CHAPTER - 2

The efficiency and convenience of maritime transportation system are a must for every nation for the growth of its economy, security and quality of life. Globalization of world economy and the corresponding dependence of a greater number of nations on foreign trade have brought tough competitions among them which demands for quick delivery of market products and real-time response. More trading nation means more shipping and more use of trade routes. The security of overseas trade remains as critical as ever. Though there are enormous technological advances in transportation systems, the physical distance, the geography of a place, weather pattern still determine the safest and most efficient trade routes. There exist a great deal of uncertainty and contention in the security front as to what appropriate role the country should play that would be acceptable domestically and internationally to tackle the maritime security issues.

2.1. Maritime Trade of Japan

Sacks has said ‘What was true in Adam Smith’s time remains true today, despite technological advances in rail, road and air transport, sea-based trade remains the most cost-effective means of international trade’ (Sacks, 1997: 19). Morse has stressed on the fact that ‘the Japanese are also proud of their hard earned success and there is a growing desire to gain international recognition and respect which they consider should accompany such successes’ (Morse, 1987:2). Alagappa is of the opinion that ‘Japan’s strongest and most acceptable assets continue to be its economic and technological resources. In the world of today the political dimension of economic relations is assuming centre-stage (Alagappa, 1998:141). The author Ninic said ‘trade routes are fixed’ and he also expressed that, ‘there are little chances of adding new man-made trade routes, because there occurs huge cost for construction (Ninic, 2000:32). He is of the opinion that ‘projects like the construction of Panama and Suez Canals are not likely to be replicate in future’. There are other possibilities as well to reduce the stress on SLOCs for exporting or importing oil by curving out pipeline network over the land.

The Review of Maritime Transport (2000) clearly pointed out World Bank’s estimation that the world seaborne trade was about 21,480 billion ton-miles in 1999 and it is expected to reach 35,000 billion ton-miles in 2010 and 41,800 billion ton-miles in 2014. The report also says ‘World sea-based trade recorded its fourteenth consecutive annual
increase, and Asia’s share of imports and exports was 26.1% and 18.8% respectively’ (Review of Maritime Transport, 2000:34). There is a prospect for the rise of seaborne trade in the near future. This will intensify maritime threats like piracy, terrorism, drug trafficking, gun-running, human smuggling, pollution, accidents and inter-state conflicts.

2.2. Straits Important for Japan’s Overseas Trade

Energy Information Administration (EIA) has identified six straits as the most important world oil transit choke points - Strait of Hormuz, Strait of Malacca, Suez Canal, Bosporus, Babel Mandeb and the Panama Canal. These chokepoints experience high volume of oil tanker traffic throughout the year and according to EIA, nearly two-thirds of the world’s oil trading happens through these choke points. They are at the same time highly susceptible to acts of piracy and marine disaster, security of shipping is of paramount importance. Map 2.1 shows spatial distribution of different straits passing through critical choke points in the Asia-Pacific Region. Explanations of the important straits are as follows.

2.2.1. Sunda Strait

Noer says ‘Sunda was the old Dutch entrance to the South China Sea, separating the islands of Java and Sumatra used by international traffic’ (Noer, 1996: 21). He further added that Sunda Strait ‘remains the most direct route in terms of distance for some important trade routes’, as it connects the Cape of Good Hope to North Asia. Graham says ‘in 1993, Japan received 9 million tons of imports through this strait, mostly coal, coke and iron-ore from Africa through this strait’ (Graham, 2005: 67). He said that Sunda Strait is more or less 12 miles wide apart, and the draft is limited to 18 meters in some places, sometimes strong currents hamper navigation to a greater degree than that of Strait of Malacca. The northern portion of the Strait is not suitable for use as it is shallow. Graham, gave estimation that ‘if it is used as an alternative to the Straits of Malacca, Sunda would add around 8.5 percent to the cost of a one-way voyage’ (Graham, 2005:78).
Spatial Distribution of Different Straits in Asia-Pacific Region

Source: Based on the source map provided by Asia-Pacific Centre for Security Studies, Honolulu (2000), [on line:www.southchina.org] scale: 1cm = 450kms
2.2 2. The Straits of Lombok and Makassar

Graham says, ‘Lombok- Makassar is the second most important strait in South East Asia for Japan’s trade with half of the total tonnage observed in the waterway in 1993 bound to or from Japanese ports’. He further added that ‘iron ore and coke shipments from Australia accounts for most of the cargo moved through the Lombok Strait’ which Japan receives till date from this route. (Graham, 2005: 28). Noer said ‘from Lombok, mariners bound north can sail between Kalimantan (Borneo) and Sulawesi (formerly the Celebes) via the Makassar Strait’ (Noer, 1996:23). It is less congested than the Strait of Malacca and quite often is used as an alternative passage to deliver oils to East Asia. It is sometimes used for the largest tankers transiting between the Persian Gulf and Japan, and it is considered the safest route if compared to the Strait of Malacca.

2.2.3. Ombai-Water Straits

This strait is situated to the east of Lombok and north of the Timor Sea to connect North Asia. Noer said that this route is hardly used for large long-haul merchant vessels on international voyages.

2.2.4. The Strait of Hormuz

It is considered to be the most strategic waterways that forms a link between the oil fields of the Persian Gulf, the Gulf of Oman and the Indian Ocean. Rodrigue argued that ‘it is 48 to 80 km wide but navigation is limited to 2-3 km wide channels, each used exclusively for inbound or outbound traffic’. It points out that circulation in and out of the Persian Gulf is extremely limited because of big size vessels makes navigation difficult along this narrow channel. He further argued that, ‘75 percent of all Japanese oil imports transit through the strait’ and ‘approximately 88 percent of all the petroleum exported from the Persian Gulf transits through this strait, bound to Asia, Western Europe and the United States’ (Rodrigue, 2004: 366). Broadus and Vartanov (1994) have talked about other important passages which includes Bab-el- Mandab which connects the Arabian Sea with the Red Sea, the Panama Canal and the Panama Pipeline connecting the Pacific and Atlantic Oceans, the Suez Canal and the Sumed Pipeline linking the Red sea
and Mediterranean Sea and the Turkish-Bosporus Straits joining the Black Sea and the Caspian Sea region to the Mediterranean Sea.

2.2.5. Suez Canal

Rodrigue argued that Suez Canal which was opened in 1869 has ‘ushered a new era of European influence in Pacific Asia’ (Rodrigue, 2004: 367). He further argued that, the journey from Asia to Europe was reduced and 6500 km was saved from the circum Africa route. This Canal can accommodate up to 2,500 ships each year that is 38 ships each day on an average which represents 14 percent of the global trade. Akimoto has pointed out that ‘the voyage between Japan and Gulf Oil terminals typically takes 20 days each way. A total of 13 million barrels per day is estimated to flow through the Strait’. He explains the fact that the ‘closure of Suez Canal which is economically significant to Japan only for the container trade, would require diversion via the Cape of Good Hope, adding 10 days steaming or 23 percent of the cost of exports shipped from Yokohama to Rotterdam’ (Akimoto, 2006: 8).

2.2.6. The Malacca Strait (SOM)

Noer argued that Malacca is supposed to be the second busiest strait in the world, ‘located between located between the Indonesian Island of Sumatra and Peninsular Malaysia’, and this strait is also known as ‘the shortest route for ships traveling between the Pacific Ocean via the South China Sea and the Indian Ocean via the Andaman Sea’ (Noer, 1996: 18). It remained as the vital artery of world trade for many centuries. Rodrigue argued that ‘by the early 16th century the Portuguese conquered the stronghold of Malacca, a key trading centre after which the strait bears its name’ and he also explains that SOM has been part of the ‘Arab trade route linking the Middle East, Southeast Asia and China’ (Rodrigue, 2004: 369).

Fathom has argued that ‘in 1995, more than 104,000 vessels called at Singapore and about 300 uses both the Strait of Malacca and Singapore per day’ (Famthom, 1998: 4). According to Noer’s estimation in 1996 the Strait of Malacca supports the bulk of the maritime trade between Europe and Pacific Asia, which accounts for 5,000 ships each year that is 600 ships per day. According to Eadie, more than 200 boats pass through the Straits of Malacca on a daily basis, carrying 80 percent of the oil transported to Northeast
Asia. Eadie further said that 'the strait is approximately 800 kms long and from 50 to 320 km wide (2.5km at its narrowest point) and has a minimum channel depth of 23 meters (roughly 70 feet)' (Eadie, 2004: 23). According to EIA’s statement, it is the longest strait in the world used for international navigation and 30 percent of the world trade and 80 percent of petroleum imports to Japan, South Korea and Taiwan transit through the strait, which represented approximately 11 million barrel per day in 2003.

EIA Report (2005) expresses the fact that, ‘oil traffic through SOM is expected to double to 22 million barrels per day by 2030’. Over 50,000 vessels transit Malacca each year, probably because it is the shortest shipping route between Japan, South Korea, China and the oil fields of the Middle East. The nearby Straits of Makassar and Lombok provide alternate routes at a marginal cost increase and not always the preferred routes during peacetime, but can be used during war times. In the event of a severe disruption, ships could transit to East Asia by traveling all the way around Australia, remaining in the open ocean and adding only a few days of transit time.

