ISLANDS AND CHOKE POINTS-A COOPERATIVE MODEL FOR SECURITY

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"Today, some of the most critical highways of global trade are in the Indian Ocean Region. Two thirds of the world's oil shipments and one third of its bulk cargo, and half of the world's container traffic passes through the expanse of Indian Ocean. The world's pre-eminent energy seaway, the Indian Ocean will matter even more in future."

- Adm Nirmal Verma
  CNS Indian Navy, IONS
  Abu Dhabi, 09 May 10

INTRODUCTION

1. Nearly half of the world's oil production is transported by tankers through Indian Ocean and 36% of oil comes from IOR. More than 80% of this oil passes through three Indian Ocean Straits: Hormuz, Malacca, and Bab el Mandeb.[1] The stability of IOR as a routeway is vital, yet East Africa and North West Indian Ocean would be characterized as the most unstable areas on earth. According to the Heidelberg Institute for International Conflict resolution (HIIK) Conflict Barometer 2008, the IOR harbours 146 of world's total of 346 conflicts (in various forms) or 42.3%, including 6 out of 9 wars and a considerable proportion of high intensity conflicts.[2]

2. Cooperative security relies on understandings and agreements that are based on joint definition of various threats and their solutions. This paper will address the following issues: -

   (a) Prospects for enhanced multilateral cooperation among user states, shipping companies and littorals for improving safety against piracy and security of choke points viz. Straits of Hormuz and Bab el-Mandeb.

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[1] Dr Brahma Chellaney, "Indian Ocean Maritime Security: Environmental Security and Climate Change", Proceedings from "Indian Ocean Maritime Security Symposium", p 16, Australian Defence College, 15-17 Apr 2009, http://www.ancors.uow.edu.au/news/item/IOMS

[2] Ibid

(b)   Options for cooperation in island nations for security.

(c)   Political and commercial obstacles to sharing of costs and responsibilities.

(d)   Define a strategy to achieve a working model for IOR.

ISLAND STATES AND CHOKE POINTS IN IOR – AN OVERVIEW

Island States-Historical and Geopolitical Perspective

3.   The island nations in the IOR, which are also members of IONS are: Madagascar (world's fourth largest island), Comoros, Seychelles, Reunion (under French control) Maldives, Mauritius and Sri Lanka. The archipelago of Indonesia borders the ocean on the east.[3]   Of these, Madagascar, Mauritius, Seychelles, Comoros and Reunion (Francophone nations) are in the western Indian Ocean. For centuries, the island states including Djibouti and Socotra have been critical links in the flow of goods and people across the Indian Ocean from east and west, and north and south. In the colonial era, they acquired a military significance amidst the efforts of European powers to control the sea lanes of Indian Ocean.[4] When the winds of nationalism were blowing across the Asian and African continents, four islands of this region, viz. Mauritius, Seychelles, Madagascar and Comoros became independent. As the terms of reference of this paper, the discussion would be restricted to these island states. France maintained contacts with other islands from Reunion and has continued to maintain her commercial, cultural and military infrastructure.[5]

4.   During the Cold War, the Francophone Western Indian Ocean islands were at the very heart of American Power Projection into the region.[6] The overriding goal of US policy in the Indian Ocean was to safeguard the supply of Persian Gulf oil to the US and its allies. From 1960s onwards, Britain carved out a British Indian Ocean Territory from Chagos archipelago (prior freeing Mauritius in 1968) to enable Diego Garcia to be

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[3]   http://www.en.wikipedia.indianocean_islands
[4]   C. Raja Mohan, "Sino-Indian Rivalry in the Western Indian Ocean", p 2, ISAS Insights, No. 53, 24 Feb 2009
[5]   M. K. Roy, " France-Status as an Indian Ocean State", p 166, USI Journal (New Delhi), Vol – CXXI, (504), Apr-Jun 1991
[6]   Vidhan Pathak, "China and Francophone Western Indian Ocean Region: Implications for Indian Interests", p 2 Journal of Defence Studies, IDSA (New Delhi), Oct 2009

leased to the US Navy.[7] During the 1970s, the US and Soviet navies manoeuvred for base and refueling facilities in the NW quadrant of Indian Ocean, viz. Berbera in Somalia on the Horn of Africa, Asmara in Ethiopia (Red Sea), island of Socotra off South Yemen, Muscat (Oman) and island of Masirah (off Oman).[8]

5.   Through the cold war, the Soviet Union continually jockeyed for influence with occasional successes as in Seychelles. Many of the island states were fragile and were easy targets for not just great power intervention, but also threatened by small mercenary groups. Island nations of Madagascar, Mauritius, Comoros and Seychelles have experienced a growth in democratic institutions and economic development and it has changed their relationship to outside powers. These island states have tended to follow a non aligned policy in their foreign relations and reflecting their lack of defence capabilities, have sought to promote the Indian Ocean zone of peace in which they include the littoral states.[9]

6.   **American Naval Presence in the Indian Ocean**. After taking Diego Garcia on lease, the oil shock of 1973 resulted in US Navy establishing a major naval base in the island. In 1995, the US established its Fifth (Indian Ocean) fleet, headquartered in Bahrain, to conduct operations in the Red Sea, Arabian Sea, Persian Gulf, and adjacent land areas. By 2000, the US Navy was the predominant navy in the Indian Ocean.

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[7]   V. Adm GM Hiranandani (retd), " Transition to Guardianship : History of the Indian Navy 1990-2000", p 8, published by IHQ of MoD (Navy), 2009
[8]   Ibid, p 9
[9]   Vidhan Pathak, "China and Francophone Western Indian Ocean Region: Implications for Indian Interests", p 3 Journal of Defence Studies, IDSA (New Delhi), Oct 2009

Choke Points

7.   The fact that choke points are a critical part of global energy security needs no emphasis.   A   comparative   statistic   is   enumerated   below.[10]

