# IONSPHERE

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# IONSPHERE



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The Southeast Asia region is currently facing non-traditional security challenges; a trend that is also a global issue. From Indonesia's perspective, the region faces significant maritime challenges. As Southeast Asia's largest country, Indonesia believes that Regional Maritime Partnership would be the tool to face regional maritime security challenges. As countries become more interdependent with one another, there is a strong need to manage maritime security challenges collectively. ASEAN Navies have the modality to develop multilateral cooperation, as they have previous experiences on bilateral cooperation and this must be further built upon.

A powerful navy has conventionally been seen as the projection of sovereign power off its own shores. Conversely, the constabulary role is closer to home and has often been made a domestic issue with many nations having a separate police force or Coast Guard to fulfil the constabulary role. However, the focus for navies of today should be the ability to maintain skills in both constabulary and conventional roles, and be able to switch between the two roles expeditiously. The navy that is capable of dealing with all threats is one that focuses on both the conventional and constabulary roles.

Being one of the world's most disaster-prone countries, Sri Lanka has suffered significant loss of life and property due to natural hazards of 2004. Although preparedness and disaster response have been a government priority for a number of years, the tsunami disaster clearly illustrated the need for Sri Lanka to take priority action in strengthening disaster preparedness and response, and provided additional momentum to do so. The Sri Lanka Navy has a huge task and responsibility to assist those who are affected by any such natural disaster.

Though the motivation to engage in piracy is largely related to poverty, like any other business venture, it requires a substantial investment to get started. Targeting financial activity of pirates, especially pirate financiers and instigators, through asset freezes and the seizure and confiscation of the proceeds and instrumentalities of piracy could help in tackling this menace. Targeting the money trail could pay substantial dividends in anti-piracy operations and ensure that money generated by ransom payments is not diverted for any subversive activities in collusion with terrorist organisations.

In contemporary world, maritime security remains at the forefront of political concern in many of the littoral countries. Bangladesh, a small country in South Asia, faces serious maritime security threats from both traditional and non-

traditional sectors as well as changing geo-political dimensions. The maritime component of the country's national security continues to remain less debated with little efforts to sensitise its constituent issues. Capability enhancement and promoting regional mechanisms may be a start in the right direction.

Anti-piracy operations are complex and thus a holistic and systemic approach needs to be adopted to combat the scourge of piracy off the Eastern Coast of Africa and South West Indian Ocean. One such holistic and integrated approach is that of DIME-FIL (Diplomacy, Informational, Military, Economic, Financial, Intelligence and Legal) which is proposed to deal with antipiracy operations. Securing the sea route infested with pirates is a war on several fronts and antipiracy operations cannot be undertaken in isolation given the complex nature of such operations.

The Indian Ocean has become a key strategic arena in the 21st century. Different issues pertaining to maritime security, which can be identified as challenges faced by the regional States with regard to the maritime security in the IOR, manifest themselves in various ways. Cooperation rather than competition is the only way ahead in collectively addressing the various challenges that IOR littorals face, but this approach calls for re-organisation and prioritisation of national issues as well as harmonisation of policies across territorial boundaries.

Mauritius has put in place a robust MDA infrastructure, which is being utilised effectively to monitor the waters around the island and disseminate information for shared situational awareness. The various tools that go into feeding information into this MDA loop are being utilised to their optimum. These tools have been reoriented and reinforced with current and emerging capabilities.

World War II first emphasised the strategic role of the Indian Ocean. Naval forces were deployed in that region to prevent German and Japanese military

forces from consolidating at any point between the Caucasus and India, while the Allies attempted to control the Red Sea. The Cold War once more enhanced its importance. Globalisation and the growing dependence of major powers on shipping lanes also overturned any perception about the Indian Ocean at the turn of the century. The main characteristic of this region is its heterogeneity. It is this diversity that lies behind the numerous conflicts that have destabilised the region in the past. Nevertheless, the Indian Ocean area is at the heart of varying strategic tensions, some exogenous, others endogenous. France, being well established in the IOR, must strengthen its historical links with its local partners, while adapting the relative intensity of its involvements according to regional changes and the emergence of new stakes.

### *Conventional v/s Constabulary Roles of Navies* 75
**LT SONAM SHAH, INDIAN NAVY**

The dynamics of the global maritime environment has changed more drastically over the last few decades than in any other era. The focus of the navies today is being very much determined by the plethora of ever-changing geopolitical and diplomatic dynamics. The sharp increase in the incidence of piracy and armed robbery on the high seas and around coastal areas is what brings the constabulary role of the navy to the fore and makes it one of the most critical callings of the day. However, due to the dynamic and volatile nature of inter-state relationships, and in view of the changing paradigm of world politics, conventional roles of the navy were, are and will be the focal point of the foreign policies of sea-going nations.

### *Humanitarian Assistance and Disaster Relief* 82
**LT NAING AUNG, MYANMAR NAVY**

Large scale calamities or disasters which have occurred in different parts of the world in the last decade have highlighted the importance of effective coordination and response by various governmental agencies including military forces, especially the Navy. Relief and rehabilitation missions cannot be accomplished by individual organisations or an individual government. Governments, NGOs and international organisations must work in concert to achieve desirable results. In this respect, the role of a Navy is a significant one. Navies are key deliverers of HADR capability, although HADR is not a primary or frequently executed military mission. Assessing its own force training and expertise in the requirements of this non-traditional activity is a vital requirement for any navy today.

# Foreword

It is with a sense of immense satisfaction, indeed, that I write this short message for the second edition of IONSPHERE.

It is heartwarming to see that IONSPHERE has manifested itself as such an interesting read. Each article in the publication's inaugural edition highlighted, in letter and spirit, the fact that the publication achieved its anticipated position as a platform for expressing views, opinions and concerns and to highlight the diverse activities of IONS. The number of hits that the IONS website has received since the publication went online is also indicative of the interest generated by this unique newsletter.

IONS, as a cooperative initiative between the IOR littorals, has been a viable and dynamic platform to discuss and share issues of common concern. IONSPHERE further gives us a platform for penning our thoughts. It provides a broad readership and an appropriate vehicle for interaction, in keeping with the open and collaborative outlook of IONS.