Noer (1996) says that Malacca, Sunda, and Lombok Straits serve as ‘southern entrances’ to the South China Sea. Ships sailing the main routes north on the South China Sea must pass by the Spratly Islands, which for the most part are more reefs than islands (Noer, 1996:32). After World War II, the pacific trade swelled, hence the importance of passages increased. Singapore located at the southern tip of Strait of Malacca, is one of the most important ports in the world and a major oil refining centre. Degrading is one of the main problems of the Strait of Malacca, since some sections are barely deep enough to accommodate ships of approximately 300,000 deadweight tons. The threat due to maritime piracy and terrorism has created a biggest problem in the Strait of Malacca. This strait is more important for international navigation than Lombok, Makassar and Sunda but the channel is becoming more congested with the increasing density of shipping traffic and fishing activities. The tonnage of ships is also growing reducing their ability to maneuver and these compels ships to cruise at slow speed and thus pirates attacks.
Recent reports by the International Chamber of Commerce shows that piracy including attempted theft and hijackings are a constant threat to tankers in the Strait of Malacca. Japan depends heavily on crude oil shipped through the straits. Eighty-five percent of the Japan-bound crude transiting Southeast Asian waters come all the way from the Arab Gulf. Over half of the crude oil entering Malacca in 1993 from the Gulf went on to Japan. Noer is of the opinion that 'Japan is not well diversified, so far as oil sources are concerned, and depends on the Southeast Asian sea lanes to bring in energy imports'. He further concluded that 'the Japanese tanker fleet is dedicated to the South China Sea SLOCs' and almost 'about 95 percent of Japanese-owned tanker capacity, including all 79 of their Very Large Crude Carriers (VLCCs), plied the South China Sea moving crude to Japan in 1993' (Noer, 1996:23). The amount of traffic makes it the busiest straits in the world currently, and it is likely to be even busier in the future as a result of increasing trade flows and energy demands in Asia. Malacca is not only narrow, but also quite shallow as well, at some point it is less than 22 meters. The maximum size of a vessel that can pass thought the Strait is usually called as Malaccamax. The strait is not deep enough also to permit some of the largest ships to use it. A ship that exceeds Malacca max will typically use the Lombok Strait, Makassar Strait and Mindoro Strait for that matter. Thailand has developed several plans to diminish the economic significance of the strait and the Thai government since 1970s has given several proposal to cut a canal through the Isthmus of Kra, saving around 960 kilometers from the journey from the Indian Ocean to the Pacific. The future of such proposal seems bleak since it will divide Thailand into two parts and would create internal tension. Pattani, the muslim majority area will be further isolated from the mainland, and it needs funds as well to dig such a huge canal. Map 2.2 shows the planned route of Kra Canal in Southeast Asia.
The Planned Kra Canal in South-East Asia

Table 2.1 Vessels passing through the Straits of Malacca

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>43,964</td>
</tr>
<tr>
<td>2000</td>
<td>55,955</td>
</tr>
<tr>
<td>2001</td>
<td>59,314</td>
</tr>
<tr>
<td>2002</td>
<td>62,393</td>
</tr>
<tr>
<td>2003</td>
<td>62,334</td>
</tr>
<tr>
<td>2004</td>
<td>63,636</td>
</tr>
</tbody>
</table>

Source: Marine Department, Malaysia. [On line available: http://www.marine.gov.my/service/index]

The above table 2.1 shows the number of vessels passing through the Straits of Malacca. It is seen that from 1999 to 2004, the number has increased from 43,964 to 63,636. It is expected that with the expansion of overseas trade in South East Asia and Newly Industrialized Economies of East Asia, the number will further increase. Supertankers alone account for more than one-third of all interregional tonnage transiting the Straits of Malacca. When small oil tankers, gas tankers, and petroleum product carriers are added, vessels that move petroleum in its various forms account for well over half of Malacca tonnage. This traffic mix reflects Singapore’s position as a major oil-refining center, now hosting the world’s largest refinery, as well as its importance as a trading centre.

The number of piracy incidents and attempted attacks in the Straits of Malacca in the last 10 years seems to suggest that the littoral states have not been doing enough to protect the security environment and the safety of international users of the straits. The recent concerns raised over potential terrorist attacks on international shipping in the straits further make the security scenario more alarming. Eadie pointed out that ‘one has to note that locations of piracy incidents also shift from time to time’ (Eadie, 2004: 24). He further explains that ‘during the period 1990-1992, the waters of the Straits of Malacca and Singapore were identified by the IMB as the most dangerous waters’ and in 1993-1995, the most dangerous area for piracy attacks was ‘Hainan-Hong-Kong-Luzon’ area.
2.2.6.1. Maritime Terrorism in the Straits of Malacca

The author Kawamura has argued about 'what is maritime terrorism?' he explains that 'there is no firm definition of maritime terrorism' then again he wanted to express 'How do we define it?' Is it either based on armed group attack on a ship, the ship being terrorized, or the ship being used for political objectives?' (Kawamura, 2004:34). The Southeast Asian Region is rich in maritime tradition, particularly Indonesia, Philippines and Malaysia, whereby maritime skills are prevalent. The capability to terrorize shipping lanes or to explode ships at strategic choke-points such as off the Philipp Channel is also not impossible to acquire. These factors reveal that pirates meet all the criteria of being equipped to carry out terrorist attacks. He further argued that 'pirates and terrorists have totally different agendas and motives. Pirates would not be willing to sacrifice their lives as suicide bombers and their ultimate objective is to make money, while terrorists are willing to sacrifice their lives for their political objectives and looting a can of point or crew belongings is certainly not their ultimate aim' (ibid:34).

High value-added products are being manufactured as a result of capital investment in the region, and further prosperity has been obtained through the promotion of exports. The basis of these activities is the stable preservation of transportation systems for energy, raw materials and the basic necessities of life such as food and other resources. Thus, the security of seaborne trade will remain as one of the fundamental prerequisites, supporting the subsistence and prosperity of each country within the region. A mass-transportation network could be built through the sea lanes, reaching all places in the world relatively easily by consolidating the service of ships, the functions of ports and harbours, and the safety of the sea routes.

2.2.7. South China Sea

South China Sea includes the Spratly, Paracel and Senkaku Island chains, which China claims as its own and which are contested in varying degrees by six other states: Taiwan, Philippines, Indonesia, Vietnam, Brunei and Malaysia. These countries are claiming some part or the other of this Sea and there is continuous negotiations going on among them and the dispute over the Spratly islands remained unresolved. This the Spratly
Islands consist of 230 islands, islets and reefs covering an area of 3.1 square miles of entirely uninhabitable land and the most important thing is that it lies directly in the path of shipping lanes that converge on the Indonesian Straits. These vital sea lanes transport oil from the Middle East to Japan and the West coast of the United States.

Mayer argued that 'the wealth of the seabed surrounding the Spratlys and the maritime resources, especially where there is evidence of petroleum deposits are major factors explaining the intensity of rival claims to the Spratlys'. He further concluded that Spratlys islands 'controls the SLOCs lying across the South China Sea'. (Mayer, 2000:101). Many littoral nations of the South China Sea do not have well-developed land transport infrastructure, such as road and rail, which might otherwise offer substitute modes for maritime transport. For the numerous islands, no such substitute is feasible. Noer argued that 'the maritime transport mode is more important to this region than it is to most other regional economies. Geography ensure that much of the region’s domestic trade and virtually all coastal and intraregional trade moves by sea' (Noer, 1996:45). Leifer argued that 'the maze of overlapping claims in case of South China Sea are so extensive that the kinds of bilateral agreements which have been worked out in some cases over territorial sea and continental shelf would not be adequate in themselves to establish a stable maritime regime within the context of the Convention on the Law of the Sea' (Leifer, 2001:132).

The straits of the South China Sea are a crossroads for world shipping. More than half of the world’s large merchant shipping capacity, and over one-third of merchant vessels in the world fleet, passed through at least one of the chokepoints. The southern access is through the Malacca, Sunda or Lombok Straits. Eastern and northern accesses are through Sulu Sea and via the Luzon Strait respectively. The normal route of shipping is through the west of Spratly Islands. The composition of shipping and cargoes bound to and from Japan via the South China Sea is basically the same as the Straits of Malacca and Sunda. During the typhoon season, ships enter into Lombok-Makassar and then to South China Sea.
China has developed more territorial interests in South China Sea since 1990s. Japan and US are closely monitoring the Spratlys disputes. The US interest in South China Sea lies in extracting petroleum from the oil reserves. As such it is more concerned about the issues of freedom and safety of navigation along the coastal states of South China Sea. Singapore increased the number of its armed vessels patrolling the South China Sea with the intent of securing the area’s sea lanes. The addition of two navy patrol vessels was justified on the grounds that freedom of navigation through the Malacca and Singapore Straits as well as the South China Sea is fundamental to the continued survival and prosperity of Singapore.

The author Laimou-maniati says ‘the overarching territorial claims by the People’s Republic of China almost the entire area of the South China Sea is detrimental to the freedom of navigation on the High seas as guaranteed by the Law of the Sea Convention’ and he added that ‘it is important that conflict over sea matters must be averted’ (Laimou-Maniati, 2003: 6). The author Noer argued that ‘a large volume of international long-haul maritime traffic crosses Southeast Asian straits’ but ‘the lion’s share transits the South China Sea’ (Noer, 1996: 1). In 2002, China and ASEAN countries decided to reduce tension at least temporarily by signing a code of conduct in the South China Sea. There is a peace in and around the islands for the time being, the disputes have not been settled and they carry the potential for tension in the future. A global framework does not exist for the maritime dimension of regional order. The institute of Strategic and International Studies in Kuala Lumpur has proposed the concept of a Regional maritime Surveillance and Safety Regime for Southeast Asian Waters. This proposal could provide a medium for monitoring illegal activities, sharing information, combating piracy, enhancing maritime safety and controlling pollution. To build the stable regime, various maritime confidence and security building measures should be explored considering the changes happening in the maritime security context. In East Asia, maritime confidence and security building measures could be put into practice.
2.3. Maintaining Alternative Sea Lines of Communication on Occurrence of Blockages in the Normal Routes

2.3.1. If Malacca Closes

According to EIA, the closure of the Straits of Malacca, through which nearly 9.4 million barrels of oil per day flow can seriously threaten the economies of Southeast Asia and the energy intensive economies of China and Japan. Over 50,000 vessels transit the Strait of Malacca per year. If the strait were blocked, nearly half of the world's fleet would be required to reroute around the Indonesian archipelago through Lombok Strait, located between the islands of Bali and Lombok, or the Sunda Strait, located between Java and Sumatra. Malaysian, Indonesian and Saudi companies signed a contract in 2007 to build a $7 billion pipeline across the north of Malaysia and Southern border of Thailand to reduce 20 percent of tanker traffic through the Strait of Malacca.

Noer and Gregory is of the opinion that, 'if the Indonesian archipelagic waters were open, ships could enter the South China Sea through the Sunda Strait or take a route east of the Philippines via the Lombok - Makassar Straits'. They further argued that, 'in the case of a shipment of crude oil from the Gulf to Japan for example in comparison to the route through the Malacca Strait, the detour would add about three days to the voyage'. And this is an obvious fact that closure of the Straits of Malacca would immediately raise freight rates and it would disrupt the world shipping markets even more severely. Nearly half the world fleet would be required to sail farther and there will be increase in demand for vessel capacity. The authors are of the opinion that 'all excess capacity of the world fleet might be absorbed' and 'the effect would be strongest for crude oil shipments and dry bulk such as iron ore and coal' (Noer and Gregory 1996: 9). Figure 2.2 shows blockage of SCLOs in Southeast Asia and their alternate routes.