Important World Oil Transit Chokepoints						
Name	2006E oil flow (bbl/d)	Width at Narrowest Point	Oil Source Origin	Primary Destination	Past Disturbances	Alternative Routes
The Strait of Hormuz	16.5-17 million	21 miles	Persian Gulf Nations including Saudi Arabia, Iran, and UAE	Japan, The United States, Western Europe, other Asian countries	Sea mines were installed during the Iran-Iraq War in the 1980s. Terrorists threats post September 11, 2001.	745-mile long East-West Pipeline through Saudi Arabia to the Red Sea
The Strait of Malacca	15 million	1.7 miles	Persian Gulf Nations, West Africa	All Asia/ Pacific consumers including Japan and China	Disruptions from pirates are a constant threat, including a terrorist attack in 2003. Collisions and oil spills are also a problem. Poor visibility from smoke haze.	Reroute through the Lombok or Sunda Strait in Indonesia. Possible pipeline construction between Malaysia and Thailand.
The Suez Canal/ Sumed Pipeline	4.5 million	1,000 feet	Persian Gulf Nations, especially Saudi Arabia, and Asia	Europe and The United States	Suez Canal was closed for eight years after the Six-Day War in 1967. Two large oil tankers ran aground in 2007 suspending traffic.	Reroute around the southern tip of Africa (the Cape of Good Hope); additional 6,000 miles.
Bab el-Mandab	3.3 million	18 miles	The Persian Gulf	Europe and The United States	USS Cole attack in 2000; French oil tanker in 2002, both attacks off the coast of Aden, Yemen	Northbound traffic can use the East-West oil pipeline through Saudi Arabia; Reroute around the southern tip of Africa (the Cape of Good Hope); additional 6,000 miles.
The Turkish Straits	2.4 million	0.5 mile	Caspian Sea Region	Western and Southern Europe	Numerous past shipping accidents due to the straits sinuous geography. Some terrorist threats were made after September 11, 2001.	No clear alternative; potential pipelines discussed including a 173-mile pipeline between Russia, Bulgaria, and Greece.
The Panama Canal	0.5 million	110 feet	The United States	The United States, and other Central American countries	Suspected terrorist target	Reroute around Straights of Magellan, Cape Horn and Drake Passage; additional 8,000 miles

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[10]   Energy Information Administration, Oil flow and Major Choke Points, Jan 2008,
http://www.eia.doe.gov/cabs/world_oil_transit_chokepoints
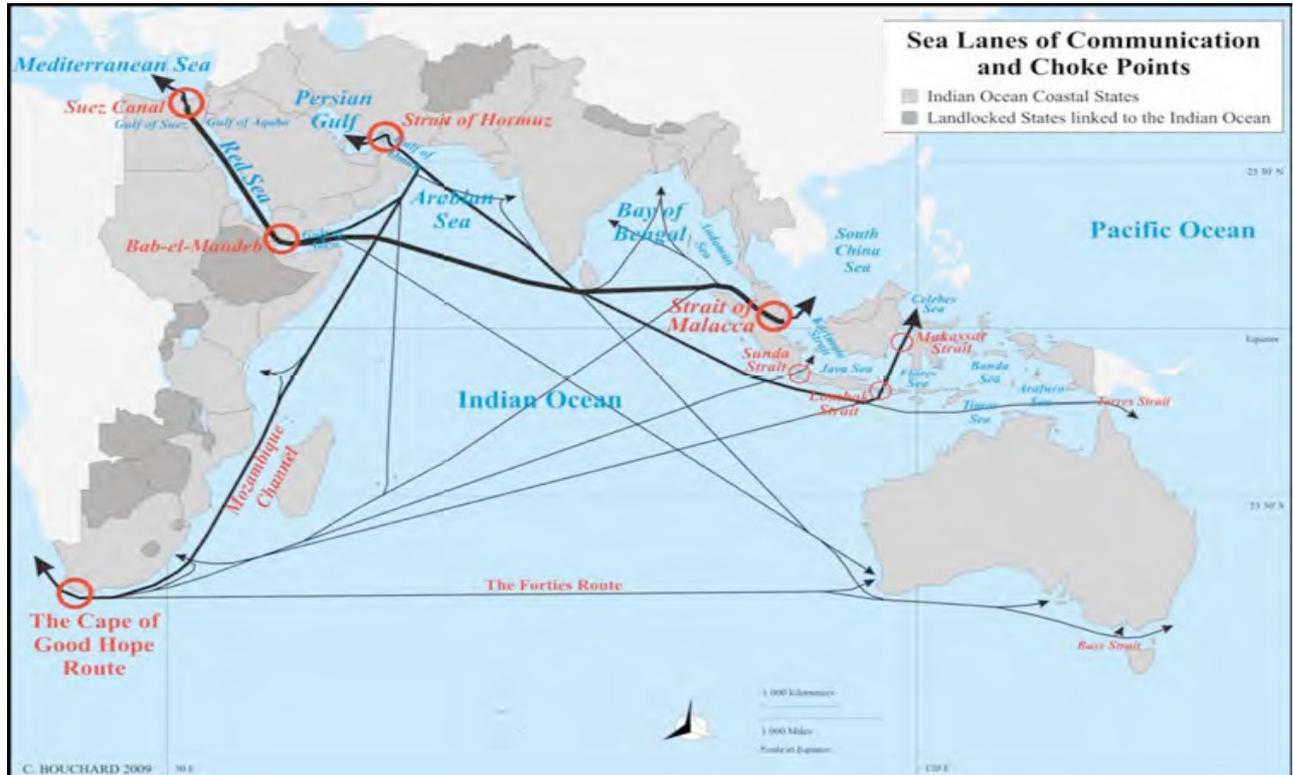
Adapted from p 9, Indian Ocean Maritime Security Symposium, 15 -17 Apr 09

ANALYZING MALACCA MODEL OF SECURITY

Geopolitical Conundrum of littorals

8.   In order to evolve a solution for other straits, it would be interesting to analyze the Malacca Strait model. The geopolitical and legal complexities of Malacca may be found in the disputes that encompass the strait's internal waters, territorial seas, contiguous zones, and EEZ- all under 1982 UNCLOS. Overlapping jurisdictions have led to complaints by countries in the strait against one another-e.g. Indonesia has protested Malaysia's use of straight baselines to measure its territorial seas because of alleged encroachment on Indonesian waters.[11] Between 1999 and 2008, traffic in the strait has

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[11]   Sam Bateman, Catherine Zara Raymond and Joshua Ho, "Safety and Security in the Malacca and Singapore Straits: An agenda for Action", Institute of Defence and Strategic studies, Policy Paper, May 2006, 2,9

increased by 74%. Japan's Ministry of Land, Infrastructure and Transport estimates that 114,000 ships will use the strait by 2020.[12]

9.   In 2004, the US proposed Regional Maritime Security Initiative (RMSI) was opposed by Malaysia and Indonesia (but not Singapore). They have opposed any effort to 'internationalize' management of the strait that could compromise their sovereign rights. Moreover, the lurking fear of imposing PSI/CSI in the strait against WMD proliferation in the region (read North Korea) was perceived as being too intrusive. Whereas piracy and terrorism are priority challenges for Singapore, Malayasia and Indonesia are much more concerned with fishing interests in the area, environmental threats from ship sourced pollution, and human trafficking across the strait.[13]