Each of the individual authors and the editorial team have done a commendable job in putting together yet another engaging edition of this nascent publication. I invite all readers to use IONSPHERE as a medium to share ideas on matters of maritime interest and encourage contribution of your thoughts.

I extend my best wishes in anticipation of a very meaningful and successful interaction at the forthcoming Operational Seminar and Preparatory Workshop Mumbai. Much to consider will, I am certain, emerge out of the discussions in Mumbai and also provide content for future issues.

VICE ADMIRAL J. MUDIMU, CLS, DMG, SM, MMS, MMM, MMB
CHIEF OF THE SOUTH AFRICAN NAVY

# From the editor's desk

Greetings and a warm welcome from the second edition of Ionsphere!

When we set out to create this publication and give it an outline, we were conscious of the need to provide a forum, a medium, an avenue that would promote maritime cooperative engagement, to foster an interactive flow of information, ideas and opinions towards addressing issues of common maritime concern. The one thing that the editorial team was fully conscious of, was to steer-away from the temptation to resort to a degree of 'editorial license'. However, regrettably we did have to, as we were unable to fit all the articles received in the limited space available. Nonetheless, we were content at having included perspectives from the entire swath of the Indian Ocean Region. Your feedback has reinforced our faith in the relevance, and inclusivity of Ionsphere. On behalf of the editorial team, I thank you in all sincerity. We appreciate your encouragement to our endeavours, which are in turn propelled by your contributions!

What you will find, in this 'follow-on' edition, is a collection of yet another set of inspired and informative articles written by professionals who have sought to voice their opinions in identifying the challenges that confront our collective well-being, They have gone on to propose realistic, flexible and viable solutions to these issues. We are honoured to share the work of so many committed and thoughtful maritime professionals, and to provide them a medium for interactive sharing.

We have made minor changes in the format from the inaugural edition, but I am sure that you will agree that we won't be totally upending the ship if we change a little rigging! This edition seeks to include a wider and enhanced number of articles, so that we can provide a 'voice', so to speak, to a larger number of thoughts into the ionosphere. We intend to keep tinkering with the layout in small measure, just to kindle your curiosity and keep an element of surprise going.

I request you all to kindly take a little time and shoot us an e-mail, letting us know about what aspects of this newsletter you liked, and more importantly, what you did not like. That would set us on the path of improvement. After all, the fundamental purpose behind this publication is to provide a dynamic forum, for dialogue and debate. As always, ideas and comments are always welcome!

(Dinesh Singh)
Captain
Principal Director Foreign Cooperation
Indian Navy

# Perspectives From The IOR

# TROUBLED WATERS: MARITIME CHALLENGES IN ASIA-PACIFIC

*By Admiral Dr Marsetio, Chief of Staff, Indonesian Navy*

## INTRODUCTION

Globalisation and maritime security are inseparable. It could easily be explained with the fact that globalisation, which requisites the smooth flow of goods and service supported by information, necessitates maritime security since 95 per cent of global trade utilises the maritime domain. It is, therefore, imperative that all stakeholders with maritime interest, both state and non-state actors, develop their Maritime Domain Awareness(MDA) to secure their maritime domain.

Two-thirds of Southeast Asia's waters belong to Indonesia; our seas and straits are key to the region's maritime security. The security of Indonesia's territorial waters could become one of the ways to measure Asia Pacific's maritime security. Our unique geographical position puts Indonesia in between the Pacific and Indian Oceans. Indonesia is a member of both regions; as well as Southeast Asia.

This geographical position prescribes the unique security challenges faced by Southeast Asia. The most recent security challenge, the South China Sea dispute, is not the only threat the region is facing. Non-traditional threats, Transnational Organised Crime (TOC) for example, have become one of the region's main issues on its regional interest and security. During the High-Level Meeting of the United Nations General Assembly on Transnational Organized Crime on 17 June 2010, UN Secretary General Ban Ki-Moon stated that the threat of TOC continues to grow and yet states need to do more in order to tackle this issue. Hence, it is important for the international community to step up its international cooperation to counter the increase of TOC in a collective manner.

The combination of these two challenges necessitates stronger and more robust cooperation among countries in the Southeast Asian region. Since one of the implications of globalisation is the heightened security interdependence among countries, cooperation is the key. This paper will elaborate the region's maritime security challenges that are considered as common regional threats and proposed solutions from the perspective of Indonesia's national interests.

## GLOBALISATION AND REGIONALISM

The Southeast Asia region is currently facing non-traditional security challenges; a trend that is also a global issue. To quote James Dougherty, global issues are questions,

problems, dilemmas and challenges related to the basic requirements of international peace and security, structure, justice, freedom and progress. In general, they are classified into security diplomacy, military strategy and social economy.

The emergence of global issues derives from global integration in the fields of economy, social and culture. As distance, space and time no longer become obstacles to how members of the international community interact with one another, thanks to telecommunications, air and space technology; hence integration would be a consequence of such a process. Global issues along with the rise of globalisation have blurred the sovereignty and geographical borders of the once-autonomous entity called the nation-state. The world is now interconnected and interdependent.

There are four indicators of a global issue. First, a particular issue receives attention from decision makers and government officials where the administration is directly involved in public debates. Second, it continuously becomes headline of the international media. Third, the issue becomes a permanent topic of academic studies, research and debates among international scholars and professionals. Fourth, the issue is part of the agenda of international organisations. To become a global issue, an issue must fulfil four criteria. It would, first, have significant implications to the global community. Second, it transcends national borders or is transnational by nature. Third, resolving it would need a long term approach. Lastly, connectivity among countries in a region as well as with countries outside the region.

Regionalism is closely connected with globalisation, in which regional cooperation is its main theme. In Southeast Asia, ASEAN is in the midst of transforming itself into the ASEAN Community for the year 2015. With its three pillars of political-security, economy and social-culture, ASEAN's transformation into a community is a significant leap, especially since this organisation is still trying to find the right formulation for the implementation of the 'non-intervention' issue.

The discourse of the development of maritime security depends heavily on the dynamics of globalisation. One of the significant responses to globalisation dynamics is the increase of military spending as well as the pursuance of military modernisation by countries in the region. Maritime security is one area heavily influenced by globalisation and it has become an issue of paramount interest among global leaders.