2.3.2. If Malacca and Spratly Islands Closes

Akimoto argued that 'potential losses to Japan from disruption of shipments of crude oil from the Middle East to Japan are $87.9 million if the Malacca Strait were blocked, $200 million if the South China Sea were closed, and $1.2 billion if the Indonesian Archipelagic Waters became impassible'. He further added that 'it would take 3 more
days to go by a round about route that sails along the Philippines in the east by way of the Lombok and Makassar Straits. And in order to meet the normal requirement for crude oil an increase in the volume of tankers (15 vessel) with repeated roundtrip shipping would be required’. (Akimoto, 2006: 5). Graham has pointed out that ‘to cover the extra 1014nm between Malacca and Lombok route it requires three days steaming and adds 13.5 percent to shipping costs’. He further elaborated the fact that ‘if the straits of Malacca were closed most Japanese tankers would have to pass through the Lombok Strait’. And he has given his own estimation that ‘this would require an extra 15 tankers and add approximately $ 88 million to the annual import bill’ (Graham, 2005:56). He also talked about the strategic importance of waterways which is depended on geopolitical and military factors of the regional states.

Most of the North Asian economies would select the Lombok alternative if the South China Sea became dangerous. Closure of Malacca or the Spratly SLOCs would generate a large increase in freight rates worldwide due to the heavy concentration of world shipping there. The trade pattern via the choke points is dominated by a flow of high-volume raw materials north and east and high value finished goods returning south and west. So important are hub ports in the global trading system that it has been estimated that the global economic impact from a closure of the port of Singapore alone could easily exceed US$200 billion per year from disruptions to inventory and production cycles. Japan has the largest volume of interregional trade and shipping through the SLOCs. Much of Japan’s traffic could easily reroute in a crisis. Economics and geography should balance each other to keep open strategic straits. The detour requires vessels to sail further in order to deliver the same cargoes, increasing the ton-miles demanded. Shipping markets are very competitive. The increase in freight rates caused by a capacity shortage will eventually lead hamper the business of the vessel owners. Map 2.3 shows blockage of SLOCs and the alternate routes in Southeast Asia.

2.3.3. If Malacca, Sunda and Lombok Closes

Akimoto argued that, ‘nevertheless, if the Malacca/Singapore Strait and the Indonesian Archipelagic Waters were blocked, then all crude oil and other freight bound for Japan would have to make a detour around the south coast of Australia, which would have a
Source: Based on the source map provided by the Centre of Naval Studies, USA (1966).
significant economic impact not only on Japan but on many other countries including the countries of Southeast Asia and South Korea' (Akimoto, 2004:34). It is very hard to make any generalizations about the economic losses and the acceptability of detours around Highly Accessed Sea Area. Through bulk shipping, surplus vessels and crude oil stockpiles may help those countries with spare economic capacity to escape significant losses. But it should be limited in short period. The losses due to a disruption in container shipping however would have a negative impact on the global economy. According to Akimoto the required solutions are the stabilization of the security environment, the maintenance of order and international approaches to the strengthening of defence positions.

The Singapore Institute of International Affairs has projected traffic density to increase from 94,000 ships in 2004 to 141,000 to 2020. According to Singapore Institute of International Affairs, East Asia’s navies will be more than double in their submarine capabilities over the next 10 years, replacing obsolete and ageing submarines from the 1970s. According to Akimoto, if Sunda Strait and the Lombok-Macassar Straits are blocked, ‘it may also be impossible to navigate through the Malacca Strait’ the only detour available would be to go around the south of Australia (Akimoto, 2004: 23).

2.3.4. Blockage in East China Sea

If there is blockage in East China Sea, it would not affect Japan but there would be a transportation lag to China and South Korea and an increase in the number of tankers with the repeated roundtrip shipping required.

2.3.5. Consequences of Vessel Detour

Noer says ‘if a threat to shipping appears that is deemed credible, merchant vessels are likely to use other routes. A typical mechanism is the maritime insurance markets. If an area is determined to be a war zone, insurers will either refuse to insure or will increase the rates of their policies’ (Noer, 1996:28). He further added that ‘vessel operators may even face the prospect of paying for any and all damage to their vessels, whatever the cause, and shippers similarly may find their cargoes at risk’ (Noer, 1996:29).
And this may create SLOC transit unattractive, because there would be more financial risks. The author argued that such situation may lead to ‘virtual closure’, where apprehension alone causes shipping to divert though no vessels are actually being damaged or intercepted' (Noer, 1996:30). Noer has elaborated the fact that if ‘any event that causes traffic to divert from the most cost-efficient routing must be interpreted as a signal that shipping interests are worried’. Ship operators deviate from their normal courses to avoid danger and the loss of cargoes, vessels and even human lives.

2.4. Indian Ocean: An Important Trade Route for Japan

Khalid has argued that ‘Indian Ocean (IO) is the world’s third largest ocean, covering 20% of the earth’s water surface. The IO is a critical waterway for global trade and commerce. This strategic expanse hosts heavy international maritime traffic that includes half of the world’s containerized cargo, one third of its bulk cargo and two third of its oil shipment’ (Khalid, 2005:23). Sakhuja is of the opinion that ‘its waters carry heavy traffic of petroleum products from the oilfields of the Persian Gulf and Indonesia and contain an estimated 40% of the world’s offshore oil production’ (Sakhuja, 2003:56). Today, the IO region is one of the busiest waterways in the world for the commercial exchange of commodities, capital, manufactures and services. It is at the center between the developing economies like the Indian subcontinent and the developed economies like the Far East, and within the oil-rich Gulf area. This ocean occupies a strategic position to facilitate a tremendous amount of trade within this expanse and makes the IO region an economically vibrant area and the ocean a vital trade facilitator.

The trade routes passing through the IO are gaining prominence with increasing dependence by the world’s economic powers on energy supply from the Gulf. According to Pant, ‘it has been estimated that European, Japanese and US economies respectively import 70%, 76% and 25% of their crude oil requirements from the IO Rim’ (Pant, 2003:23). He indicated the fact that ‘China is fast emerging as one of the world’s most powerful economies, also has vital trading and energy interests in the IO waters and rim’. (Pant, 2003:23). Khalid says, ‘increasingly, with trade liberalization, maritime trade passing through the ocean has dramatically increased as a result of the export-import orientation of many trading countries and their energy imports. The IO provides maritime
advantages to several of its littoral states in terms of their strategic location along the ocean' (Khalid, 2005:32). These points highlight the significance of IO in facilitating global maritime trade and its importance from a strategic viewpoint. Global trade growth has heightened the importance of this vital ocean, with its strategic waterways and links with major maritime trade routes, in linking the trades of countries and economic regions. Economic geography, international trade and political trends will continue to change and influence the development of maritime trade around the IO rim and its trading partners.

As the importance of maritime trade and strategic interests increase, the IO will continue to be at the forefront of attention of trading nations and the world’s great powers. This will exert plenty of challenges to this ocean in areas such as navigational safety, environmental integrity, sovereignty and security, and enhance focus on the impacts they will have on social, trade economic development in the region. The near future will undoubtedly see an increase in maritime activities in the IO waters, fuelled by factors such as increasing international trade amongst nations, demographic changes, integration of economies, modernization in ports and shipping, increasing dependence of economic powers on energy supply, and growing strategic interests. Subsequently, the scenario in the IO will become more complex and the challenges greater than ever. It is expected that the sealanes of the IO will become even busier in the future as global trade grow in size and importance. Author Khalid says that 'increasing regional cooperation such as those initiated on the platform of IOR-ARC will enable IO countries to participate more actively and effectively in the global economy' (Khalid, 2005:23).

2.5. Piracy

According to the International Maritime Organization modern maritime piracy is a developing world problem and is confined to certain parts of the world like waters off

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3 IMB defines piracy as an act of boarding or attempting to board any ship with the apparent intent to commit theft or any other crime and with the apparent intent or capability to use force in the furtherance of that act. (Kesavan, 2006: 16). The United Nations Convention on the High Seas (1958) and Convention on the law of the Sea (1982) define maritime piracy as an attack mounted for private ends on a ship, involving violence, illegal detention of persons or property, or the theft of destruction of goods that is directed on the high seas or in a place outside the jurisdiction of any state. Inside territorial waters, the laws of littoral states determine what actions constitute piracy, and most subsume piracy under offense categories such as murder, assault, robbery or theft. However, the International Maritime bureau (IMB), an offshoot of the International Chamber of Commerce, has adopted a practical rather than legal definition of piracy within a largely commercial frame of reference. The IMB definition refers simply to any act of boarding any vessel
South America, West and East Africa, the Middle East South and South East Asia. The
the end of 2003 the total number of actual or attempted incidents of piracy and armed
robbery against ships was 3456’ (Reports on Acts of Piracy and Armed Robbery against
Ships: Annual Report, 2003:32). The author Abhyankar argued that ‘this problem is
highly seen in South Asia waters. In 1998, over 200 incidents were reported worldwide to
the IMB, including at least 67 fatalities, 138 vessels boarding, 11 shootings and 15
hijackings’ (Abhyankar, 1999:12). Though piracy is as old as the history of shipping
itself, it has grown dramatically in Asian waters, particularly in the Post-Cold War
period. Before Cold War there was powerful naval forces maintained by both US and the
Soviet Union in the Pacific and the Indian Ocean to combat piracy but after the cold war
complete removal of Russian naval forces and reduction in US navy has rather
proliferated the growth of pirates in Asian waters. The growth of overseas trade due to
liberalization and globalization in early 1990s caused increase in movement of cargo
ships. The globalization has caused considerable economic disparities among the nations
of South East Asia and forces some sections of the society to indulge in piracy smuggling
and armed robbery. The peculiar feature of piracy in South East Asia is that most of the
incidents take place in areas which border on the territorial waters of more than 1 or 2
countries which enable the pirates to flee from one country to another. The pirates are
well equipped with sophisticated weapons, scientific instruments like radar, radio and
satellite communication systems. Map 2.4 shows the occurrence of piracy and armed
robbery along the coastal areas of the world.