10.   **Cooperative Mechanism**. In 2007, Cooperative Mechanism for the straits of Malacca and Singapore was formally launched to encourage user states and shipping companies(viz. owners and operators) to voluntarily assist the littoral states in their responsibilities to enhance safety, security and environmental protection of the straits. Indonesia and Malaysia refused to include 'security cooperation.' This was a first for Malacca Strait policymaking. The mechanism created a committee to coordinate and manage six designated joint projects. This is the only forum in which all three principal stakeholders in the Malacca meet regularly to determine joint projects. As of 2009, Australia, USA, Germany, Japan, India, South Korea, the U.K., Greece, the UAE, and International Independent Tank Owners' (INTERTANKO) Association have all committed either financing or expertise.[14]   Singapore's pilot project on utilizing of AIS transponders for small ships has successfully identified the locations of vessels in crowded Singapore Strait. However, at the Oct 2009 meeting in Singapore, the Baltic and International Maritime Council (BIMCO) representative reminded that any measures relating to shipping in the strait should have the approval of the shipping industry as well

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[12]   Joshua Ho, " Realising Safe and Secure Seas for All", International Maritime Security Conference 2009 (Singapore: S Rajaratnam School of International Studies)
[13]   Sheldon W. Simon, "Safety and Security in the Malacca Strait: The Limits of Collaboration", p2, National Bureau of Asian Research, Special Report 24, Nov 2010 accessed at http://www.nbr.org/publications/specialreport/pdf-sr
[14] Heather Gilmartin, "EU-US-China: Cooperation in the Malacca Strait" (paper prepared for the Inst fur Friedenforschung and Sicherheitspolitik, Hamburg, Nov 2008), 25,26; and Joshua Ho, "Enhancing Safety, Security, and Environmental Protection", 242

as the states. The shipping companies may fear that voluntary contributions could create a precedent for similar schemes for other straits.[15]

Legal Dimensions

11.   The littoral states have the right to prescribe rules for navigation safety and security, prevent accidents, and provide regulations for maritime pollution. These rights are set out in the International Convention for Safety of Life at Sea (SOLAS), International Regulations for preventing Collisions at Sea (COLREG) and the 1982 UNCLOS. These provisions are limited, however by the rights of transit passage that the UNCLOS extends to the vessels of user states passing through the strait.[16]

Littoral States of Malacca

12.   The views of littoral states for best practices for the strait do not always coincide but vary according to national threat perceptions, sovereignty concerns, capabilities and non-aligned orientation.

(a) **Singapore**. The country with the least sea area and busiest port has a state-of-the-art ship tracking system that employs coastal radars to track 70,000 vessels simultaneously. Of the three littoral countries, it has the most integrated arrangement. The interagency Maritime and Port Security Working Group brings together Navy, Coast Guard and port authority to control ship movements within the port. Given the complexity of these activities, Singapore is a vocal advocate of international cooperation and has also provided sea marshals who board and accompany high vessels that use its port.[17]

(b)   **Malaysia**. In 2006, Malaysia established a Coast Guard namely Malaysian Maritime Enforcement Agency (MMEA). The creation was in part a reaction to the addition by Lloyd's of London to its "war list" for maritime insurance.[18] Lloyd's

[15] Sheldon W. Simon, "Safety and Security in the Malacca Strait: The Limits of Collaboration", p 13 , National Bureau of Asian Research, Special Report, Nov 2010 accessed at http://www.nbr.org/publications/specialreport/pdf-sr 24

[16] Ibid

[17] Victor Huang, " Building Maritime Security in SE Asia: Outsiders Not Welcome?", Naval War College Review 61, no.1 (winter 2008):89-90 and Jeremy Chow, "Navy Revamps Coastal Command," Straits Times 13 Feb 2009

[18] Yun Yun Teo, "Target Malacca Straits: Maritime Terrorism in South East Asia", Studies in Conflict and Terrorism 30(2007): 547-548

decision increased shipping insurance rates through the strait and motivated the three littoral states to create a joint patrol arrangement. This prompted the British insurance company to remove Malacca from the war list a year later. However, MMEA with 70 patrol craft and 6 helicopters maintains a considerable presence but is less concerned with piracy than with illegal fishing and development of tourism.

(c) **Indonesia**. Indonesia's waterborne trade transits through the straits of Lombok and Makassar. Moreover, maritime border disputes with Malaysia, smuggling, illegal fishing, and environmental degradation are of a greater concern than piracy and maritime trade. Indonesia also lacks sufficient ships to patrol the waters around its approximately 17,000 islands.[19] In 2004, the Indonesian Navy estimated that it would require 302 warships and 170 aircraft to effectively monitor the seas around the country's islands. This is near impossible considering the resources that are needed. In 2008, Indonesia with Japanese assistance, was planning to create a separate Coast Guard.

The User States

13. Of all the user states, US and Japan have been the primary contributors to the promotion of safety and security in the Strait, with South Korea, China and more recently India becoming involved. Extra regional countries assist in capacity building, training and technical assistance on a bilateral basis.[20] The US Pacific Fleet also exercises annually with the littoral states' navies through the Cooperation Afloat and Readiness Training (CARAT) and Southeast Asian Cooperation for Anti Terrorism (SEACAT). Finally, in pursuit of its anti-terrorist goals, US Navy would like to equip ships electronically in order to precisely track their positions course-speed, registrations, destinations and manifests comparable to global ATC system.[21] In 1997, the Japanese

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[19] Sheldon W. Simon, "Safety and Security in the Malacca Strait: The Limits of Collaboration", p 4 , National Bureau of Asian Research, Special Report, Nov 2010 accessed at http://www.nbr.org/publications/specialreport/pdf-sr 24

[20] Joshua Ho, "Cooperative mechanisms in the Malacca Straits", in Realising Safe and Secure Seas for All: International Maritime Security Conference 2009 (Singapore: Select Publishing, 2009), 174

[21] David Rosenberg, " The Political Economy of Piracy in the South China Sea", Naval War College Review, 62, no.3 (Summer 2009) : 54 and John B Haseman and Eduardo Laschica, "Getting Indonesia Right: Managing a Security Partnership in a Non-aligned Country", Joint Forces Quarterly 54 (2009):89

Coast Guard (JCG) actively participated in creating a Traffic Separation Scheme for the Malacca Strait.[22]

Challenges in Malacca Strait

14.   **Commercial Shipping**.   Article 26 of UNCLOS Treaty stipulates that coastal states can only charge for services rendered in territorial waters (e.g. pilotage). Malaysia has argued, however, that article 43 of the treaty calls for users and littoral states to cooperate to enhance safety; this article could provide a basis for imposing fees that are designated for improving the security of the strait.[23] Because more than half the commercial traffic transiting the strait do not make port calls, they are in effect free riders on fee-based improvements made by littoral states with funds from the ships that use the strait.