According to Jonathan Kirshner, Globalisation's most significant influence to a state's national security is changes in the nature of the game. These changes are not the fruits of a

state pertaining to its traditional state-centric concept or whether it adopted a multistate-centric paradigm nor because it's national goals remain the same.

Globalisation pushes states to formulate new ways of facing and managing challenges, both domestic and foreign. Based on Kirshner's view, globalisation has the ability to force all global players to adapt themselves to new rules and regulations that came to be as a result of the global community's interaction process.

Ripsman and Paul also gave their theoretical ideas in order to further comprehend current global phenomenon. They both view that, Liberals have been unsuccessful in understanding the failure of a state's capacity to abandon traditional security approaches. Realists, on the other hand, could not comprehend, how countries in a stable region can attain more benefits in managing their national security compared to those surviving in a region of conflicts and disputes. These realities have forced states around the world to establish regional organisations for sharing responsibilities among members as the answer to tackle current and future challenges that might disrupt national and regional security.

It is important for Indonesia to understand the plurality of perspectives and perceptions in its process of comprehending the dynamics and implications of globalisation and regionalism. The Indonesian Navy, in this case, could have the chance to determine a new perspective on how Indonesia could view and understand globalisation. The choices are, first, to follow the available alternatives, or, second, to establish a new approach in regionalism.

## SOUTHEAST ASIA'S MARITIME SECURITY CHALLENGES

Southeast Asia, a strategic region between the Indian and Pacific Oceans, faces a number of maritime security challenges, which requires cooperation not only among member states of ASEAN, but also with the organisation's dialogue partners and other non-ASEAN countries incorporated in the ASEAN Regional Forum (ARF). From Indonesia's perspective, the region faces eight maritime challenges.

The first is the competition for natural resources and sea-borne trade. The most current example is the South China Sea dispute, where claimant states are fighting over the rights of natural resources in the waters as well as strengthening their own prestige in the region. The nature of this dispute is the one-sided interpretation of UNCLOS 1982 and the overlapping claims in the South China Sea; with mostly history, colonisation and law of the sea as the basis of their claims. The situation has become more complex since it is one of the world's

important international sea routes for shipping goods, services and energy, vital for countries such as the United States, Japan and India. These countries are non-claimants; nevertheless, they all have major influences in the region.

Second, a number of Southeast Asia countries still have longstanding territorial disputes with their neighbouring countries. Handling such sensitive issues requires patience and discretion from countries in dispute in order to avoid escalation of conflict that could rock regional stability.

Safety of navigation is the third challenge because a number of international strategic choke points are situated in the region. Safety of navigation is one of the important priorities in managing regional security, since economies of Southeast Asia and Asia Pacific are heavily dependent on sea transportation.

Fourth challenge is the marine environment. Lately, the environment has become a focus of national and regional security as the world's population continues to grow and this has implications on natural resources. Excessive exploration and exploitation of these resources without some sort of control and preservation effort have brought us to a crisis zone. Global warming has now threatened the existence of small islands in and around the Southeast Asian region.

Transnational Organised Crime or TOC is the next maritime challenge. Criminal activities such as piracy, armed robbery against ships, drug smuggling, arms smuggling and illegal immigrants are among the TOC issues. Since the region is dominated by the seas and straits, ensuring security along maritime boundaries has become a challenge for countries in the region. TOC actors have long exploited the region's open pores for their illicit activities.

Since some countries in Southeast Asia, such as Indonesia and the Philippines, are prone to earthquakes, volcano eruptions, tsunamis and deadly storms, natural disaster is the sixth challenge. In the last decade alone, the region has seen large scale natural disasters taking more than 2,00,000 lives. The 2004 Aceh tsunami resulted in the understanding that no country alone could manage the aftermath of a devastation of its scale.

Energy security has become an important issue for the region as it is one of the resources important for the survivability of a state as well as for the development in many areas, including defence and security. This issue requires effective and precise regional and global management. The uneven distribution of global energy has become a latent source of conflict across the globe as well as a weapon of choice for competition.

Last is food security as the latest global concern after the emergence of global climate change and its negative implications both on land and at sea. There has been a significant decrease of fishing activities at sea; thus impacting food security. On the other hand, excessive exploitation of marine resources in a number of Southeast Asia's waters have pushed the need for serious and firm actions in ensuring the region's food security.

## REGIONAL MARITIME PARTNERSHIP

Southeast Asia's maritime security challenges require Global Maritime Partnership that focuses on regional cooperation. In this era of globalisation and regionalism, Regional Maritime Partnership becomes the ideal choice to face these challenges through a multilateral framework; considered more effective than bilateral. This paper will answer three key questions related to the partnership.

First, what tools are at the disposal of the diplomatic community within and beyond the region to work out solutions? Second, what are the contributions of navies in the evolving ASEAN maritime relations? Third, are there any examples from other regions that could serve as a model for advancing cooperation in the maritime area?

Further analysis of these three questions would suggest their relevance to Indonesia's national interests, and one of them is regional stability in Southeast Asia and in the Asia Pacific region. On one hand, regional stability would allow Indonesia to develop prosperity for its people and have the ability to develop a sustainable defence posture. On the other hand, Indonesia's national resilience would have positive contribution to Southeast Asia's regional resilience.

Indonesia's defence posture is aimed to secure its national interests, including supporting its diplomacy. It is not aimed to threaten regional stability as it would go against Indonesia's fundamental principles. One way to show its commitment to regional stability is by publishing its periodical Defence White Paper.

At the regional level, Indonesia shows its commitment to the region's stability through a number of initiatives, including the establishment of the ASEAN Defence Ministers' Meeting (ADMM) and the ASEAN Defence Ministers' Meeting Plus Expert Working Groups (ADMM-Plus EWG). Through both fora, Indonesia, together with ASEAN member states and dialogue partners, provides suggestions and implements them through concrete cooperation in the fields of maritime security, Humanitarian Assistance and Disaster Relief (HADR), peacekeeping, counter terrorism, and military medicine. The ADMM-Plus EWG

will enter a new phase as all five areas of cooperation will have their own field training exercise (FTX) this year.

In regards to Southeast Asia's maritime security challenges, it is important for countries in the region to fully understand Indonesia's main position in this matter; balancing without alliance. It is implemented through dynamic equilibrium concept as a realisation of the Indonesian President's foreign policy directives as "sailing on the turbulence sea". In short, "balancing without alliance" is Indonesia's effort to become the stabiliser of major powers contesting one another in Southeast Asia and the Asia Pacific. Indonesia will not side with anyone of these powers.