The numerous cases of reported and unreported piracy have led to considerable concern
and multinational efforts to control this violent menace. According to the International
Maritime Organization Annual Report 2002, the Malacca Straits, South China Sea and
Indian Ocean are the areas that have been most affected by piracy. The Report also says
‘with a dramatic increase in large and small container transport by sea, from vessels that
used to carry 226 TEU’s (Twenty-Foot Equivalent Units) in 1957, there are today vessels

with the intent to commit theft or other crime and with the capability to use force in furtherance of the act. It is thus wider than the UN definition and ignores the question of Jurisdiction.
Distribution of Piracy & Armed Robbery Along the Coastal Areas (2000)
that can carry 6,600 TEUs'. IMO Annual Report, 2002: 23. The Flag of Convenience (FOCs) pose another major challenge to maritime security. Flying the flag of a state other than the country of ownership enables the owners to avoid high registration fees and taxes, and to employ cheap labor operating under sub-standard conditions.

It is estimated that there are about 30 such registries mainly run by small islands or impoverished nations. According to the international chamber of commerce's IMB, the number of piracy attack on shipping throughout the world has reached a high of 445 in 2003. Since data was collected in 1992, this was the second highest figure collected with 469 incidents occurring in 2000. According to the author Sondakh, ‘Southeast Asia and the Far East accounted for 43 percent of the world's number of incidents, of which 16 percent occur within the Malacca and Singapore straits’ (Sondakh, 2004:7).

Although piracy has been an ongoing activity in the region for a long time, what makes piracy dangerous now is that these gangs appear to be better equipped and organized than most of the naval authorities, and have demonstrated an increased propensity to use violence. They make use of speedboats, modems, radars, satellite phones and modern weaponry to take control of merchant ships. These criminal gangs organize themselves into syndicates who are increasingly involved in sea piracy and generally, target relatively small vessels carrying valuable products like palm oil, diesel or gasoline that can be sold with high profits in the black market. They also use hijacked ships both for the human trafficking and for the transport of illicit drugs and weapons. According to the straits Times, ‘Crime syndicates involved in piracy incidents take advantage of governments that lack the financial resources, political will and efficient law enforcement agencies to tackle their criminal activities’ (The Straits Times, 2004:31).

2.5.1. Counter Measures for Piracy

Several factors have actually contributed to the decline in the piracy attacks in ports. The most obvious factor has been the level of security measures adopted by the littoral states and port authorities that have been upgraded or increased, especially in order to meet the
requirement by the IMO such as the ISPS Code\(^4\) and also the US customs and border protection agency’s CSI. In order to receive the ISPS code certification, shipping companies, vessels, port facilities and contracting governments must meet several criteria of security requirements. Therefore, it is an intensive effort by the local port authorities to increase the level of port security measures since it will affect the nations’ export to other countries especially to the USA. Competition to meet the deadline and to have the certification by the IMO has resulted in the littoral states in this region drawing their port security policy. States failing to do this would lose their competitive edge with other main ports in the region.

The new trends in piracy incidents require a different perspective or approach to eradicate it. The latest development indicates that attacks mostly occur away from the port area. With the changing trend, enforcement at sea needs to be given higher priority and consideration. The IMB reports have regularly highlighted that most of the piracy incidents occurred in Indonesian waters. According to the Indonesia Defence White Paper, the highest priority for Jakarta is their internal security such as combating terrorist groups and also separatist movements that pose a direct threat to the regime itself. Before the economic downturn in 1997, Jakarta was actively engaged in efforts to eliminate piracy in the Straits of Malacca. With the limited capabilities available, and a huge maritime space that needs to be governed by Jakarta, areas of priority need to be clearly identified. More attention has to be given to land issues since it directly impacts on the Indonesian government as well as regional stability. National users of the straits should cooperate with the littoral states to identify the problem, should provide technical assistance, training, and equipment and even promote economic development along the straits rather than putting all responsibilities of protecting the users at the cost of the littoral states.

Malaysia has initiated several approaches to combat piracy in the Straits of Malacca. One of the approaches is by using the existing navigational system in place along the Straits of Malacca. Numerous coordinated patrols by both sides have been activated. In 2004 Malaysia, Indonesia and Singapore navies conducted a coordinated patrol in their

\(^4\) The ISPS code was drafted in late 2002 with the primary objective to increase the security surrounding ports and protect maritime shipping from any potential terrorist attacks.
respective maritime territory in the Straits of Malacca. They also agreed to establish a database that would carry information such as profiles of pirates. Beckman argued that ‘Malaysia-Indonesia formed a joint team called the Maritime Operation Planning (MOP) in December 1992 to conduct coordinated patrols along their common borders in the Malacca straits’ (Beckman, 2004: 15).

Measure adopted by the Malaysian government is the formation of the Malaysian Maritime Enforcement Agency. The agency will assume the function of several existing maritime enforcement agencies such as the marine police, fisheries department, customs department, and marine department. Being highly dependent on maritime trade, Singapore is obviously concerned about the latest developments and pattern of piracy in this region and has urged all the littoral states to take the threat more seriously. Any incident in the Singapore waters or even close to their waters will cause direct economic and security impact to the island. Based on the IMB 2003 Report, the number of piracy incidents occurring around Singapore is growing and they are getting closer to the island. The Report says ‘in 2004 alone, eight incidents were reported which is the highest ever in the Singapore Straits in the last 10 years’ (IMB Annual Report, 2003:14).

All the main shipping routes are already covered by the piracy attacks. Although Singapore maritime enforcement agencies are among the best equipped in the region, they also have their limitations in curbing piracy incidents effectively. Differing national concerns and priorities regarding piracy and maritime terrorism have divided the three littoral states from reaching a common position on how to deal with the threat in a region. Singapore tends to favour the interests of ship owners to a greater extent than its neighbours. Singapore is more dependent than its neighbours on world shipping via the straits, for center port trade, its refining industry and profits from serving as an operational base for shipping. Singapore also has less to lose than Malaysia and Indonesia from an environmental perspective.
Malaysia and Indonesia advocate the use of the alternate route east of Bali and Borneo via the Straits of Lombok and Makassar for laden supertankers. While ship owners are quite discreet about this issue, a finding of this study is that very few, if any, follow this advice. For the main oil route, Arab Gulf to North Asia, almost all supertankers transit via the Straits of Malacca. The route via Lombok is 15 percent longer than the route via Malacca, which is the shortest available of all the alternatives for supertankers. Furthermore, vessels plying Malacca can use the facilities of Singapore, a significant logistical and operational advantage.

The safety problem is compounded by the lack of navigational aids along the channel and heavy volumes of shipping. The two littoral states that own most of the waterways' coastline, Malaysia and Indonesia, benefit far less from the international through-traffic than Singapore, which has jurisdiction over a relatively small portion of Malacca. Furthermore, there is the responsibility for disaster response to consider. It has been suggested that the two littoral states levy a toll on shipping to finance emergency response and better navigation aids. This proposal has met with an unenthusiastic response from the international maritime community. Such schemes violate the international legal status of the straits, and could open the door for more rigorous assertions of sovereignty. In 1994, the Malaysian government established the Malaysian Institute for Maritime Affairs (MIMA) to coordinate maritime policy and promote Malaysian interests. In 1995, Malaysia proposed a Vessel Traffic System (VTS), featuring local area radar, traffic advisories, and voluntary coordination of shipping in the channel. MIMA has indicated interest in determining what shipping passes through the straits, including such details as registration, origin, and destination.
The above diagram shows the reported piracy and sea robbery attacks in Southeast Asia, from 1994-1997. This data has been taken from IMB which is the sole authority to record such maritime data. It is seen that South China Sea has experienced such menaces over the years followed by Malacca Strait, Philippines Coastal Waters, Coastal Thailand and Malaysia.

Kesavan is of the opinion that 'within Asia, Indonesia, Malaysia and the Malacca Strait account for the maximum number of such incident'. He has only given the 2004 data which says '147 incidents occurred in these areas out of a total of 325 for the whole world'. It seems that these Southeast Asia Straits are the most vulnerable areas for the occurrence of piracy. Kesavan has further argued that, 'Indonesia continued to experience the highest number with 93 incidents followed by the Malacca Strait with 37. Other

5 The statistics produced by IMB are also subject to criticism. It has been said that IMB's piracy figures tend to conflate piracy and sea robbery attacks. Critics argued that piracy is an issue that demands international cooperation, while sea robbery is a domestic matter under the jurisdiction of coastal states. IMB statistics do not always make a distinction between actual and attempted attacks. IMB's figures sometimes do not accurately reflect the true extent of the problem because of the phenomenon of underreporting.
countries like the Philippines, Thailand, Vietnam, Cambodia etc, have had a lesser number of attacks’ (Kesavan, 2006: 14). While the littoral states may have acknowledged the concerns of the straits users, the responsibility to ensure its security is very heavy, particularly, on the Indonesian government that has limited resources. The Asian Times says, ‘sea robbery and thefts in harbours have now reduced quite drastically. In 2002, there were 161 actual and attempted pirated attacks in Southeast Asian waters. Of those 73 percent occurred at ports. The following year in 2003, out of 187 attacks, only 37 percent occurred within the port. In the first quarter of 2004, of the 41 reported attacks, only one-third were committed in ports’ (The Asian Times, 2004:4).

2.5.2. Weakness in Regional States

Young argued that, ‘three sets of interlinked factors have contributes to the recent violence: failures of governance, poor socio-economic conditions, and a diffuse set of technological and geographical factors (Young, 1999: 4). The first set of factors includes various aspects of weak political control, poor governance, and lack of state capacity, all of which have undermined the ability of governments to control events outside of their environs. Additionally state responses to piracy are delayed by weak regional cooperation resulting from the absence of trust, extreme sensitivity over national sovereignty, and lack of interoperability. When robust regional cooperation is absent, sea-borne criminals find it easy to cross from one national jurisdiction into another without fear of capture. Poor socio-economic conditions are often both a cause and an effect of weak political control and poor governance. Members of coastal communities facing economic hardship in some cases turn to maritime crime to supplement meager incomes.