15.   Indonesia and Malaysia have frequently asked shipping companies to share the costs of policing the Malacca Strait against pirates. For the most part, the shipping companies have refused. Moreover, the littoral states also want shipping companies and user states to share the burden of policing the strait, including safety and environmental measures. This is indeed a very complex challenge. The Organization for Economic Cooperation and Development (OECD) has estimated that new security measures to counter the threat of piracy and terrorism at sea would cost ship operators at least $1.3 billion and would increase the annual operating costs by approximately $730 million.[24] It can be then extrapolated that similar figures for Horn of Africa/GOA/Hormuz would be similar or even higher. The biggest challenge is that the relatively low cost of actual piracy may not warrant such expensive outlays. In 2005, a year of relatively high levels of piracy in South East Asia, over 63,000 ships passed

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[22] Masahiro Akiyama, "Regional Maritime Security Engagements: A Japanese Perspective" in Ho, " Realising Safe and Secure Seas for All" 90-93 ; Sheldon W. Simon, "Safety and Security in the Malacca Strait: The Limits of Collaboration", p 7 , National Bureau of Asian Research, Special Report, Nov 2010 accessed at http://www.nbr.org/publications/specialreport/pdf-sr 24

[23] Mohammad Nizam Basiron, " Between Rising Naval Powers: Implications for Southeast Asia of the rise of Chinese and Indian Naval Power"- Statement at the Maritime Institute of Malaysia Conference, Singapore, 18-19 Nov 2008 and Sam Bateman, " UNCLOS and its limitations as the foundation for a Regional Maritime Security Regime", Inst of Defence and Strategic Studies, working paper no 111, April 2006, 13-14

[24] Sheldon W. Simon, "Safety and Security in the Malacca Strait: The Limits of Collaboration", p 8 , National Bureau of Asian Research, Special Report, Nov 2010 at http://www.nbr.org/publications/specialreport/pdf-sr 24

through the Malacca Strait, and the IMB reported only 12 cases of piracy, or a probability level of 0.019%. Many of the attacks involved petty theft against ships at anchor. Shippers on the other hand, probably under report piracy attacks because it may cause vessels to be detained in ports for investigation with the costs of such delays frequently exceeding the losses incurred by piracy.

16.   Arming merchant ships is discouraged by both owners and trade unions in the belief that firearms will further endanger crews. Both Malaysia and Indonesia prohibit armed guards on merchant vessels passing through territorial waters though Kuala Lumpur has relented to the extent that such ships may pass through its section of the strait as long as the passage is continuous. Singapore requires any armed guards on merchant ships in its territorial waters to dismantle their weapons and lock them away.[25]

17.   Further complicating the piracy suppression is the proximity of the littoral states' territorial waters. Pirates can attack a ship in Singaporean waters and then flee to Malaysian or Indonesian waters. A solution to this problem may be found in 1988 Rome Convention on the Suppression of Unlawful Acts Against the Safety of Marine Navigation (SUA). The convention extends coastal state jurisdiction where a crime has been committed in foreign territorial waters and provides guidelines for the extradition of suspects to the coastal state, where the crime was committed. Only Singapore is a signatory; the same jurisdiction does not extend to either Malaysia or Indonesia.[26]

Measures to Improve Cooperative Security in the Strait

18.   **Malacca Strait Patrols (MSP)**. The most effective cooperative mechanism to suppress piracy in the Malacca Strait, MSP since 2005 is Southeast Asia's only indigenous multilateral military arrangement that is ongoing involving the Coast Guards, navies and air forces of littoral states as well as Thailand (from 2008). A joint coordination committee of MSP meets twice a year.[27] In 2006, after an agreement was

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[25] Rosenberg, "The Political Economy of Piracy", p 47; Charles Glass, "The New Piracy: Terror on the High Seas", London Review of books, 18 Dec 2008; and Lok Vi Ming and Laura Chang, "Maritime Insurance Against Piracy: A Shield or a Sword", in Joshua Ho, "Realising Safe and Secure Seas for All", 160

[26] Teo, "Target Malacca Straits", 544 in Sheldon W. Simon, "Safety and Security in the Malacca Strait: The Limits of Collaboration", p 9 , National Bureau of Asian Research, Special Report, Nov 2010 at http://www.nbr.org/publications/specialreport/pdf-sr 24

[27] Ministry of Defence, Singapore, 28 Mar 2008 at http://www.mindef.gov.sg/imindef/mindef_websites/.../navy

reached, ships in MSP have the right of hot pursuit up to 5 nm into the sovereign waters of a neighbouring country, though there are no plans yet for joint patrols. The Eyes in the Sky (EiS) component of MSP involves aircraft patrols from the four states (Thailand included), though only 6 sorties per week. Each flight carries personnel from each of the participating armed forces, who report suspicious activities to Monitoring and Action Agencies (MAA) in each of the countries. With MSP, the number of reported piracy incidents declined from a high of 38 in 2004 to just 4 in 2008. Interestingly, the EiS agreement contains a provision that could permit extra regional countries to participate in air patrols.[28]

19. **Regional Cooperation Agreement on Combating Piracy and Armed Robbery Against ships in Asia (ReCAAP)**. This was launched in Singapore in 2006 to provide more timely and accurate reports of maritime crime against ships in the region while facilitating best practices among the states concerned.[29] Sixteen countries covering South, Southeast and Northeast Asia belong to ReCAAP although neither Indonesia nor Malaysia are members. ReCAAP's Information Sharing Centre (ISC), in addition to distributing data on illegal activities against shipping, also assists in capacity building and cooperative arrangements. Each member state has designated an integral agency as a focal point that manages and coordinates with neighbouring focal points as necessary. They include Coast Guard, Marine Police, navies and port authorities. ReCAAP's main achievement has been to break down the 'jurisdictional silos' within each country with respect to maritime affairs by creating a reporting and analysis centre at Singapore. Partner organizations also include shipping associations such as the Asian Shipowners' forum, the Baltic and International Maritime Council (BIMCO), IMO and International Independent Tank Owners' Association (INTERTANKO).[30]

20. **Information Fusion Centre**. Inaugurated by Singapore Navy in Apr 2009, the IFC exhibits the kind of multilateral cooperation that is needed to resolve complex maritime issues. Located at Changi C2 centre, IFC houses a number of information