This principle is the reason why Indonesia chose a strategic partnership with Asia Pacific's two prominent powers. Since 2008, Indonesia and China have agreed upon a Strategic Partnership, one which has given many benefits to Indonesia. The same has been done since 2009 with the United States through a Comprehensive Partnership; an important contribution to Indonesia's national interests. These partnerships are indicative of the "balancing without alliance" approach, based on Indonesia's free and active foreign policy.

In regard to regional maritime security challenges currently being faced by the countries in the region, Indonesia stands on the argument that Regional Maritime Partnership is the key and multilateral cooperation is the way to implement this partnership. This cooperation allows each country to provide its available resources in order to anticipate the eight regional maritime security challenges. These resources include human resources, software and weapon systems.

The available resources could be used wisely in our response to emerging challenges and contribute to regional stability. The preparation should be done both unilaterally and multilaterally. One of the means to such preparation would be through a joint exercise among ASEAN member states. There are a number of reasons as to why this ASEAN joint exercise on maritime security is needed. First, security interdependence and how it pushes countries in the region to improve their capacity and capability together in facing these challenges that are a threat to their common interest.

Through this joint exercise, the participants could improve their interoperability. It is an important element in tackling current maritime security challenges, especially with their transnational nature. The exercise would also decrease the discrepancy of tactical skills of ASEAN's maritime security agencies. This type of exercise would guarantee each country to attain a certain degree of interoperability to face real-time dynamics at sea. Third is the

readiness of ASEAN Navies, which could be improved through a joint exercise. Navies would analyse their level of preparation in their response to challenges at sea. It would also create standardisation on ASEAN Navies' readiness. Each navy in the region has different levels of readiness due to a lot of factors and reasons.

ASEAN Navies undeniably are the greatest contributors to the region's maritime security. Therefore Indonesia sees the importance of ASEAN Navies' strong commitment to prepare themselves and all their resources to face the challenges of the maritime domain. The realisation of such commitment would be to prepare a number of warships ready to be deployed in times of need.

This commitment is not new since it has been realised on a multilateral level of cooperation through the Malacca Strait Sea Patrol (MSSP). The cooperation commenced on 20 July 2004 with Indonesia, Malaysia and Singapore taking the lead. Thailand joined the cooperation a few years later. The four navies prepared their warships to patrol each sector along the Straits of Malacca. Such practice could become a template for ASEAN Navies cooperation with several requirements beforehand. For example, ASEAN member states should first agree upon areas considered prone to maritime security threats. This agreement could then be followed by a commitment to prepare readily-deployed warships to respond to any threat or escalations along those areas.

Another example comes from the experiences of the European Union and NATO in their response to the piracy threat in the Gulf of Aden and the Somali waters. The European Union established a Task Force which deployed its warships and operated under the command and control of the European Union Naval Force or EUNAVFOR.

It would not be wise to compare ASEAN and the European Union; nevertheless the operations along the Gulf of Aden and the Somali waters could become a lesson on how ASEAN can improve its multilateral maritime security cooperation. As security interdependence is real, it is no longer the time for ASEAN member states to approach this crucial issue in a narrow context.

Another important form of cooperation among ASEAN Navies is the ASEAN Naval Symposium (ANS). It could be used as a forum for ASEAN Navies to sit down together and discuss the dynamics of our regional maritime security. Since the characteristics of Southeast Asia's maritime security are much different to ones of Indian and Pacific Oceans, this forum is a necessity to our region. At the same time, the ANS would be a true statement that ASEAN is indeed the "owner" of its region, and that the region is not just a contest arena for major powers. The suggestions brought to the table today as means to respond to regional maritime

security challenges define Indonesia's stance in maintaining regional stability. Cooperation, in Indonesia's perspective, is the key and a must for Southeast Asia's security and stability. Nevertheless such cooperation would not diminish state sovereignty of ASEAN member states, although we now live in an era where globalisation and regionalism have blurred the autonomy and sovereignty of nation states around the world.

## CONCLUSION

Indonesia views the age of globalisation and regionalism as an era of interdependence among states. The same approach is given to maritime security where maritime domain awareness has become globalisation's backbone. As Southeast Asia's largest country, Indonesia believes that Regional Maritime Partnership would be the tool to face regional maritime security challenges. Therefore, multilateral cooperation among ASEAN Navies is paramount. As countries become more interdependent, there is a strong need to manage these challenges together. ASEAN Navies have the modality to develop multilateral cooperation, having previous experiences on bilateral cooperation. Regional security stability as the region's common interest would be the foundation of the cooperation.

Admiral Dr Marsetio is the current Chief of Staff of the Indonesian Navy. This article is a transcript of the speech delivered by the Admiral at the Jakarta International Defence Dialogue 2013.

# 'CONVENTIONAL VS CONSTABULARY ROLES: WHERE SHOULD THE FOCUS BE FOR NAVIES OF TODAY?'

*By Lt Sean Craig Bates, Royal Australian Navy*

## INTRODUCTION

The sea has provided mankind with transportation, strategic control, resource prosperity and has been central to human development since it was first harnessed. All the great civilizations and large cities throughout history have been connected to the sea either directly, by a connection of canals or by road. This sea connection has been seen as a lifeline in accruing national wealth and as a valuable means of communication with neighbouring states.

Ever since there have been ways to harness the sea, there has been the need to protect its prosperity and maintain freedom of access. An early example of this protection is the grain barges in Egypt 4000BC, transporting goods up the river Nile, with guards to provide defence from potential marauders. Today, modern navies enforce national sovereignty on the high seas and the largest are able to influence 95% of the Earth's surface .

A powerful navy has conventionally been seen as the projection of sovereign power off its own shores. Conversely, the constabulary role is closer to home and has often been made a domestic issue with many nations having a separate police force or Coast Guard to fulfil the constabulary role . However, emerging threats are beginning to shift the battle out of the high seas and into areas where constabulary forces tend to operate. This overlapping area where conventional and constabulary navies both operate has led to difficulty in establishing a defined maritime doctrine that clearly outlines the two roles and responsibilities.