Storey says, ‘technological and geographical factors meanwhile have increased opportunities for pirates and sea robbers in recent years. Maritime criminals today especially members of organized crime gangs have easy access to high-speed boats, satellite navigation, cell phones, and the internet, as well as to automatic and heavier weapons’. He further elaborated his point in saying that, ‘geographical features such as narrow waterways, small islets, and river-rine access provide pirates with a benign environment in which to exploit these technological capabilities‘ (Storey, 2004: 3). According to IMB, Indonesia is home to the most pirate-infested waters in the world.

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According to Storey, another major obstacle to increased security cooperation is extreme sensitivity over national sovereignty. Such sensitivity has prevented neighboring countries from reaching agreement, whereby the security forces of one country can cross into the territory of another in pursuit of sea-borne criminals without the latter country's permission. In 2004 nations outside Southeast Asia embarked on two new efforts to improve cooperation in the region: the United States proposed the Regional Maritime Security Initiative (RMSI) and Japan organized the establishment of the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP).

Primary cause for maritime crime is poor socio-economic conditions, especially in coastal Sumatra, Riau Islands and Southern Philippines. Malaysia and Singapore are economically stronger than Indonesia and Philippines. MSP aimed at alleviating economic hardship in coastal communities would significantly mitigate the problem of sea robbery and piracy. Improved levels of governance in Indonesia and Philippine’s armed forces and law enforcement agencies along with overall economic development is necessary to mitigate the problems of maritime crime in Southeast Asia.

There is strong consensus among security practitioners in the region that one of the primary root causes of maritime crime is poor socio-economic conditions, especially in coastal communities in Sumatra, the Riau Islands, and the southern Philippines. Although both the Indonesian and Philippines economies have begun to recover from the Asian financial crisis, the gains have been made at the macro level rather than at the micro level and have not yet trickled down to villages in coastal areas. In both Malaysia and Singapore high levels of economic growth keep those who depend on the sea for their livelihoods in gainful employment. Achieving similar growth levels in Indonesia and the Philippines, however, will take decades. In the meantime, projects aimed at alleviating economic hardship in coastal communities would significantly mitigate the problem of sea robbery and piracy.

Economic development is a necessary along with there should be improved levels of governance, particularly in the Indonesian and Philippine armed forces and law enforcement agencies to tackle maritime piracy. Storey says, 'Conflict resolution in
Southeast Asia is also likely to have an important impact on the maritime crime situation. Indeed this is already the case in the Indonesian province of Aceh’. He further suggested that, ‘external powers like U.S., Japan, India, and China could assist Indonesia and the Philippines both with economic development projects in Coastal Communities and with programs aimed at improving governance’ (Storey, 2008:104). He feels that there should be efforts of regional states, and support from external power to improve security in Southeast Asia’s maritime domain.

2.6. Terrorism

A quick look at the geography of the Asia-Pacific region indicates that terrorist hubs in Asia are located in the littorals, and it can be said that maritime terrorism is concentrated in the Asia-Pacific region. In addition to attacks on ships, seaborne trade is fragile to well-prepared terrorist attacks in the following two areas: one is in several choke points such as international straits and canals through which three quarters of the world seaborne trade passes. These choke points are relatively narrow and can be blocked with ease. The other is the mega-port hubs that from an interdependent global network and increasing amounts of containerized shipping. A terrorist attack on a commercial ship not only endangers the lives of the crew/passengers but also threatens the safe passage of other ships and their crew/passengers by means of causing massive collisions. It is certain that the disruption of maritime traffic in the Malacca Straits will do serious damage to regional and international seaborne trade.

Storey says, ‘maritime crime in Southeast Asia poses a threat to regional and global security and potentially could impede international trade. Southeast Asia presents an inviting opportunity to both criminals and terrorists for several reasons’ (Storey, 2008:23). He further explained that the important international shipping lanes, ‘such as the Strait of Malacca (SOM), pass through the territorial waters of several states in the region’. He identified other problematic areas apart from the Strait of Malacca which he called ‘tri border’ area between the Philippines, Indonesia, and Malaysia falls under various states’ jurisdiction comes under national security apparatuses. According to Storey, sea is the most attracting area for operating piracy. He identified four reasons. First, for gun-running, second, for the clandestine movement of their cadres from safe
sanctuaries in one country to safe sanctuaries in another, third for the smuggling of narcotics, which is an important source of revenue for them, fourth, for the movement of material for weapons of mass destruction to an intended theatre of operations.

This has brought to the concerns of the international community over the possible use of the increasing container traffic by terrorists for the transport of WMD and for causing explosions of a conventional or unconventional nature in the vicinity of ports. This has underlined the importance of creating a greater awareness amongst policy makers and national security managers of the need for paying more attention to the likely new threats from maritime terrorism and for strengthening their intelligence collection, preventive security, crisis management and investigative capabilities.

Maritime terrorism is functionally different from maritime piracy. Pirate attacks occur for economic gain, terrorist attacks occur for political or social gain. The U.S. Department of State defines terrorism as premeditated, politically motivated violence perpetrated against non combatant targets by sub-groups usually intended to influence an audience. In essence, threats from maritime terrorism are on the rise and can cause severe damage to Thailand's economy by affecting the exploitation of marine resources and the sea lines of communication. Fighting maritime terrorism, which is trans-boundary in nature and may come from anywhere in any form, requires all authorities and agencies concerned to perform their relevant duties in an integrated and comprehensive manner, be it at the policy level or at the operational level. Domestic, bilateral and regional cooperation and close coordination to establish the order at sea and efficient network of information sharing is the key to success in combating terrorism. The need to enhance cooperation and coordination among all stakeholders, as well as the need to further upgrade our human resources and technologies, to address the threats from maritime terrorism is vital. Thus, Thailand will continue to adopt a multifaceted approach in managing maritime security threats and challenges, at various levels, in close cooperation with countries in the region and other partners and in accordance with our commitment under international regimes, governing the maritime safety and security issues. The Asia-Pacific Century, as the region is expected to experience phenomenal growth rates unprecedented in the history of world development. But little do we realize how true the adage will be.
2.7. Regional Security Issues in Asia-Pacific Region

The issue of maritime security is of critical importance to the countries of the Asia-Pacific Region, which are set to play a key role in international politics in the 21st century. The region is witness to some dramatic economic, scientific and technological development. Kesavan argued that 'Japan, China, Korea, ASEAN represents models of their own in the realm of economic development'. (Kesavan, 2006: 3). As Kesavan says security is not restricted to military terms, though it is an important factor, many non-military components of security such as resources, technology, trade and environment should be emphasized. He feels there is a growing realization of the need to evaluate security in a holistic or comprehensive manner. He thus added that his region is 'shifting from the period of military preoccupation to more comprehensive multi-dimensional economic interactions'. (Kesavan, 2006: 4). Freedom of navigation, marine resources, safety of sealanes, proper delimitation of Exclusive Economic Zones (EEZ) and maritime environment are also responsible for regional security issues. There are certain maritime geographical features like presence of several closed and semi-closed seas like the Yellow Sea, Japan Sea, South and East China Sea and Bay of Bengal and presence of narrow straits and channels has made it more vulnerable to maritime attacks.

In recent years China, India, Korea and ASEAN countries have great economic strides contributing to strong integrating trends within the region. ASEAN, ASEAN+3 are evidence of the emerging trends towards greater economic cooperation, there is massive flows of trade, technology and investment. The Asia-Pacific region has witnessed its highest economic growth in the last several decades and this trend is likely to continue in the coming decades as well. Japan is seen as a powerful engine of growth contributing significantly to other countries with its economic assistance. South Korea and other East Asian countries have also experienced major economic and technological transformation. In the Asia-Pacific region, governments have been worried that terrorists in Southeast Asia, especially those in Indonesia, would join with pirates and create blockades to disrupt Asian trade. A specific fear is that terrorists will sink large ships somewhere in one or more of the three straits – Malacca, Sunda and Lombok, along the southern edge.
of the South China Sea, forcing transiting ships to sail much longer distances around Australia as they traverse between East and South Asia.

At present in the littoral states, the maritime police of one nation cannot pursue pirates or terrorists into the territorial waters of another because a key feature of the straits is that while ships have the right of free passage under the UNCLOS, waters remain under sovereignty of the coastal states. And because the international legal definition of piracy applies only to international waters, maritime attacks in the majority of straits are considered crimes under domestic, not international, law. Also, it should be noted that a lack of trained maritime police, insufficient number of vessels and equipment, and inexperience with complicated concepts of law enforcement have hindered effective counter-piracy or counter-terrorism cooperation among nations along the South China Sea.

2.8. Maritime Security Issues in Southeast Asia

Southeast Asia is sandwiched between Pacific and Indian Oceans. Countries spread all over the region are the most active economic bodies in the world. In terms of shipping movements, its seas and straits are among the busiest in the world. Security in the region is very much concerned with maritime issues and capabilities. Japan has been interested in securing sealanes of communication, realizing that it is strongly in its national interest. Many nations in Southeast Asia are either isolated or having peninsular region or extended coastlines, therefore most of the trade moves by sea, which is growing over the years. Land transport is not so well developed. Geographic and economic factors confer considerable importance to certain key waterways in Southeast Asia. Merchant shipping thrives on three southern entrances into the region like the Straits of Malacca, Sunda and Lombok. Vessels passing by the Spratly Islands on the South China Sea add significantly to the area’s congestion.