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[28] Storey, "Securing Southeast Asia's Sea Lanes", 114-117,119; Leong, "Realising Safe and Secure Seas for All", and Ho, "Cooperative Mechanism in the Malacca Straits" 170-173
[29] http://www.recaap.org/index_home.html
[30] Joshua Ho, "Combating Piracy and Armed robbery in Asia: The ReCAAP Information Sharing Centre", Marine Policy 33 (2009) : 432-34

sharing arrangements including WPNS and MSP information sharing systems.[31] IFC also closely works with ReCAAP. IFC's purpose is to provide participating navies and maritime agencies with a complete regional maritime picture thus enabling the identification of potential threats. The IFC also has an anti-terrorism brief based on the belief that the sharing of a variety of nations' maritime experiences can contribute to a better understanding of this data. To operationalize the same, IFC has set up a 24/7 operations run by an integrated team of international liaison officers and Singapore Navy. IFC reports are also delivered to shipping companies. At the IFC's heart is a database on more than 150,000 vessels and a software tool designed to flag suspicious ships.[32]

LESSONS FROM MALACCA FOR HORMUZ, BAB AL MANDEB AND GULF OF ADEN

21.　　While maritime crime seems under control and a number of safe transit procedures are in place in the Malacca Straits, the world's attention has turned to the Gulf of Aden and Western Indian Ocean, where piracy is ubiquitous. Any comparison between the two would be incorrect. In 2008, pirates attacked 111 vessels in and around the GOA and hijacked 42 of them for ransom; increased insurance premiums added $20,000 per trip in the region.[33]

Differences in Piracy in GOA from Malacca Strait

22.　　The main differences are enumerated as follows:-

　　(a) **Governance**. Lack of central authority and Rule of Law. The ground situation in Somalia has not yet stabilized and there is every persisting indication of a failed state. The cooperation of Transitional Federal Government (TFG) has largely been limited to allowing other forces to interdict pirates inside Somali waters.

　　(b) **Political Compulsions**. Complicating the cooperation of the TFG is the radical Islamic group 'Al Shabaab'. Although it has stated that it will act to

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[31] Ministry of Defence, Singapore Navy, "Press Release on the Inauguration of IFC", 27 Apr 2009
[32] Ibid
[33] Mark Valencia and Nazery Khalid, " The Somalia Multilateral Anti-Piracy Approach: Some Caveats", Nautilus Institute, 12 Feb 2009

prevent piracy in areas under its control, the organization's relationship with various clans that engage in piracy is unclear. The group appears to have made recent gains that may allow it to control Harardhere, long a pirate haven. [34]

© **Geography**. The presence of large naval forces off Somalia- including vessels tasked by EU's Operation Atlanta, NATO's Ocean Shield, India, Russia, and China have clearly deterred prospective attacks. It has forced the Somali pirates to change tactics by heading out farther from shore. Spatial analysis indicates that attacks have occurred more than 1200 km from the Somali coast, far out in the Indian Ocean. GOA covers more than 1 million sq nm, most of it open ocean, rendering the region hard to effectively police.[35]

(d) **Nature of Attacks**. A successful attack in GOA usually removes a vessel from service for some time, and entails significant operating and other costs in the interim, as well as eventual ransom payment to the tune of millions of dollars. The pictorial representation for data pertaining to Nov 2008 is given below (source http://newsimg.bbc.co.uk/media/images). Much has changed since then as a result of vigourous anti-piracy patrols.

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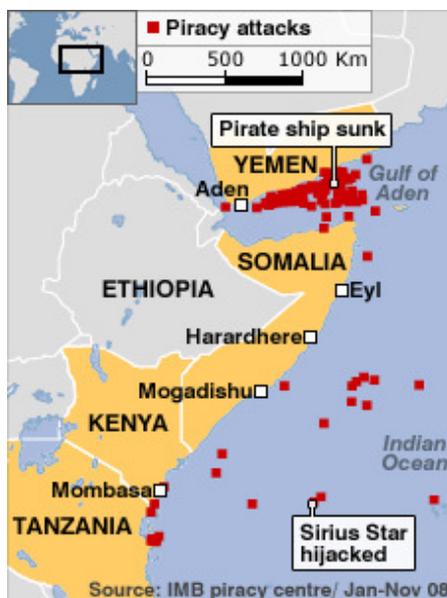
[34] "Somali Militants Push toward Pirate Stronghold", Associated Press, 16 Mar 2010.
"Seized ships free Islamists", Tradewinds, 04 May 2010
[35] Analysis of Somali Pirate Activity in 2009-UN Inst of Training and Research Operational Satellite Applications Program (UNITAR/UNOSAT), 23 Apr 2009 at http://unosat_maps.web.cern.ch/unosat_maps/so/piracy/2009

Recent Initiatives & Current Measures in Force

23.   The UN Security Council has passed a series of resolutions, latest being in April 2010 authorizing foreign intervention to suppress piracy and even authorizing 'hot pursuit onshore of pirates operating from Somalia.'[36]   At the peak of anti piracy patrols, there are between 35-40 warships plying the waters off Somalia.   After the implementation of Maritime Security Patrol Area (MSPA), anti-piracy efforts were concentrated in a corridor along the coast of Yemen, which allowed military forces to concentrate on a smaller geographic area.   For operational reasons, MSPA was changed in Feb 2009 to the Internationally Recommended Transit Corridor (IRTC) which also incorporates a Vessel Traffic Separation Scheme. MSPA now refers to the larger area covered by anti-piracy patrols, while IRTC is the corridor in which commercial traffic sail along the Yemeni coast. Roger Middleton, an expert on the Horn of Africa at Chatham House, a London based think tank, estimates that it would take a mammoth flotilla of 700 to 800 ships in the region to actually neutralize the full capabilities of pirates.[37]   This sort of mobilization is unthinkable, not least because modern navies simply do not have such numbers. The present operations have been coordinated by the US Navy regional headquarters in Bahrain at monthly meetings of Shared Awareness and Deconfliction Group (SHADE).[38]   So far, this conclave has enabled better policing of GOA. But now the vital job of monitoring vast stretches of Indian Ocean will require aerial assets and eventually satellite surveillance is going to be essential to countering piracy threat", says Sam Bateman, maritime security expert.[39]

24.   **Djibouti Code of Conduct**. The Code of Conduct on Repression of Piracy and Armed Robbery against Ships in the Western Indian Ocean and GOA called the 'Djibouti Code of Conduct' was adopted on 29 Jan 2009 by many states. The meeting convened by IMO was attended by 17 states from the GOA, Western Indian Ocean, and Red Sea areas; UN specialized agencies and bodies; and international and regional

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[36] http://www.un.org/news/press/docs/2008/sc9344.doc.htm

[37] Ishan Tharoor, "As Patrols increase, Somali Pirates Widen their Reach", Time 27 Apr 2010
[38] http://en.wikipedia.org/wiki/piracy_in_somalia

[39] Ishan Tharoor, "As Patrols increase, Somali Pirates Widen their Reach", Time 27 Apr 2010

inter-governmental and non-governmental organization.[40] The code requires signatories to criminalize piracy and armed robbery against ships, to investigate incidents when possible and to prosecute alleged offenders. It further calls for setting up of national focal points and sharing of information relating to incidents reported. The signatories are to use piracy information exchange centres in Kenya, Tanzania and Yemen.

