

- The natural beauty of the beaches, the bays and the corals dotting the holiday spots in Penang, Langkawi, Pangkor , Morib, Sepang, Port Dickson and Malacca are great attractions

- The tourism arrival per annum to Malaysia is closed to 25mil with tourist receipts of about RM60 bil of which 30% are marine tourism related.

- Exotic sea creatures are also great attractions

Geopolitics

- Immensely strategic to the international community as large proportion of the international trade and most of the oil imports to China, Japan and Korea are transported through the Malacca Straits

- In the event of hostility superpowers may deny crucial energy supplies to their enemy through controlling the access in the chokepoints of the Straits

INCIDENTS OF POLLUTIONS

- Over the years, several incidents have occurred in the Straits involving ships releasing oil and hazardous and noxious substances into the water

- A study indicated that in 2000, the vessels plying the Straits generated 888,000 mt of waste comprising 150,000mt of oily bilge sludge, 18mt of solid waste and 720,000mt of sewage

- Waters in Port Dickson found to contain nitrogen-rich suspended organic particles, which is suggestive a man-made pollution

- Scientists have also detected mercury levels in the Straits to be higher than those of East Coast of Peninsular Malaysia

- Fish caught off Gold Coast , Selangor have residual of copper, zinc and lead exceeding permissible levels due to heavy metal pollution of seawater

INCIDENTS OF POLLUTIONS

- Between 1975-1995, 496 marine casualties of all types of ships in the Straits of Malacca which resulted in the loss of live and pollution damage

- 5 major pollution incidents occurred at the Straits of Malacca between the period resulting in the spillage of almost 400,000 barrels of crude oil

RISING THREATS

- A study by Japan International Transport Institute (JITI) in 2006 forecast that through traffic in the Straits of Malacca will increase to 140,000 ships , double the current numbers

- The increase in vessels traffic and sizes shall increase the risk of:
  - vessel accidents due to collision and grounding
  - pollution from oil and grease, hazardous and noxious substances , solid waste , anti-fouling paints and invasion of species through ballast discharges
  - coastal erosion and degradation of coastal zone habitats including mangroves, coral reef and seagrass along the sealine destroying feeding and nursery ground for about 100 fish and 20 prawn species
  - noise pollution and physical damage to sea animals and plants due to physical contact with ship's hull and propellers

- On average until 1990, 57% of Malaysia total fish production came from the Straits of Malacca. After 1999, it has dropped to 45% from the total

RISING THREATS

- Polluted beach and water s will drive the tourist away

- A major oil spill the size of VLCC would cause irreparable damage to the ecosystem, fishery, biodiversity and tourism industry

- Increase piracy may result in grounding and pollution risk as when the ship is taken over she may be handled in a haphazard manner and vulnerable to collision and grounding with possible pollution

MARINE POLLUTIONS IMPACT LIVES.....

SOME STARTED TO MUTATE....

THE END OF THEIR LIFE

DAMAGING SEAFOOD CHAIN....

Mutant two-headed fish

OR WORST CASES .....

HOPEFULLY WILL NO END LIKE THIS.....

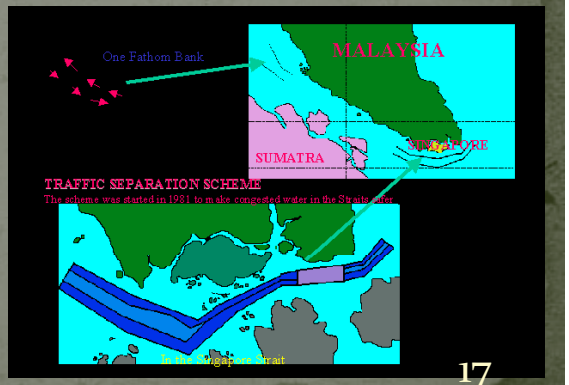
EXISTING MEASURES ... TO ENHANCE NAVIGATIONAL SAFETY

- Malaysia formed a maritime enforcement agency in 2005 known as MARITIM MALAYSIA looking after the safety of vessels transiting Malaysian waters.

- MALSINDO, a coordinated patrol scheme involving the navies of Malaysia, Singapore and Indonesia

- The ' Eyes in the Sky" initiative operation over the Straits of Malacca to detect and deter acts of piracy criminal activities in the Straits

- The routing system adopted under the auspices of IMO introduces the Traffic Separation Scheme (TSS)



EXISTING MEASURES … PROTECTION TO THE ENVIRONMENT

- Malaysia , Indonesia and Singapore maintain resources to deal with oil pollution in the Straits. In Malaysia the Petroleum Industry Malaysia Mutual Aid Group (PIMMAG) provide OSR equipment and personnel to respond to oil spill within Malaysia

- Major oil companies have also set up East Asia Response Limited (EARL) , which have bases in Singapore and Port Dickson

- In addition, the Petroleum Association of Japan maintains a stockpile of anti-oil pollution equipment in Singapore and Port Kelang.