Storey argued that ‘in Southeast Asia violence at sea has been a perennial problem for governments and seafarers alike for hundreds of years’ (Storey, 2005:98). The Laimou-Maniati feels that ‘as the nature of conflict itself changes together with the ways in which international security structures are modified, the notion of threat is likely to become more diffuse and difficult to define’ (Laimou-Maniati, 2003: 4). The author here talks
about the need for identifying the kind or form of threats that exist between regional nations before talking any steps for bilateral, multilateral regional or international discussions. He categorized two types of threats like one type of threats are those that arise from objective navigational or environmental conditions, conditions of maritime narrows, the size, speed and number of vessels as well as piracy and pollution. Second types of threats are that may lead to crisis situation concerns the domestic instability of the coastal states and the policies they pursue. The policies of coastal states are designed to control the freedom of passage through the Straits in the interest of their national security. Common perception and understanding of the forms of threats that persist among the regional states to the security of the sea-lanes in the ASEAN region, it not only determines the forms of inter-state security cooperation but also the possible areas to be covered and the countries involved accordingly. This commonality in perception is lacking among the ASEAN member states. Southeast Asia is expected to see a greater number of actors in the region along with uncertain security implications. There are more actors with a lack of clearly defined security threats. Three kind of security the US-Japan tussles, the age old existing internal security, differences among developed and under developed nations and the land border disputes between the regional states

2.9. Rise of China

According to Frolic and Chin, ‘till 1996, China enjoyed a high degree of self sufficiency in energy consumption. Even in 1994 its energy sufficiency rate was as high as 101.1 percent (Frolic and Chin, 2000: 1). Zubir and Basiron concluded that China’s rapid economic development has crested ‘a high dependence on the import of raw materials especially oil. Since 1993 China has had to import large volumes of crude oil to satisfy economic demands particularly from its industries’ (Zubir and Basiron, 2000: 35). According to Zubir and Basiron, China’s fast economic growth and the strengthening of its defence capabilities placed it in a position to challenge the US’s global leadership in the future. They feel that it is the only country to do so after the demise of the Soviet Union. The World Energy Outlook Report says, ‘in 2003, China surpassed Japan as the second biggest user of oil. By 2010 end, China’s oil imports will amount to 4mbd and by 2030, the figure is supposed to reach 10mbd’ (World Energy Outlook, 2004: 4). The
International Energy Agency (IEA) estimated that China’s fuel consumption in 2030 will be equal to that of the US today. Any disruption in oil supply will have a significant impact on China’s economic growth and will be as a threat to China.

While China is not entirely without its own sources of oil but it will continue to be depended on imported oil especially from the Middle East. Akiyama gives his estimation that ‘China’s import of Middle East oil now constitutes 58 percent of and is expected to increase to 70 percent by 2015’ (Akiyama, Masahiro, 2001: 1). The bulk of the Middle Eastern oil to China passes through the Straits of Malacca, Lombok and Sunda. Strait of Malacca is the preferred route for many as it offers the shortest distance and the most secure route replete with navigational aids. According to Akhiyama, China was not so much interested in SLOCs before 1980s, but it has changed its idea and realized that it need to import a lot of food and energy through sea lines. China changed its maritime military policy in the early 1990’s transforming its navy from a coastal defence to a blue water navy. He argues that china has taken such moves just because it has taken into consideration both the necessity of military actions beyond the coastal sea zone to defend itself from countries that could possibly confront it with modernized and sophisticated military systems, particularly like that of the US and also the necessity to secure the sea line of communication for itself.

Till 1990s most of China’s imported oil came from South East Asian countries themselves needed vast quantities of oil for their own national development. From then China depended upon Gulf Countries for its oil supplies. China is well aware of keeping friendly relationship with Gulf countries since Gulf oil is superior from any other source, it is more economical to import oil qualitatively oil stocks are likely to last for a fairly longtime. China is well aware of US military presence, the region is geopolitically instable, and oil demand is very high from all over the world. China while keeping Gulf region as its main energy source, it is also seeking for alternative routes like from Siberia, North Africa, and Latin America. It is particularly looking for the use of gas. It is exploring potential areas in East China Sea where it do not have to encounter with the strategic choke points.
As Frolic and Chin says, ‘Chinese quest for resources clashes with similar energy interests of Japan. This conflict of interests will have serious security ramifications that involve Taiwan, the US and the over-al maritime security of the South and East China Seas’ (Frolic and Chin, 2000: 1). East China Sea is not an exclusive Chinese lake. There are complex questions of certain rights and obligations arising out of UNCLOS. In 1964, it established the State Maritime Agency before that it was a continental country, depended on the Soviet Union for a great deal till 1960s. It has developed excellent ports with modern infrastructural facilities for the growth of maritime industries. Shanghai Port is next only to Hong Kong and Singapore in terms of handling quantities of cargo. China wants as much access to and control over the East China Sea as possible so that in the event of any military action over Taiwan it could effectively prevent US naval forces from advancing towards the island states. Kesavan has observed that ‘the ultimate objective of China is to seek an outlet to the Indian Ocean through Myanmar and connect it with its southern provinces of Yunnan and Sichuan’ (Kesavan, 2006:9). He is of the opinion that if china gets success in the above mentioned plan, it would be possible for oil bearing ships from the Gulf to reach Myanmar from where the oil could be transported to South China by pipeline or rail. This is one way of avoiding South East Asian SLOCs.

2.10 Japan’s Political and Security Role in the Asia-Pacific Region

The region Asia Pacific for Japan is important for three reasons. Firstly, Japan’s strategic and physical location in Northeast Asia, Japan shares deep historical and cultural bonds with the countries in Northeast Asia. Middle East and Southeast Asia are sources of vital strategic commodities like Middle East provides oil and Southeast Asia has huge deposits of petroleum in South China Sea and its straits and waterways provide passages for carrying out trade. Thirdly the volume and value of Japan’s economic relations which affects its trade, investment, tourism with Asia-Pacific countries, have increase substantially over the years. It is, therefore, in Japan’s interest to ensure peace and stability in this region.

Akiyama finds the alliance between Japan and US have got strengthened after the end of Cold War, and it has contributed to the peace and stability of the Asia-pacific region as
well. Thus he concluded, 'the joint maritime military power of Japan and the US is seen as being the strongest military force in this region' (Akiyama, 2001: 1). Morrison on the other hand is of the opinion that, 'although Japan may not have a direct security role in Southeast Asia, it can play a number of supportive roles' (Morrison, 1987:104). He feels that Japan can act as a consultant agent in regulating security issues, financial aid, and security assistance to coastal states. The author Horimotyo thinks the recent changes in Japan’s security policies will depend on ‘the nature of Japan-Us alliance, the East Asian economic framework as well as other security-related developments, emerging international system and China’s domestic developments and external activism especially on the Taiwan issue’ (Horimotyo,2005: 251).

It is a well known fact that Japan has long been a major aid donor, investor and trading partner for Southeast Asian countries, particularly for the members of the ASEAN. Japan has actually concentrated its economic assistance on this region. However, in political and security fields, the prospects are seen not so bright, as the author Miyagawa argued that, ‘it has been seen shy in intensifying its contribution to the peace and stability of this region, its diplomacy often caricatured as trader’s diplomacy’ (Miyagawa, 1996: 159). Japan’s policy for the maintenance of security in Southeast Asia can be categorized in three basic fields. Firstly assisting nations in this region in their efforts to increase public resilience, secondly providing them with a variety of advice and assistance to enable them as much as possible to avoid or solve peacefully by themselves any disputes among nations within this region, thirdly encouraging them to set up and expand regional organizations and to take an attempt to prevent outside powers from posing threats to the security of this region. The author Miyagawa explains, ‘Japan shared apprehension about the rapid infiltration of communism into Southeast Asia’ (Miyagawa, 1996:160).

Chanda argued that ‘during 2000 and 2001, Japan has been actively exploring the scope for Japan Coast Guard vessels and aircrafts to participate in anti-piracy activities in Southeast Asian waters’ (Chanda, 2000: 28.). Miyawaga feels that the entire processes for getting stability still need some more time to mature. Japan should cooperate with rapidly growing economies in this region, like Malaysia, Singapore and Thailand and assist other countries still dealing with problems to gain stability. He further argued that
Japan should also emphasize the importance of pushing forward the democratic process in these nations to accommodate legitimate political demands, particularly of minority groups to increase the resilience and maturity of these nations, so long as such a process would not lead to instability or disorder in each of these countries (Miyagawa, 1996: 160). The author also points out that economic growth has created a favorable security environment in Southeast Asia. Whether this economic growth will continue for a considerable period of time in future that is a big question, because he feels with the passage of time this region will see more complexity due to expansion of trade that will create a high level of economic interdependency. Japan has long been involved in maritime security cooperation with Southeast Asia. It has hosted regional workshops on anti-piracy measures and maritime security, financially supported regional initiatives conducted joint-training exercises with regional coastal guards and maritime police, and invited maritime officers from Southeast Asian countries for training. Japan is one of the few countries outside Southeast Asia actively attempting to address the region’s problems, and Tokyo regularly conducts bilateral anti-piracy exercises with India, Singapore, the Philippines and Thailand.

The ASEAN plus three (Japan, China and Korea), since its existence in 1997, has tried of creating an East Asian Community (EAC), referred also as the East Asian Economic Community (EAEC). The idea was strongly advocated at the ASEAN Foreign Ministers Conference held in Vientiane in 2004, which is expected to gain momentum. According to Horimoto, ‘the modalities remain unfinished. This was mainly because no consensus could be reached over the issue of starting an East Asian Summit meeting’ (Horimoto, 2005: 247). After the separation of Malaysia and Singapore, tension still existed between Indonesia and Malaysia therefore Japan set up a non governmental organization called the Malacca Channel Council whose jobs were to construct light houses along the channel and to dredge it, as an act of assistance to these nations as a whole, with a motive to reduce tension among them by providing forum of cooperation among them. This type of assistance has been termed the Malacca Channel type which proved to have contributed to a considerable extent to regional security through the reduction of tensions. Southeast Asian nations, particularly ASEAN countries have acquired experience in diplomacy and gained confidence in each other. This happened due to the daily
interactions among the ASEAN nations, through discussions and debates on a set of common values. It cannot be expected to become within a day a forum for negotiation for the settlement of security conflicts.

Nations in Asia, whose populations were therefore susceptible to such ideological infiltration, were struggling with poverty. Japan’s economic assistance since then has been to a considerable extent, geared to raising living standards in those nations which were unable to do so because of the lack of capital and production skills. Japan has since then provided for these nations with an abundance of assistance in fundamental infrastructures, hard and soft, such as education, transportation, irrigation and the creation of industries so that they can stand on their own feet. Japan is in a position to provide Southeast Asia technology and skills to increase their production efficiency. The security situation in Southeast Asia today has become far better than it had been perhaps until ten years ago not only in internal security dimension but in external security dimension as well. The age old confrontation between communist and noncommunist countries in this region has virtually disappeared. Vietnam and Laos still retained some kind of communism but that no longer divides Southeast Asia. Economic interdependencies are increasing, expanding trade and investment flows within this region. Japan provided assistance to Laos through Cambodian crisis. Its assistance was focused on industrialization and improvement of human resources. Japan’s aid to Laos was welcomed by ASEAN. Any disputes between countries inside the region are of great importance for security of this region. Owing to their colonial history, most of the nations in Southeast Asia have border disputes with each other. Disputes over territory on land and sea are in particular a prominent feature of security in Southeast Asia.