Understanding Maritime Interoperability- A Primer

25.   Before proceeding further, it is relevant to define the following:-

(a)   **Automatic Identification System (AIS)**. Automatic Identification System (AIS) is the most significant development in navigation safety since the introduction of radar. The AIS was developed as a collision avoidance tool to allow ships and coastal stations to accurately locate and identify one another. AIS determines position, speed and course using a built-in GPS receiver. This information is combined with other important navigation information (Destination, Vessel MMSI No, Cargo, etc) and is automatically communicated between AIS-equipped vessels without any user interaction.[41] This technology was made compulsory throughout the world for vessels over 300 GRT. Operating within the VHF limit, the monitoring distance from the coastal AIS station is about 25 nm. The AIS data not only aids Intelligence, Surveillance and Reconnaissance (ISR) efforts at the tactical level for air and surface platforms employed at sea, but would also provide a transparent picture of coastal traffic identification as an overlay to Maritime Op Centres.

(b)   **Long Range Identification and Tracking (LRIT)**. LRIT for ships at sea is a measure that fully contributes to the enhancement of the maritime and coastal states' security, and was adopted as part of resolution 3 of IMO conference in 2000.[42] Other than technical issues, the fundamental difference, between AIS and LRIT is that, AIS is a ship safety measure, whereas LRIT is meant for Maritime Domain Awareness (MDA). The regulations for LRIT have been

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[40] http://www.imo.org/newsroom/mainframe

[41] http://www.en.wikipedia.org/wiki/Automatic_Identification_System

[42] http://www.en.wikipedia.org/.../Long_Range_Identification_and_Tracking

incorporated in the revised SOLAS as a mandatory requirement for all ships above 300 GRT. The obligation to transmit LRIT information applies to all passenger ships and cargo ships above 300 GRT engaged in international voyages and mobile offshore drilling units. The important information of LRIT include transmission of ship's identity, location, time upto extended ranges of 1000 NM, wherein only authorised users will receive the data. The positional information, corroboration of identity of platforms at sea and moving indication of maritime commercial shipping traffic on the plots of MOCs enhances the clarity of MDA picture immensely. It also saves the Intelligence, Surveillance and Reconnaissance (ISR) efforts by the joint coastal security forces.

(c) **Maritime Domain Awareness (MDA)**. All vessels at sea, irrespective of their size are required to be identified in order to obviate any threat to coastal security. Vessels can be utilised for piracy, transfer anti-national elements, contraband and in the worst case, Weapons of Mass Destruction (WMD). The concerted efforts of all stakeholders to enhance awareness and activities of vessels within the maritime zones are essential. Any threat or its after effects may be mitigated by establishing identity and movements of vessels operating close to the coast. Information and sharing are key factors to achieve this. Therefore, Maritime Domain Awareness (MDA) may be described as collation, analysis and dissemination of information amongst stakeholders and is an integral part of cooperative security.

(d) **Merchant Ship Security Information System (MSSIS)**. This is the first step in MDA which shares unclassified maritime information. This is a web-based application used as a means to receive and display vessel positions on a map interface. This system also receives AIS data from commercial sources as contracted from time to time and forms the basic interface for exchange of information.[43] The beauty of this system lies in its simplicity (one needs only an antenna, transceiver, GPS, computer and internet connection). All legitimate actors in the global maritime domain can participate viz Navies, Coast guards,

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[43] http://www.en.wikipedia.org/.../Maritime_Safety_and_Security_Informations_System

law enforcement agencies like customs and coastal police, border patrol and ministries etc.

Challenges for Maritime Security in GOA/Straits in the Region

26.   The challenges, though not completely exhaustive, but mainly are: -

(a)   **MDA**. This is a very complex task which needs agreements and methods of information sharing.   One reason may be lack of political will to develop agreements. Another issue is desirable open source 'information methodologies', which unfortunately can also be accessed by the 'bad guys'. Data collection for developing states must also involve security of data.

(b)   **Legal Issues**. There are many unanswered legal questions.

(i) On 16 Dec 2008, UNSC passed a resolution authorizing hot pursuit onshore of pirates of Somalia. US was the leading proponent. But it was forced to compromise when Indonesia objected to including authorization to enter Somalian airspace. Indonesia made it clear that the resolution must be consistent with international law, especially the 1982 UNCLOS and not create a precedent for intervention in other waters where piracy is common.[44] Indeed, a draft of first resolution introduced by the US implied that if the intervention was successful off Somalia, it or the principle could be applied elsewhere e.g in the Malacca Strait. The concerns voiced by Indonesia and the resultant compromises are indicative of the ongoing struggle between the proponents of two different concepts of nationality-the traditional Westphalian concept in which the national borders are sacrosanct, and the relatively recent US doctrine of 'Justifiable Intervention' in situations in which it decides that a sovereign state cannot control internal strife, endangering either its own citizens or others outside the state.

(ii) Can a foreign naval ship legally fire on a ship believed to be under the control of or carrying pirates? On 18 Nov 2008, this question became a practical reality when INS Tabar, an Indian Navy ship fired on and sank a Thai fishing vessel *Ekawat Nava* which was alleged to be a pirate mother

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[44] Mark J Valencia and Nazery Khalid, "The Somalia Multilateral Anti-Piracy Approach: Caveats on Vigilantism", The Asia-Pacific Journal, Vol. 8-4-09, 17 Feb 2009.

ship.[45] The vessel had been hijacked by heavily armed pirates and the crew tied up. The pirates escaped in speed boats while 14 members of the fishing vessel's crew died in this incident. In its defence, the Indian Navy said that it was a pirate vessel in 'description and intent' and that INS Tabar had fired in self-defence after coming under attack. The Commander of US Fifth fleet, VAdm William Gortney had urged shipowners to engage Private Security Companies (PSCs) to guard commercial vessels transiting the area. But what if the sinking of the Thai fishing vessel had been perpetrated by PSCs? Who would be accountable? If a ship is seized 'without adequate grounds' by anti-piracy forces, how will the owners seek redress? Moreover, if the pirates are arrested, which country has jurisdiction and who can and should prosecute the pirates-the arresting country, the flag nation of the pirated ship, or the pirates' home country?"[46]

(c)   **Multilateral Agreement**. Rather than extra regional powers taking lead roles, has the time come for a UN led Maritime Peacekeeping force?[47] Why not adopt a regional approach? A nascent IONS model might be appropriate; it could provide an ideal platform to develop a regional maritime capability.[48] Multilateral agreements are feasible only within political boundaries acceptable to littoral states.