Therefore, the real battle of the modern navy is fought between the increasing requirements of constabulary duties in order to maintain regional stability and the more conventional role. Achieving a balance between the two, often opposing, requirements drives the stability of a region; it is a difficult compromise. The necessity for critical skills in order to fight and win at sea (the high end war fighting capability) is not seen as an everyday requirement. Conversely, the stability of a region, border protection and constabulary duties are seen as more significant and often presented in the media. The significance, or urgency, is

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[1]  United States of America Department of Defence, 2007, *A Cooperative Strategy for 21st Century Seapower,* p. 5.

[2]  Notably the US, China and Canada all have separate Coast Guards and navies.

due to the real and immediate threat to national prosperity that can occur from a lack of adequate protection.

The purpose of this paper is to propose that the focus for navies of today should be the ability to maintain skills in both constabulary and conventional roles, and be able to switch between the two expeditiously. This will be achieved by first defining a conventional form of naval warfare and its changes throughout history. Analysis of the constabulary roles faced by modern threats to prosperity and security will emphasise an often-contradictory naval requirement. And in light of the evolving international environment and emerging threats, this paper will roughly define a national security policy and highlight how a compromising maritime policy can play an integral role in an all-encompassing strategy. The requirement of the modern navy is to remain flexible and versatile in order to be able to change between a conventional role and constabulary duties, at a moment's notice.

## CONVENTIONAL ROLE

*"A good Navy is not a provocation to war. It is the surest guaranty of peace."*

*- President Theodore Roosevelt,*
*02 December 1902,*
*Second Annual Message to Congress*

The conventional role of a navy has not lost its importance. The focus of today's navies must be the ability to switch from a conventional role to constabulary duties, at a moment's notice. The conventional role of a navy is the ability to deliver a high-end war fighting capability when called upon. However, due to the high cost of training and maintaining such a navy and the fact that we are not (thankfully) in a perpetual state of war, the importance of this role is often diminished. The significance of the conventional role may not be seen as an everyday requirement; nonetheless, it is the answer to the 'worse case scenario' question, and an ever-present deterrent to aggressors. Constabulary duties, particularly antipiracy operations, are regularly portrayed in the international media. However, the greatest threat, that 'worse case scenario' threat can only be answered by a having a well-trained and well equipped conventional navy.

In order to understand why the conventional function of navies must be maintained, one must first understand the change of the conventional role throughout history. Accompanying this change will be an analysis of the more recent and rapid changes to the threat experienced by navies in the 20th and 21st centuries. The realisation that not all navies need to have the ability to

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master all spheres of warfare will result in greater efficiency in resource management and better co-operation between like-minded nations. Finally, this section will highlight why the conventional role must be maintained and be able to be unleashed at a moment's notice.

It has been a form of navy, for thousands of years, which has provided civilisations and empires a way in which to protect themselves and their offshore interests. Although naval warfare has evolved from humble beginnings to advanced technological marvels, the end result has remained the same, to fight and win at sea. The earliest example of naval warfare was the Mediterranean Galley, from as early as 8000 BC ; where naval warfare more imitated land warfare. The next stage in naval history was the golden age of sail, epitomised by the British defeat of the Spanish Armada in 1588, where accurate gunnery and discipline ruled the waves. The launch of HMS *Dreadnought*, in1906 commenced the era of the modern battleship and would not be surpassed until the aircraft carrier rose to prominence in the Second World War.

For the almost ten thousand years between the first Mediterranean Galley battle and the last Carrier engagement, the defeat of an arranged, opposing sea power has remained the primary maritime objective. More or less, two opposing navies, meeting at sea and fighting to determine an outcome. Thus the conventional role has had no requirement for quick change; rather it relies on technological innovation as the catalyst for a modification. However, the threat has transformed dramatically in the late 20th and early 21st century and the modern navy has had to show versatility from its long-standing conventional role.

In the wake of both World Wars and the Cold War, 'Blue Water' navies drove the maritime environment in the 20th century. More than twenty-three years have passed since the fall of the Berlin Wall - and the subsequent end of the Cold War – and the idea of a two adversary fleet conflict have become dated. The move away from this bipolar balance of power that was prevalent in the 20th century has been destroyed with the disintegration of the USSR and the emergence of modern Chinese, Indian and South Korean navies, as well as the ever-present threat of small terrorist groups. With a change of the role of the sea from this 20th century construct, modern navies are confronted with a new and unconventional threat.

The threat that confronts modern navies is an unconventional one cannot be met on the high seas in a test of military prowess. The modern threat is not likely to attack in the same way multiple times; the threat is likely to be forever changing, so a modern navy needs to be able to change rapidly in response. International threats to modern security have never changed so quickly or been as radical, and the modern navy has had to modify itself with the threat. Accused of sometimes not altering at the pace to counter such threats this section will continue to discuss the changed roles of the modern navy and the continuing requirement to have a navy with a conventional function.

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Modern navies need to continue to sustain conventional sea power; however, there has not been an open water naval engagement since the Second World War. This realisation makes it easier for sceptics to dispute the need for a conventional force, which trivialises the threats to large conventional warships. The attack on the USN destroyer, USS Cole, in the Yemeni harbour of Aden in October 2000, showed an unconventional threat to large warships that had not been seen before. A small water craft carrying two terrorists and 200-300kg of high explosives attacked the Destroyer costing the lives of seventeen servicemen and woman, and causing damage amounting to 243 million USD. The attack showed an unconventional threat that defeated a 180 man, multi-role destroyer thought to be one of, if not the, most formidable in the world. This example proves the existence of a very real threat to modern navies, at the same time highlighting a failure of the conventional role. We will now examine how modern navies in the conventional role have been, and continue to be successful in defeating this modern threat.

Modern navies in the conventional role have been successful, proving that the high-end war fighting capability is still required to defeat these modern threats. Naval air support and ship launched precision-guided munitions by coalition forces were vital in the successes of *Operation Iraqi Freedom and Operation Enduring Freedom*. Similarly, ship borne overland surveillance aircraft have contributed significantly to military successes in the Middle East Area of Operations. And most recently Special Forces operations have been launched from the sea; including the 2011 US military operation in Pakistan, that killed Osama bin Laden. These military successes are not a constabulary capability; they are borne only from a well-equipped and well-trained conventional navy.