Now the question is Japan’s assistance to Southeast Asia thus far sufficient? The maintenance of safety, in the straits of Malacca and the waters around Indonesia and the Philippines and South China Sea is of vital importance to the security of Southeast Asia. According to Japanese government the presence of US forces in this region are vital. However, some of the ASEAN nations, including Malaysia have pointed out that US economic presence but not its military presence. Thanks to the economic success in the region, the countries in this region can now afford modern weapons for navies and air
forces. Some will argue that arms building in ASEAN nations will pose a serious security problem in the near future and should therefore be put under strict supervision, emphasizing the role of transparency. For Japan, the crucial issue seems to be its relationship with the US. In the past 60 years, bilateral relations between Japan and the US have been rooted in economic and security issues. Now that China is emerging as the most important economic partner, Japan would have to resolve the contradiction that appears to exist between strong economic relations with China, but equally strong security relations with the US.

2.11. Role of ASEAN in Maritime Security Issues

In comparison to the bilateral cooperation that exists in Southeast Asia, the multilateral response to piracy and terrorism has been made within ASEAN and the ARF to promote multilateral cooperation against sea piracy. The ASEAN work programme to combat transnational crime has introduced some concrete action lines to fight the problem in Southeast Asia. It seeks to increase information sharing on piracy by requesting ASEAN states to disseminate laws, regulations, agreements and conventions cooperate with the UN agencies, the IMB and the IMO, and study the trends of sea piracy in the region. The ARF also adopted the statement on cooperation against piracy and other threats to maritime security at its ministerial meeting in Phnom Penh in 2003. The ARF participants agreed to undertake a series of measures to tackle the piracy problem. These include better information sharing, cooperation and training in anti-piracy measures and the provision of technical assistance and capacity building. In another move, Southeast Asian leaders have also signified their intent to focus more on maritime security at the ninth ASEAN Summit held on 7 October 2003. The resulting declaration of ASEAN Concord II indicates that the organization will construct an ASEAN security community in which maritime cooperation between and among ASEAN member countries shall contribute to the evolution of that community.

At the operational level, multilateral operations to combat piracy and maritime terrorism are also taking ground. In 2004, Operation Malsindo was inaugurated, it is a year-round coordinated patrol by 17 ships from Indonesia, Malaysia, and Singapore, which aims to tackle the piracy problem as well as act as deterrence against maritime terrorists. Round
the clock naval patrols along the coastal countries to improve coordination through the setting-up of a hotline linking the three naval command centres in Batam, Lumut and Changi have also been done. In addition, merchant vessels will also get access to radio frequencies used by navy vessels in the area to enable them to call directly for help when required. Beside operations multilateral defence exercises have also begun to focus on counter-terrorism as a theme. One of the glaring examples for such thing is that the Five Power Defence Arrangement (FPDA) comprising Malaysia, Singapore, Australia, New Zealand and Britain, for the first time, in 2004 conducted an anti-terror drill at sea by hunting down and boarding a hijacked ship in the South China Sea.

The maritime space of Southeast Asia, which connects Europe, Middle East, Northeast Asia, and the Pacific Ocean nations, is critical to international trade. About 50 percent of world oil and gas and 25 percent world cargo or 54 percent of world container shipment pass through this region, especially the Straits of Malacca. The Straits of Malacca is among the busiest in the world, connected to 9 out of the 20 top ports in the world. Malaysia has also taken action to keep the piracy rates low in the Malacca and the Singapore Straits. For example, Malaysia has built a string of radar tracking stations along the Straits of Malacca to monitor traffic and has acquired new patrol boats largely to combat piracy. The Malaysians have also increased their naval capacity to ensure maritime security, and the Royal Malaysian Marine Police (RMMP) has increased its patrols against piracy and the risk of maritime terrorism in the straits.

Singapore has also implemented a range of measures to step up maritime security. These include an integrated surveillance and information network for tracking and investigating suspicious movements, intensified navy and random escorts of high value merchant vessels plying the Singapore Straits and adjacent waters, and the re-designation of shipping routes to minimize the convergence of small craft with high risk merchant vessels. In addition to increasing its own patrolling activities, Singapore has also cooperated closely with the IMO by implementing amendments to the international convention for the safety of life at sea in the form of the international ships and the ISPS code, which came into effect in July 2004. Singapore has also signed the 1988 Rome Convention on the suppression of unlawful acts against the safety of maritime navigation.
The convention would extend the rights of maritime forces to pursue terrorists, pirates and maritime criminals into foreign territorial waters, and it provides guidelines for the extradition and prosecution of maritime criminals. Besides Singapore, Brunei, Myanmar, the Philippines and Vietnam are the other ASEAN countries that have signed up to the SUA Convention. Indonesia and Singapore agreed in 1992 to establish the Indonesia-Singapore coordinated patrols in the Singapore Straits. This has involved the setting up of direct communication links between their navies and the organization of coordinated patrols every three months in the Singapore Straits.

2.12. ASEAN Regional Forum (ARF)

The ASEAN regional Forum (ARF), created in 1994 was perceived as a framework of consultation where issues related to security concerns including maritime strategy can be brought forward, with a possible future evolution to a conflict resolution forum. According to the author Laimou-Maniati, ‘this forum was seen as a positive vehicle for maintaining an environment of peace and stability by way of dialogue and consultations’ (Laimou-Maniati, 2003: 5). He further argued that ‘in order to successfully enhance and preserve the environment of peace and stability that underpins the economic growth in the region, and regional community’ for this purpose ARF’s members meet on yearly basis in order to analyze and discuss the key security challenges facing the region. The author Irini argued that ARF’s first problem is the lack of commitment by the states to a concrete framework for efficient cooperation in order to maintain the peace and stability in the region. There is a clear lack of mechanisms and effective structures in maritime security. There is no political will and political commitment for such solution. One should admit that the whole set up of the organization has been a great challenge. The regional state differs significantly in levels of development, there are cultural, ethnic, religious and historical differences to overcome, and habits of cooperation are approached differently. There lacks transparency in the region. Much effort has been devoted to gain transparency and confidence building measures, but it is the perception of regional states differs and they have different interest in achieving stability.

However the author thinks that ARF is the only alternative for any level of maritime security cooperation. He further described it as an embryonic approach’ to regional
maritime cooperation among states of considerable cultural and political diversity and thus suffers from natural shortcomings of such an undertaking. He thinks that it acts as a platform to provide diplomatic contact and dialogue for the region’s maritime concerns for the proper management and sustainable environment of the SLOC. ASEAN countries feel the need for a concrete security scheme, which can come up with security arrangement and prevent future conflicts in the region. The increase of maritime security issues in the region, mitigated by the economic and political interdependence, highlighted the need of cooperation in management and protection of these sea-lanes. Non-military issues like piracy, accidents and oil spills make the countries of the region to become acutely aware of the lack of concrete cooperation and integration between them. This holds especially true will regard to the deepening and widening integration process in Europe and North America.

ARF has track wing consisting of the Council on the Security and Cooperation in the Asia Pacific (CSCAP)\(^6\) and International Institute of Strategic Studies. Both are coordinating their efforts to promote the objectives of ARF, the role of CSCAP has become more prominent in recent years. ARF can express its various recommendations and appeals to maintain maritime security but does not have the power to implement them. Such power lies in the hands of individual countries which have to adopt appropriate legislative measures for that purpose. The need to suppress piracy in the seas calls for collective efforts on the part of the member countries. It should be noted that to what extent the countries of the Asia-Pacific region have realized the gravity of the problem. They should chalk out any collective action to effective address piracy. What are the practical obstacles that stand in the way of such common action? It is also feared that if this menace was not checked in time, the situation could further deteriorate leading to a nexus between pirates and several terrorist organizations.

\(^6\) It is established in 1993 and composed of scholars, officials and others provides essential inputs to ARF on a wide range of importance issues. They also recognize the importance of the need for maritime cooperation without which there cannot be any law and order on the seas. The growing naval arms acquisition in Asia-Pacific Region. Proliferation of submarines to cruise missiles in the region could heighten concerns for the maintenance of maritime security.
2.13. Japan’s Political Role in Northeast Asia

This is the only region in the world whose regional security is so much hotly debated. While the region continues to be the most promising in terms of economic dynamism, its security remains a cause for concern. There occurred many changes in this region, which lead to alter the regional security order. These changes have an important consequence in terms of peace, stability, development, great power relations and the role of the newly created multilateral initiatives. These are issues that need to be examined. There is need to improve the understanding and management of regional security and the approaches that can be employed for the purpose. Trade is growing faster within the region rather than without and much of Asian capital is inward bound. The emergence of China as a major trading nation with the rest of Asia is dramatic. By 2004, China replaced the US as the largest trading partner of both Japan and South Korea. Similar trends can be observed in the case of ASEAN China and China-India.

Japan is one of the major political and economic powers in East Asia and the Western Pacific and a key ally of the United States in ensuring the peace and stability of that region. It is vital to the U.S. national interest to assist Japan to develop and maintain a strong and ready self-defence capability, which will contribute to an acceptable military balance in the area.

2.14. Environmental Security

In recent years the concern over environmental security has evolved. There occurs environmental deterioration resulting from the conflict of war. This kind of conflict occurs from the scarcity of environmental resources stemming from economic and population growth. There is a debate exist that whether environmental degradation hampers national security. According to the author, Ninic environmental degradation is so serious and acute it threatens human life and national security by definition implies the protection of human life; environmental degradation must become a security issue.