- Stricter and higher liabilities for ship owners and higher compensation for damage in connection with the carriage of hazardous and noxious substance by sea as spelled out by IMO

Agreements on Marine Environment

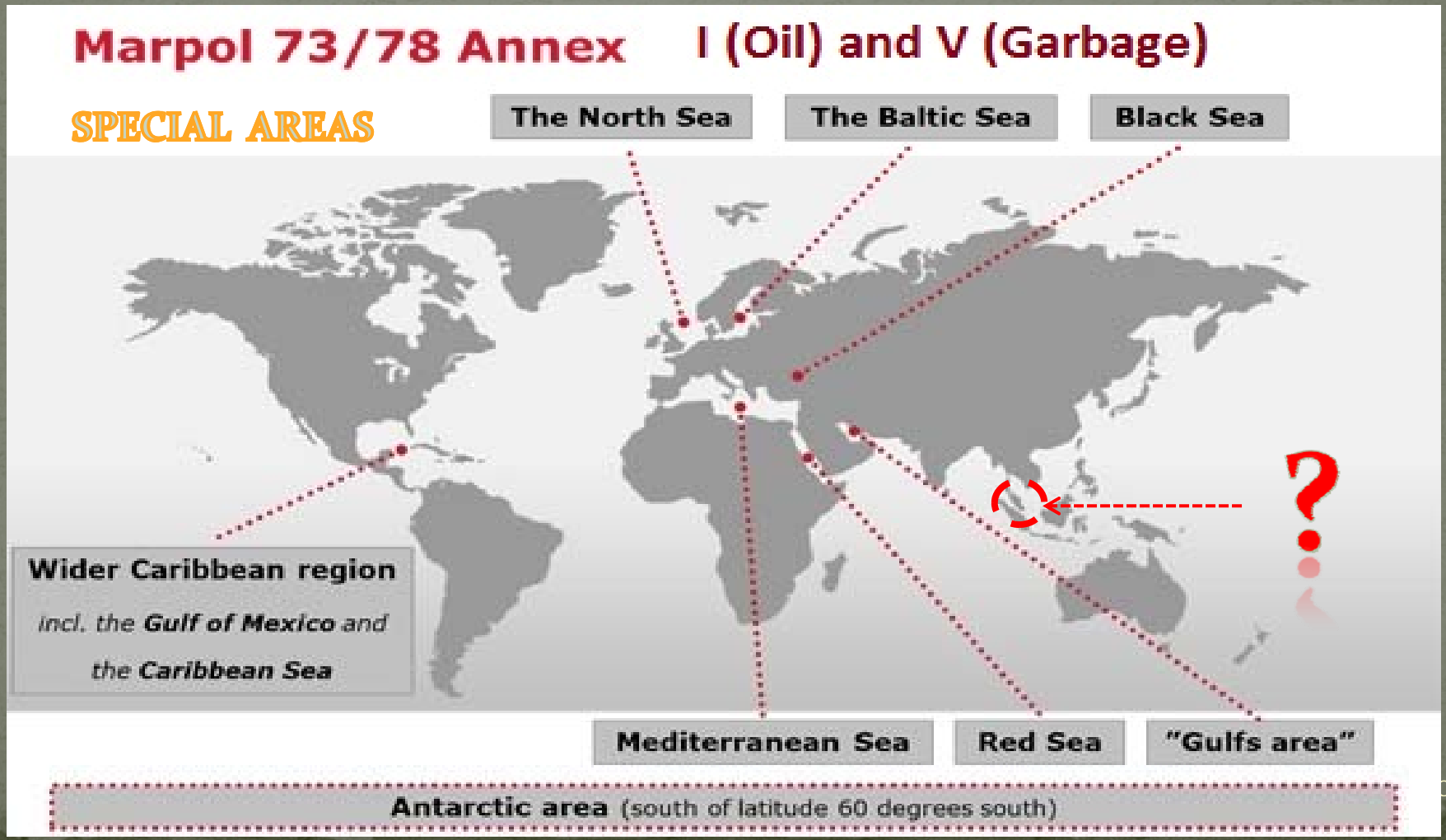
- Currently there are not less than 10 global and 13 regional conventions or agreements against marine environmental protection

- The signatories are committed to take specific measures against pollution due to dumping and discharge from ships against land-based pollution to cooperate with collision incidents and protection biological diversity

- The notable agreements are Barcelona Convention against pollution in the Mediterranean Sea (1976), Convention for the Protection and Development of the Marine Environment of the Wider Carribean Region (1983) and the Europe NOSTRA (Network of Straits) Initiatives undertaken in the UK and France to ensure the preservation biodiversity in our straits

- The MARPOL Convention defines certain sea areas as "Special Areas" which are provided with higher level of protection against pollution than other sea areas.

NONE OF THESE CONVENTIONS .....
INVOLVE STRAITS OF MALACCA SPECIFICALLY



CONCLUSION

- Increasing shipping traffic may have serious implication to the safety of the ships and quality of marine environment
- Littoral states will have to bear the consequences of the degraded marine environment reflected in reduced economic activities from fishing and tourism industries and the possible extinction of marine creatures
- There is an urgent need to take immediate action to mitigate the increase threat of ship-base pollution from the rising traffics in the Straits of Malacca as the current measures are deemed insufficient

PROPOSALS

- The littoral states and the biggest user of the Straits of Malacca like Japan , China and Korea , with the backing of IMO must enter a treaty to ensure preservation of the biodiversity at ecosystem of the Straits

- Laws of the Seas should include total prohibition of discharge of any kind of materials into the Straits while on transit or at ports in the region .