(d)   **Choke Points**. The chokepoints are a common concept in transport geography, as they refer to locations that limit the capacity of circulation and cannot be easily bypassed. This implies that any alternative to a chokepoint

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[45] http://www.expressindia.com, 26 Nov 2008

[46] Mark J Valencia and Nazery Khalid, "The Somalia Multilateral Anti-Piracy Approach: Caveats on Vigilantism", The Asia-Pacific Journal, Vol. 8-4-09, 17 Feb 2009.

[47] Cmde Rajeev Sawhney, "Indian Ocean Maritime Security: Key Issues and Perspectives", Proceedings from the Indian Ocean Maritime Security Symposium, p 39, Australian Defence College, 15-17 Apr 2009, http://www.ancors.uow.edu.au/news/item/IOMS

[48] Cmde Rajeev Sawhney (retd), "Indian Ocean Maritime Security: Key Issues and Perspectives", p41, Proceedings from "Indian Ocean Maritime Security Symposium", Australian Defence College, 15-17 Apr 2009, http://www.ancors.uow.edu.au/news/item/IOMS

involves a level of detour or use of an alternative that translates into significant financial costs and delays. Thus, three core concepts that define a chokepoint as a resource are : physical characteristics, usage and access.[49] Vigorous anti-piracy measures have definitely reduced the piracy menace in GOA but they have moved into the ocean. Are apprehensions regarding pirates positioning themselves off the Straits of Hormuz well founded? Maybe yes. US Navy perceives Iran and terrorism as greatest threats to Strait of Hormuz. The SLOC through the strait are dominated by a group of seven islands-Hormuz, Henjam, Qeshm, Larak, Greater and Lesser Tunb, and Abu Musa. Iran currently controls the Abu Musa and Tunbs. Ever since the British departed the Gulf in 1971, Abu Musa and Tunb islands have been contested by UAE and Iran.[50] The islands lie in the centre of the strait close to Iran, UAE and Oman. At its narrowest point, the Hormuz is 34 miles wide, with Iran to the north and Oman and UAE to the south. However, the passages through the strait consist of only 2 mile wide channels for inbound and outbound maritime traffic. Despite such a constricted and congested opening, transport and trade through the strait have remained relatively undisturbed since WW II. Moreover, shutting down the strait would require the use of expensive alternate routes. Geoffrey Gresh, an academic of Fletcher School of Law and Diplomacy has argued for US to phase out its role as the primary provider of naval security and begin preparations for its adjustment into a regional coordinator,withdraw its CBGs and instead focus on maritime sealift. In a hypothetical situation as this, will this lead to a vacuum? This will be examined later.

MEASURES TO ENHANCE COOPERATIVE SECURITY– IONS ROADMAP

27.   In international diplomacy, where there are complex challenges, there are ample opportunities. It may be worthwhile to explore some existing and some new 'out-of-the-box' ideas.

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[49] Jean Paul Rodrigue, "Straits, Passages and Chokepoints-A Maritime Geostrategy of Petroleum Distribution", p3 at http://people.hofstra.edu/jean-paul_rodrigue

[50] Geoffrey F Gresh, "Traversing through the Persian Gauntlet: US Naval Projection and the Strait of Hormuz", p 4 at http://fletcher.tufts.edu/forum/archives

28.   **Capacity Building**.   As many IOR island states have a disproportionate relationship between their small land areas and large EEZs, they have little capacity to govern, police or manage these areas.[51] In some cases like Somalia, lack of capacity has to do more with being a failed state. Major challenges to capacity building include addressing national sensitivities. Capacity building can be achieved by leasing of modern patrol boats, plugging the capability gaps with surveillance assets, training of Coastguard personnel and sharing of operational capabilities. Some recent examples of capacity building are: -

(a) **Seychelles**. In May 2009, India handed over a Fast Attack Craft (FAC) named Topaz. Earlier, in 2005, another FAC named Tarmugli was transferred as goodwill gesture.[52] The Indian Navy conducts EEZ patrolling (Seychelles has an EEZ of 1.3 million sq km) as well as patrolling duties against piracy based on bilateral relations in what is termed as 'the spirit of naval diplomacy and charter of IONS.' In Jul 2010, the Indian Defence Minister Mr AK Antony agreed to provide one Dornier and two Chetak helicopters for maritime surveillance 'at the earliest.' This materialized after the Indian PM committed $ 5 million assistance for defence related projects. India would help the Seychelles carry out EEZ surveillance as frequently as possible with additional IN ship visits this year and train Seychellois personnel in maintenance and drills. In a separate measure, US AFRICOM based MQ 9 Reaper UAVs at Mahe airport in Sep 2009, in addition to deploying P 3C Orion LRMP aircraft for anti-piracy operations.[53] The UAVs will not be armed but one will be on patrol at all times. A Reaper can stay airborne for 30 hours and fly at speeds up to 275 mph.

(b) **Mauritirius**. This year, a team of Indian Navy marine commandos trained Mauritius NCG commandos in anti-piracy and diving operations.[54] For the first time, training was provided in special heliborne operations involving slithering

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[51]   Cmde Rajeev Sawhney (retd), "Indian Ocean Maritime Security: Key Issues and Perspectives", p 40, Proceedings from "Indian Ocean Maritime Security Symposium", Australian Defence College, 15-17 Apr 2009, http://www.ancors.uow.edu.au/news/item/IOMS

[52] Saurabh Joshi, "IN to handover FAC Topaz to Seychelles", StratPost-South Asian Defence and Strategic Affairs, 06 May 2009
[53] Saurabh Joshi, StratPost-South Asian Defence and Strategic Affairs, 19 Jul 2010
[54] Saurabh Joshi, StratPost - South Asian Defence and Strategic Affairs, 08 Jun 2010

and sniper firing from an ALH which India had earlier gifted to Mauritius. The training had also special emphasis on Visit Board Search and Seizure (VBSS) procedures. There have also been unconfirmed reports about India's development of twin islands of Agalega at request of Mauritius.[55] The land could also be used for strategic purposes.