2.14.1. Maritime Pollution and Oil-related Environmental Disasters

Havens have argued that ‘oil-related disasters at sea are the bane of not only environmentalists but mariners and security specialists as well’. He further elaborated his
points in saying that, ‘they have create havoc with the ecology in the maritime environment and have the potential to affect maritime security’ (Havens, 2003:16). He pointed out that environmental effects are of long-term or short-term duration, but their consequential effects in related maritime spheres can continue over a longer period. There are many effects of disasters that took place due to leakage of LPC tankers that need to be understood. Regional governments are deeply concerned with major oil spills or wrecks of oil tankers that happens near to the harbours and choke points, since such pills can seriously affect the flow of merchant shipping traffic.

2.14.2. Security against Mining of Maritime Waters
Mining of maritime waters is one of the cheapest ways to conduct maritime warfare. Mines may be laid by sea-borne or airborne vessels and could be carried out by the civilian aircraft or vessels. It is not even necessary to carry out actual mining operations. A concentrated international effort was required to undertake minesweeping operations to clean up the area. Hence mining in a constricted area like the Malacca Straits has the potential to create havoc on international merchant shipping. The consequences are further aggravated because the 960-km strait provides access to important ports like Kelang, Penang, Kuala Lumpur, and Singapore, and in addition has vital naval bases of different states along both its shores. Thus, closure of this vital area would directly affect the operational deployment pattern of navies along the straits as already discussed in the beginning of this chapter. Most of the regional navies have poor minesweeping abilities and are incapable of undertaking large or even medium-sized minesweeping efforts.

2.15. Change of Security Issues in Japan
Horimotyo feels that there is ‘a sea change in the economic and security fields has been happening around Japan’. He pointed out that ‘the rise of China, North Korea’s nuclear programme and the military transformation of the US, for example are affecting Japan’ (Horimotyo, 2005: 78). Japan is not only trying to cope with these completely new situations but playing a greater role in the Asian economic and security domain, and contributing appropriately to global security also. According to Horimotyo, security and economy are inseparable and are interrelated. For him a mid term security perspective and economic integration of the region looks optimistic but a clear security framework is
yet to emerge. The author Hirose says, ‘the international relations in East Asia remain unstable, Japan need to sail through rough waters. The cold war has ended, the Soviet Union has been dismembered, new states have emerged and new types of threat to global peace and security have gained momentum’ (Hirose, 2005: 270). This changed environment has forced Japan to review its foreign policy so as to play a meaningful role in maintaining peace, especially in Asia.

2.16. Maritime Cooperation

Batemen talks about the maritime security cooperation between regional coastal countries with the object of improving regional security. According to him the South Pacific is much ahead of, in forming groups than North Pacific. He discussed four levels of cooperation namely- alliances, coalitions and non-coalition, naval cooperation and maritime cooperation. He argued that ‘the bilateral alliance relationship between the U.S and Japan, South Korea and Australia are regional examples of alliance that regulates regular combined naval exercises and doctrine development’ (Batemen, 2005: 34). He describes ‘coalition may be formal, established by treaty arrangements or less formal with a lower level of political commitment’ and according to him ‘naval operations conducted by a coalition may be ad hoc’ (Batemen, 2005: 37). According to him the lower tier of maritime security cooperation, non-coalition, naval cooperation and maritime cooperation encompasses cooperative activities between countries which do not necessarily share any specific common political or strategic objectives other than common interest in for example, confidence-building, preventive diplomacy or law and order at sea. Cooperation will be focused on non-controversial issues, including basic inter-operability requirements to facilitate cooperation on activities such as search and rescue and humanitarian relief. Maritime cooperation encompasses any cooperative activity associated with an interest in the sea, the protection of the marine environment or a use of the sea or its resources.

According to the author naval cooperation is a subset of the broader concept of maritime cooperation. It has wide scope and may be bilateral or multilateral. At the lower end are low-key, confidence-building activities. More ambitious activities might include information and intelligence exchanges, joint doctrine development, standard operating
procedures (SOPs), combined exercises, avoidance of incident at sea agreements and cooperation on tasks such as marine scientific research and piracy. Author argues that international maritime commerce is the classical multilateral maritime security interest. Its protection always involves at least two countries, the exporter and importer country and the third one is the country of flag of convenience. The author talks about the loopholes of maritime security cooperation, as the technology increases in naval operation, there are more chances of submarine operations and aircraft that are responsible for hampering the regional maritime security. Language may also be a problem. Clearly it is important to ensure that all participants in a cooperative activity have a common understanding of what they were talking about. The author feels that the East Asian countries have ample justification for expanding their military forces, particularly their naval capabilities and a naval arms race which is increasingly evident in the region.

Bateman has justified his statement by saying that ‘Japan’s interest lies in a stable and open international political and economic order. External powers like U.S., Japan, China and India could play an important role in further improving security in the region’s seas by better coordinating outreach efforts’, he further stressed the fact that ‘external powers could improve the communication, surveillance, and interdiction capabilities of regional states navies and maritime law enforcement agencies’ (Batemen, 2005: 37). States in the region could also take a number of steps to improve security like increase levels of cooperation among littoral states’ security forces, especially in the sea area, as well as conduct more frequent and joint patrols in problematic areas. He feels that regional states could implement long-term programs to address the deep political and socio-economic problems of which piracy and sea robbery are only symptoms.

Though there is a perceptible drop in private attacks, violence at sea remains a problem in Southeast Asia. The political, geographic and economic factors make the region’s seas an opportune space for sea-borne criminals. US cooperation has brought stability in Southeast Asia. This has led to decline in incidents of maritime crime. Regional states’ priorities and sovereignty concerns at times acts as a hindrance factor for security issues of SLOCs. A more comprehensive approach to maritime security in Southeast Asia is
necessary. States outside the region could improve maritime security by increasing the scope and intensity of their commitment to solving this problem. In particular, Southeast Asian states must address the political and socio-economic conditions of maritime crime in order to make real improvements to regional maritime security. Maritime security in the Strait of Malacca is the sole responsibility of the littoral states, and neither country would entertain ideas of naval patrols conducted by other countries. Singapore is more flexible on this issue but has deferred to the sensitivities of its neighbors. At the same time, although Indonesia and Malaysia have rejected an overt military role for external powers in the SOM, both countries have welcomed capacity-building offers of assistance, including information or intelligence exchange and training courses. Improved governance at the administrative level, more sustained and long-term programmes to improve the livelihoods of coastal communities will tackle the root causes of piracy, sea robbery and maritime violence. Indonesia and the Philippines are obvious to get benefit from good governed countries like Singapore, Brunei and Malaysia.

The threat posed by maritime terrorism undoubtedly exists and it is urgent to build up effective countermeasures to cope with this menace. Combating terrorism, piracy and transnational crimes requires national commitment and international cooperation. Effective maritime counter-terrorism depends on national commitment in the areas of intelligence collection, law enforcement, physical security and crisis management, and international cooperation in sharing the cost-burden of equipment and training and exchange of information and intelligence. Also, it should be noted that not only defensive measures such as physical security but also offensive measures including the operations suppress terrorist funding and to pursue and wipe out terrorists should be considered.

The development of a national intelligence capability alone may not be sufficient for fighting an international war against maritime terrorism. All the nations in the region as a whole, need to develop national intelligence capabilities in order to supplement each
other. SHIPLOC\textsuperscript{7} and Secure-Ship\textsuperscript{8} is essential for every state in the region to respond to major maritime terrorist incidents with effectiveness and to save most lives. The international response to the threat from maritime terrorism has so far focused primarily on the front area challenges of intelligence enforcement and preventive measures. These activities are essential.

- Establishment of direct communication links between relevant crisis management organizations.
- Periodic meetings of the heads of such organizations.
- Information sharing on relevant command and control and logistic issues.
- Promotion of combined training and exercises.
- An agreement to facilitate international assistance to respond to any future major terrorist attack.

Any anti-terrorism initiative must address the sensitive issue of rights and sovereignty of the coastal states. Maritime counter-terrorism cooperation should be promoted on a burden-sharing basis between the flag user states and the coastal states aiming at building the capacity of the latter, and the establishment of regional mechanisms for operations coordination and intelligence sharing, instead of requesting the coastal states to comply with regulations. Capacity building in the coastal states should include financial and equipment support and technological and training assistance by the flag states.

A regional mechanism for operations coordination and information sharing should also be established. As to regional mechanism for operations coordination and intelligence sharing, Japan has contributed to the Piracy Report Centre (PRC) in Kuala Lumpur. However, it is true that the coastal states agree that Japan should contribute more to the security of the Strait of Malacca. It is recommended that the cooperation between and

\textsuperscript{7} It is a tiny on board ship-tracking device that can secretly transmit the ship’s position for the recovery of such ships. For their own safety, the crew of the ship need not be informed of the existence or location of the transmitter.

\textsuperscript{8} It is an anti-boarding system of a 9,000-V current fence surrounding the ship to deter boarding attempts. For safety reasons, it cannot be used on tankers, gas carriers or other ships carrying inflammable cargoes.
among the coastal states and the flag states, which includes technological/educational assistance and capacity building, be promoted further on a burden-sharing basis.

The importance of the maritime environment is a worldwide reality now with particular significance for Japan. Maritime power is considered to be the most frequently used force in maritime conflicts. In the Japanese context, the relationship between the environment and maritime security is very complex. Distance is the most striking single fact about Japan’s strategic geography. The continuation of the free movement of shipping through maritime Southeast Asia is Japan’s first priority. Any interruption of or interference with international shipping would have immediate effects on Japan’s economy and its export competitiveness. For most of Japan’s northern coastal regions as well as many parts of the archipelago to the north and the islands of the South West Pacific, the sea represents either the only means of access at all or the only way where movement of people or cargo can be delivered.

To detect possible threats improved navigational techniques, sensors and data exchange systems allow seaborne unit to visualize inshore from the coastline over terrain. Technological developments are increasing the capabilities of maritime forces to operate in close proximity to land. Japanese perceive the surrounding seas as a highway for trading rather than as a barrier. The sea remains the primary and far and away the most cost-effective means for the movement of international trade. The nation’s economic well being depends upon the maintenance and expansion of export trade, while essential manufactured goods, industrial tools and high technology equipment are amongst our imports. East Asian nation’s dependence on maritime trade is even more acute than that of Australia. Japan is absolutely dependent upon seaborne imports for energy and raw materials as in South Korea. China is becoming increasingly reliant upon the sea, particularly for petroleum imports. Within South East Asia, the relative lack of land transport systems increases the dependence of the region upon the sea for the movement of goods and people.