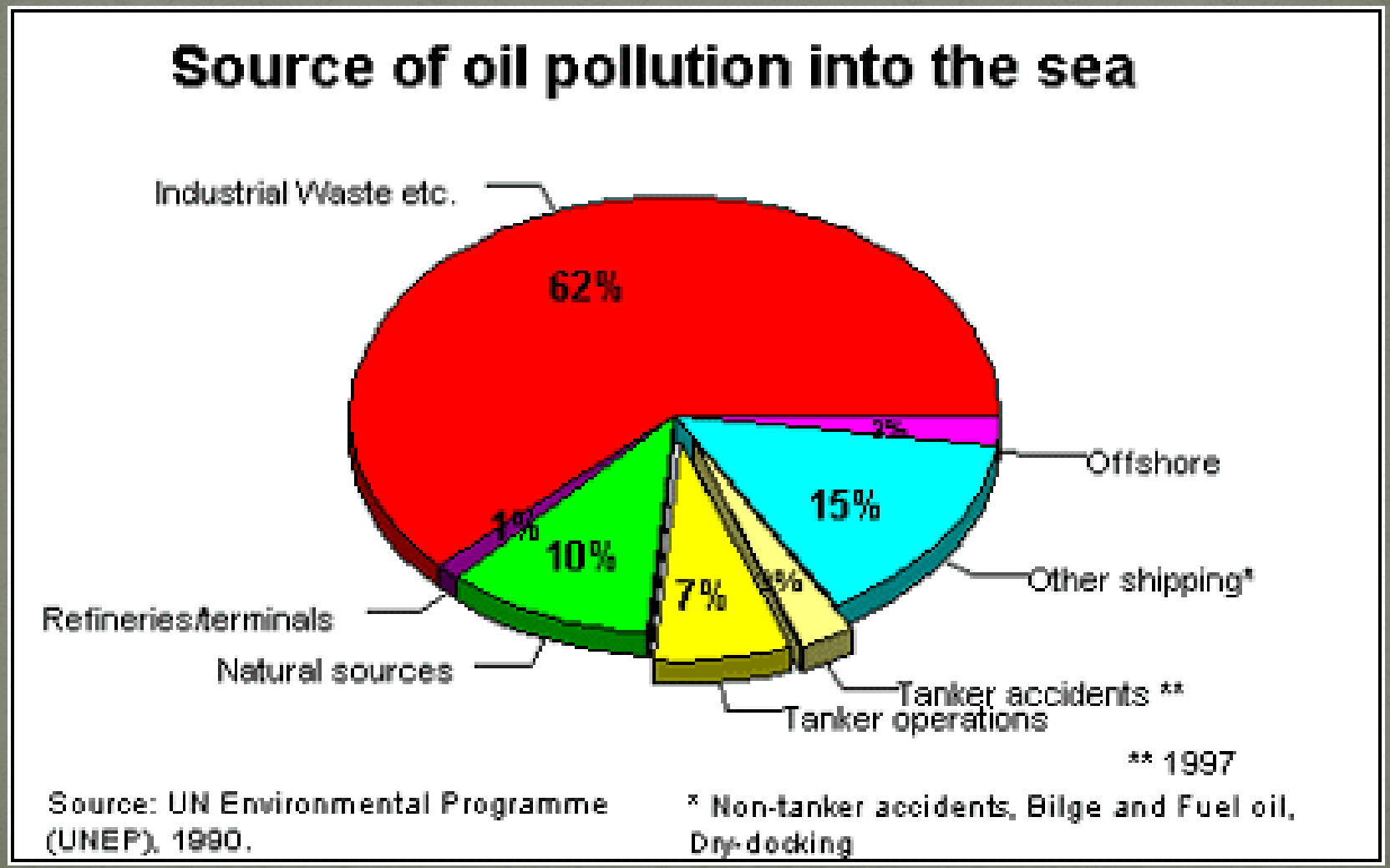
- At the least is to declare the Straits of Malacca as "**Special Areas**" under MARPOL Convention

- A study to be made to determine maximum carry capacity of the Straits , effective enforcement of various laws against pollution and introduction of toll mechanism to support the maintenance of the Straits

- Setting up of a regional authority among littoral states to monitor , manage, protect and ensure sustainable development in the Straits of Malacca

THANK YOU

ADDITIONAL INFO...



PROPOSALS....

- Immediate action is to be taken to protect the Straits of Malacca for the benefit of our future generations

- Perhaps building a canal at the narrowest point in Sothern Thailand (Ismuth of Kra) where large oil tankers to the Far East can by-pass the Straits of Malacca, hence eliminating the risks of oil spillage which could results in costly or irreparable damages to it's diversity and the environment.

Isthumus of Kra and the Strait of Malacca