© **Kenya**. US assistance to Kenya has included providing patrol boats and security for the port of Mombasa. It may be noted that cooperation in the form of US AFRICOM is very unpopular among many African states.[56]

(d) **Yemen, Djibouti and Somalia**. Japan has funded maritime security efforts. $ 67 million provided to Somalia TFG was earmarked for security and 3.6 billion Yen was divided between IMO capacity building measures, such as the establishment of a Piracy Reporting Centre in Kenya.[57]

29. **Technical Assistance for Information Sharing**. The aim should be to develop regional and sub-regional frameworks for data sharing. MDA cooperation has direct benefits. This would have to be a multilateral agreement. Industry partnership is necessary to achieve the same. Information collection relies largely, but not completely on monitoring technologies. The technologies used in a monitoring system prescribed by an agreement must be shareable among all parties, and all parties must receive equal access to collected data. Since incorrect or incomplete information may be more damaging to regional relationships than no information, procedures for dealing with anomalous data or false positives must be included in a monitoring regime.

30. **Multilateral Agreement**. The CTF 150/151 is not the cooperative model to follow. Whatever be the arrangement, it should be led by IOR states. On the issue of external powers, there are no historic, economic, or security reasons as to why they should be excluded from involvement. The issue is how they should be included and to

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[55] Rajat Guha, The Financial Express, 14 Oct 2010

[56] Dr Potgeiter, Dr Clive Schofield, "Horn Of Troubles: Maritime Aspects of Food Security and Law and Order off Somalia, Proceedings from "Indian Ocean Maritime Security Symposium", p 23 , Australian Defence College, 15-17 Apr 2009, http://www.ancors.uow.edu.au/news/item/IOMS

[57] "Japan's ODA: Rolling Plan for Djibouti", Japanese Ministry of Foreign Affairs, April 2009, http://www.mofa.go.jp/policy/oda/rolling_plans

what extent. What are the criteria upon which the involvement of external powers should be decided? It is important to lay down such criteria so that capabilities and resources can be maximized. The littoral states will welcome cooperation from outside only as long as it is on their terms and does not involve independent use of armed force. This strategy that must be pursued with vigour. There must be clarity of vision between having a region-wide maritime cooperative security e.g. aerial surveillance with LRMP/UAV, with perhaps sub-regional groupings e.g Strait of Hormuz Patrol which have a greater operational focus. India could take a leading role. Alternatively, the three corner states of Indian Ocean-Australia, India and South Africa could form the core of the forum and build from there.[58]

31.   **Chokepoints**. The UAE has enhanced its navy from a small well coordinated coastal defence force into one with blue water capabilities. The UAE government had ordered construction of six 88-metre, 500 Ton multi role corvettes with surveillance capabilities.[59] The construction of these high speed corvettes is significant because they will be the first such vessels to sail in the Arabian Gulf. Once fully operational, the UAE's fleet would be able to significantly contribute to the security of the Strait of Hormuz. Saudi Arabia, which has four bases can be an active catalyst. A regional dialogue under the aegis of IONS could be initiated as a beginning which would include all the Gulf Cooperation Council nations. This dialogue may include Yemen (since it is not a GCC member but IONS signatory) and Iran (another IONS signatory) to evolve a security model similar to MSP. Dialogue is essential to allay any apprehensions of the individual states with regards to their regional sensitivities. This would also give a further operational impetus to the success achieved through the Djibouti Code of conduct. The discussions could include modalities of achieving MDA in the straits and GOA and establishing an ISC/IFC at a mutually agreed place similar to Singapore. This could be networked with the proposed piracy centre at Mombasa, and other centres at Dar es Salaam, Yemen and Seychelles/Mauritius.

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[58] Final Plenary Discussions, "Comments and Issues", Proceedings from "Indian Ocean Maritime Security Symposium", p 64 , Australian Defence College, 15-17 Apr 2009, http://www.ancors.uow.edu.au/news/item/IOMS

[59] Ed Blanch, "Country Briefing:UAE – Packing a Bigger Punch", Janes Defence Weekly, 16 Nov 2005 at http://janesweekly.com

32.   **Commercial Stakeholders in Security**.   There is an urgent need to solicit the participation of industry which includes maritime commercial shipping, offshore oil and gas, and fishing interests. The non-state stakeholders are vessel owners and operators, charterers and cargo interests, crew, and protection and indemnity clubs and Marine insurance. Although this list is by no means exhaustive, each of these stakeholders can be defined as a "commercial stakeholder" with respect to their underlying financial motivation for involvement in the international marine transportation system, which is different from the national security and strategic concerns that primarily involve nation states.   Public Private Partnership ought to be encouraged for supporting projects that enhance strait safety in Hormuz for e.g Nippon foundation of Japan has donated $ 130 million over the last 40 years for projects in Malacca Strait. In Feb 2009, a grant from Japan to Malaysia led to the installation of laser cameras and laser direction finders that both enhance safety and help detect illegal activities.[60]

33.   **Eradicate Root Causes**. It is widely accepted that the next step in the fight against piracy is to shift from treating the symptoms of piracy viz. patrolling, surveillance and attacking pirate vessels to fighting the root causes of piracy on land.   Nation building is a tall order. International effort must be directed at basic and vocational educational programs, agriculture, establishing police and coast guard training. In addition to deterring piracy at sea, directly combating poverty though Humanitarian Assistance and building governance in pirate havens is a long term project. In an era of increasing belt tightening for governments, efforts to address the root causes of piracy may be a complex challenge.

CONCLUSION

34.   A four pronged organizational approach for cooperative security at regional and sub regional levels may work which will include Navy, Coast Guard, Maritime Law enforcement agencies viz. customs, marine police, ports and shipping bodies. Focal points will need to be established for Hormuz and Bab el-Mandeb and

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[60] Masahiro Akiyama, "Regional Maritime Security Engagement: A Japanese Perspective", 90-94 and "Maritime Agency to Improve Surveillance", Bernama, 20 Mar 2009

Seychelles/Mauritius. These focal points would then need to have integrated teams consisting of liaison officers from nominated IONS members. Some states willingly undertake command roles in multilateral entities whereas others do it independently or bilaterally. There are important distinctions to be made between multilateral or regional 'military cooperation' and 'law enforcement' activities in the straits; because law enforcement involves complex, national, multi-agency cooperation and coordination issues. The maintenance of national sovereignty, sovereign rights and jurisdiction, as a principle is a national responsibility. This problem has to be solved politically by additional Track II initiatives. Stability of maritime regime in high seas, is however, a common responsibility of the littoral states, adjacent coastal states and user states. On the basis of this principle, a cost sharing agreement could be established through IONS.