Although modern navies have and will continue to act independently in constabulary duties, multinational operations like the ones previously identified need the high-end war fighting capability. It is difficult and costly to maintain this high-end war fighting capability, however, it is more expensive and harder to build once lost. By having a high-end war fighting capacity, navies are required to work with neighbouring navies in order to maintain their interoperability and co-operability. Large international maritime exercises like RIMPAC (Rim of the Pacific) are helping to solidify these skills and in turn enhance political relations. The importance of these partnerships are being realised with participation of 22 nations in the most recent 2012 RIMPAC .

With cooperation between these like-minded navies, multinational exercises and operations show that individual navies do not need to have large conventional fleets. They do need a conventional capacity in order to work with one another, but by cooperation, they eliminate the need for a large and expensive conventional fleet. Cooperation between like-

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3    Abulafia , D. 2011, The Great Sea: A Human History of the Mediterranean, p. 3.

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minded nations shows a way modern navies can maintain the conventional role while efficiently managing the precious resources of finance, infrastructure and manpower.

This section has briefly discussed the history of the conventional role of the navy and the unprecedented pace of the modern threat. It has been shown that the conventional role is still relevant in order to defeat these modern threats against today's navies. A modern navy is only able to deliver their conventional role by maintaining their co-operability with like-minded nations. This cooperation between states can reduce the size and cost of delivering the conventional function and in the process cement national ties. However, the conventional role of today's navy is only one facet. The focus on today's navy must be the ability to maintain this conventional role and then change to a constabulary role at a moment's notice. A modern navy must be flexible, versatile and have all capabilities in its arsenal in order to be able to respond expeditiously to changing circumstances and requirements.

## CONSTABULARY ROLE

"For in this modern world, the instruments of warfare are not solely for waging war."

*- Admiral Arleigh Burke, CNO,*
*01 August 1961,*
*Change of command address at Annapolis.*

Having a navy that focuses solely on the conventional role is a costly mistake. The importance of maintaining a conventional navy has been discussed, however, modern navies need to be able to switch roles and provide constabulary enforcement when called upon. This is due to the very real and immediate threat that an interruption of commerce as a result of the instability of a region can have. Enforcing of local and international laws and the stability of a nations region are the main goals at the core of the constabulary function.

This section will explain how the focus of the modern navy should also be on the delivering of constabulary roles, roles that have traditionally been provided by a nation's coast guards and domestic police. Defining the roles of a constabulary force will allow an understanding of the broad size of tasking that are being asked. Posing the idea of closer integration of neighbouring and like-minded states will allow thought for achieving the correct balance of conventional and constabulary roles. Finally, this section will describe why it is a modern navy's duty to provide a constabulary role and how relying on a domestic force or coastguard is an incorrect solution.

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[4]   United States Navy, 2012, Participating Forces, RIMPAC 2012.http://www.cpf.navy. mil/rimpac/2012/. (Jan 2013)

In order to determine why modern navies should concentrate on constabulary roles, we must first understand what the duties of a constabulary function are. Anti-piracy operations, drug interdiction, environmental and resource protection, humanitarian assistance, peace keeping operations, prevention of illegal immigration, and search and rescue (SAR) responsibilities are just a few of the constabulary roles; and this list is by no means exhaustive. These constabulary duties are far more diverse and complex to the ones faced by civilian agencies and coast guards, when they were first formed. For instance, the original orders in 1888 for the Revenue Cutter Service (the precursor to the US Coast Guard) were to "crack down on piracy [and] while they were at, they might as well rescue anyone in distress" . The formation of these agencies was for specific and minimal duties to be performed domestically, most often-local law enforcement. The broad array, complexity and duration of the modern constabulary duties are why today's navies need to focus on these constabulary roles. The complexity and different types of missions is not the only reason for the needs of today's navy to focus on constabulary roles, intertwined economies are another driving factor.

The constabulary function is economic and politically driven as a means to protect sovereignty of an Economic Exclusive Zone (EEZ). Due to the international integration of economies as a result of globalisation it is no longer the immediately surrounding states that are affected by the instability of a region. Due to this, there is an increasing global requirement of protecting all nations EEZs, which has seen the traditional coastguard role spill into the navy domain. Smaller nation's instability and the result this has to global commerce have led to the constabulary roles moving out of individual countries EEZs. We have seen the concern that local instability has globally with the intervention and policing of international bodies (such as the United Nations) recently in East Timor, Somalia and Haiti, to name only a few. With a global focus on stability, one can see the necessity that today's navy has a large role to play in performing constabulary duties.

Modern navies should maintain focus on constabulary duties not only because of the global need for stability but because warships are better suited to respond to the larger non-warlike operations. Aircraft carriers, replenishment ships, large support vessels and amphibious ships tend to have sophisticated medical centres (if not hospitals and surgeries), immense transportation capabilities, and are able to stay at sea for extensive periods. These ships are able to provide a much greater supportive role to peacekeeping situations than the traditionally smaller domestic policing and coastguard vessels.

It is not just the largest warships that are able to support constabulary missions; frigates and destroyers are better equipped than coastguard and domestic policing vessels at other constabulary operations. Missions in support of global anti-piracy can require high levels of multinational cooperation, a skill that a highly trained operations room can achieve. Often a

helicopter is embarked on even the smallest warships, which can greatly enhance SAR capabilities. Also, warships carry a more impressive arsenal and greater complement of crew, which make an imposing deterrent to potential drugs and arms smugglers. In their preparation for warlike situations, warships are better equipped to successfully complete a number of non-warlike operations.

Although warships are better fitted for the larger and more complex non-warlike situations, the smaller coastguard-like vessels can competently complete a lot of the smaller missions, without the requirement of large warship commitments. Potentially nations should have both military and civil capabilities, as Geoffrey Till points out. But there is one major drawback; it is costly, unaffordable to smaller nations, to have two separate arms of a maritime force. In order to accomplish both important roles, a nation would need a large and sophisticated coastguard to effectively govern all of the constabulary roles and a conventional navy for warlike operations. Putting the purchasing, training and maintaining of the ships and crews to one side, the support cells and bureaucracies in order to support both would be enormous. It is much more practical to have one maritime force for the purpose of providing both the high-end war fighting capability and also to deal with constabulary duties. With a navy that is able to complete both civil and military roles, the emphasis for today's navies is to focus on the ability to change between the two at short notice.

With today's navy now fulfilling both warlike and non-warlike roles, some might suggest the load is too great to bear. A solution is perhaps that the constabulary burden be shared between neighbouring and goal-sharing states in order to have a collectively increased, but individually decreased capacity to enforce these roles. Constraints of manpower, reduced military spending and a lack of infrastructure are all common problems within modern navies. Short of the instigation of an enormous, all-encompassing global conflict, it is not foreseeable that nations will inject large spending into their navy. The link of global economies and the results of the recent Global Financial Crisis and Asian economic instability of the 1990s, many nations are reluctant to commit to large financial outlays on military capability. A more efficient use of limited resources is achieved by sharing out roles and responsibilities of constabulary duties for the combined goal of international stabilisation. And there have been multiple navies achieving this, recently in the Middle East; several nations have contributed to maritime infrastructure protection, maritime security, customs inspection, critical port operations and maritime interception operations . By sharing the constabulary burden between like-minded nations, modern navies can have a conventional warship with the ability to contribute to non-warlike operations.

A navy that focuses solely on the constabulary role will be successful in maintaining

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5    Ripley, A. 2005, How the US Coast Guard gets it right, TIME Magazine, p. 2.

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regional security, particularly when the nation is the biggest fish in a small pond. The culmination of media interests, political agenda and a lack of resources to afford a conventional navy, results in nations (particularly smaller nations) being only able to support a constabulary navy. Constabulary navies are much more like peacetime navies. However, with only having a self-interested, domestically focused, constabulary navy, the cooperation between states will diminish significantly. Also the ability to act in large, complex, multinational maritime exercises and operations will be diminished. Once this ability is lost it is even harder to regain and the corporate knowledge built up over decades can be lost within years or even months. A compromise of attention needs to be found that not only allows protection of borders but also maintaining the high-end war fighting capability.

The challenge of today's navies is to move towards and maintain this important constabulary role, without losing the war fighting capability. The importance of operating a navy that has the ability to provide civil aid, anti-piracy and all the many constabulary duties is only as important as working with neighbouring nations in a high end war fighting capacity. The most important component of this recipe is that, once this compromise has been found, modern navies need to be able to change between the two different roles at a moment's notice.


## A CONVENTIONAL / CONSTABULARY COMPROMISE

"Maritime forces need to be combat ready and operationally capable to meet the critical and varied non-combatant requirements"

*- United States of America Department of Defence, 2007,*
*A Cooperative Strategy for 21st Century Seapower.*

The focus of today's navy should not be solely constabulary or conventional, a compromising strategy that successfully achieves both must be realised. Most international navies do have a maritime policy that consists of this compromise. In most maritime policy papers, there will be a sentence compromising of, "defend coasts, protect offshore interests and respond to international peacekeeping and regional stability missions", or close enough to mean the same. The remainder of this section will seek to support the importance of having a compromising navy achieving both roles and the ability to change between the two at a moment's notice.

Successful world commerce is directly linked to the freedom of passage and security of the seas; "90% of the world's commerce (and three quarters of its petroleum) travels by sea; the vast majority of the world's population lives within a few hundred miles of the oceans; nearly three

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6    Till, G. 2009, Seapower: A guide for the twenty-first century, Routledge.

quarters of the planet is covered by water" . The requirement to protect national interests that are directly linked to the sea and the drawing of Economic Exclusive Zones in the early 20th century has led to the significance of littoral operations. This has moved the Mahanian blue water navy from the high seas conflict to, in most circumstances, within 200nm of the coast. World navies have a responsibility to global partners to effectively police their EEZs in order to protect this global prosperity. A highly trained, well-supplied navy best achieves the governance of the littoral environment with both the capacity for high end war fighting, combined with the ability to undertake constabulary roles.

There are a number of terms one can use instead of 'unconventional threat' that mean the same thing. A by no means comprehensive list would include: navy irregular warfare, confronting irregular challenges, counterinsurgency, stability and counter terrorism operations. Whatever label a nation will place on the threat, the end result will always remain the same; deterring adversaries and if required defending one's homeland by fighting and winning at sea, being the ultimate requirement for all navies. In the 20th century, the best notion to defeat this threat was to have a conventional navy; the ultimate goal from the 1940s was to have a carrier group. No longer though is a carrier task group the best device to defeat all the irregular threats that confront modern navies. A conventional force that has the ability to enforce the constabulary function is essential to deterring the irregular threat to international stability and prosperity.

Modern, sophisticated navies are done with the old interpretation of a threat being from one power that will attempt an all-out conflict. Recent multinational exercises are no longer solely blue force vs. red force. Modern, high-level, multinational exercises are politically and socially complex operations driven by realistic, incomplete and misinterpreted information. This is the real threat that confronts today's navies and that is what the larger and better exercises have realised. The latest RIMPAC exercise had participants from 22 nations and the political and military situation was forever changing. However, in order to participate in these types of exercises, and thereby improving individual skills and efficiency, navies need to be able to produce a conventional role.

The focus of today's navies should be one of a compromising strategy that has components of both conventional and constabulary roles. In order to achieve this, modern navies must surrender to the idea of a unified maritime strategy. The borders of service need to be eased and a combined, truly joint force needs to be embraced. The participation and cooperation of several like-minded states and the combined forces of the navy, army, air force and marines,

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7    O'Rourke, R. 2012, *Navy Irregular Warfare and Counterterrorism Operations: Background and Issues for Congress*, Congressional Research Service, CRS Report RS22373, p. 1.

need to combine to provide protection from future threats. The future is unclear and can only be best speculated, but it is likely to be a future of increased financial burden, a future of decreased military spending, a future of ever-changing international threats.

## PROPOSED MARITIME POLICY

*"Maritime Strategy is the use of direct and indirect approaches that dissuade and defeat irregular actors who exploit uncontrolled or ungoverned spaces in order to employ informational, economic, technological, and kinetic means against civilian populations."*

*- Rear Admiral Sinclair Harris,*
*Director Navy Irregular Warfare Office,*
*3 November 2011,*
*hearing before the Emerging Threats and Capabilities*
*subcommittee of the House Armed Services*
*Committee on IW activities and the military services.*

The combination of focusing on constabulary and conventional roles is the only way forward for today's navies. A navy is able to enforce national sovereignty and contribute to national security by, uniquely, operating on, under, above and from the sea. Being that "maritime strategy gets back to the essence of what a Navy does" , this paper will go further than stating what roles the modern navy should focus on; this paper will propose a national strategy that is best able to achieve both roles.

The bridge between political driven policies and the procurement, then application, of military assets is a nation's defence policy. When talking solely of the maritime environment, it is naturally known as a nation's maritime policy. Countries need to have a very specific goal that is in their best long-term interests. These specific goals will define a defence policy and drive their maritime doctrine. Fundamentally, maritime policy is primarily concerned with protection of the sea and projecting ones power across it, or variations near enough to it. It often aims to be simple in order to separate itself, so often, from air and land policy. This forces maritime policy into a blue water navy, in order to avoid confliction with the other two policies. The ambiguity caused by not wanting to crossover littoral operations in order to confuse with land and air policies has led to maritime policy remaining generalistic, and out on the high seas. What this section will aim to achieve is define a specific maritime doctrine that encompasses the important protection of EEZs by incorporating the conventional and constabulary roles.

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8    United States of America Department of Defence, 2007, *A Cooperative Strategy for 21st Century Seapower*, p. 2.

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Strategies, or the practical application of maritime doctrine, is inherently time lapsed; it has to be, by truest definition. It is a best guess of what might be required for potential, or imagined, future threats by learning from historical lessons. This has been true throughout time. Accompanied with a long procurement process, modern navies need to be forward looking 10-15 years ahead, for an appropriate naval strategy. The unpredictable nature of social and economic stability makes the creating of a successful maritime policy and naval strategy even more difficult. Military strategy is also crippled by the unpredictable nature of an adversary's military technological advances that has been seen in disastrous episodes such as trench warfare against the invention and mobilisation of heavy weaponry in the First World War.

This paper has so far alluded to the idea of many like-minded nations joining efforts in constabulary and conventional roles for mutual benefit. There are several examples where nations could mutually benefit from a pooling of resources, however, it does require the participation of all nations involved. If nations understand the benefits that could be realised from such cooperation and trust the other nations to participate equally, the results could be grand. For example, at present only world superpowers have the ability to form carrier strike groups that are essential for sea dominance and all-encompassing land support. These carrier strike groups are too expensive and unrealistic for all but a few of the largest navies - unless they are a component of such a group. One navy may be able to provide a submarine, another some support vessels, another a picket ship and so on. And from this collaboration, a greater component is created. This collaborative idea forms the main point of the maritime policy argument. Modern navy's best avenue to focus on both the constabulary and conventional roles is to collaborate with like-minded nations for the realisation of shared goals

By having a maritime strategy that encompasses several like-minded nations, modern navies are able to share the burden of regional and international stability through constabulary and conventional roles. Not only is the running of strike groups too costly to obtain and maintain, so too is the research and development of such systems. Like-minded nations have the ability to save in research and development in procurement projects by involving themselves in multi-national collaboration projects. One such project is the F35 Lightning II Joint Strike Fighter (JSF). The JSF project has a development program consisting of nine countries that envisage roles of the JSF not only in nations' air force, but the Bravo and Charlie variants (short take-off vertical landing and aircraft carrier variants, respectively) will serve in their Navies and Marine Corps. Similarly the BAE Type 27 general purpose Global Combat Ship (GCS) is another such program that the Royal Navy is leading. The project is receiving interest from Australia, Brazil, Canada, India, Malaysia, New Zealand and Turkey, who all can benefit from combined Research and Development projects.

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9    Roughhead, G. 2008, CNO Address

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Greater involvement of like-minded nations in a multi-national maritime policy, would allow a greater collaboration of resources. With more countries adding to the collective goals of international security and prosperity, there would be superior ability to provide constabulary and conventional roles.

## CONCLUSION

A major power war, regional conflict, terrorism, trade embargoes, lawlessness and natural disaster all have the potential to threaten global stability, prosperity and security. No one threat is greater than the other, although some are potentially more likely than others, regardless, all have the ability to unravel national and international prosperity. Today's navies are charged with having to defend their own and international interests as well against such threats, and the best navy that is capable of dealing with all threats is one that focuses on both the conventional and constabulary roles.

Aircraft carriers are the most superior maritime force, and yet there are only two countries that own more than one, the combined military spending of both these dwarfs the rest of the world's military spending . Often the cost of platforms has led to the creation of a maritime strategy, when theoretically it should be maritime strategy that defines platform procurement. The high cost and training burden of a purely blue water navy is enormous, and politically unaffordable for most nations, particularly smaller nations. The truest answer for the modern navy is to have a maritime doctrine embedded in cooperation with like-minded nations in order to achieve a combined focus on constabulary and conventional roles.

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# NATURAL DISASTERS IN SRI LANKA AND CONTRIBUTION OF THE SRI LANKA NAVY

*By SLt MM Widanapathirana, Sri Lanka Navy*

The Democratic Socialist Republic of Sri Lanka is an island nation located off the southern angle of India and separated from the Indian sub-continent by the Palk Strait. The island is shaped like a tear drop, approximately 445 km long and 225 km wide. The island is surrounded by the Gulf of Mannar to the West, the Indian Ocean to the South and the Bay of Bengal to the East. With an estimated population of 21.1 million, Sri Lanka is ethnically, linguistically, and religiously diverse. Being one of the world's most disaster -prone countries, Sri Lanka does experience a variety of natural hazards, which have caused significant loss of life and property in the past. Changing weather patterns in recent decades have resulted in an increased frequency of flash floods, cyclones in the Bay of Bengal, landslides and inundation of low-lying coastal areas.

Disasters, natural or man-made, deprive our people of life, health, sustenance and property, and often deplete our country's capacity to respond. These disasters arise from natural hazards such as earthquakes, epidemics, typhoons, droughts and floods or from any number of man-made threats like food or water shortages, environmental and technological disasters, acute economic distress, civil unrest, armed conflict and terrorism. Man-made and natural disasters generated worldwide economic losses of USD 222 billion in 2010, more than three times the figure in 2009, as estimated by the World Bank.

Natural disasters in Sri Lanka have been far lesser compared to other South Asian nations. Various types of natural disasters can be defined as: -

- **Floods**.  Flood is the most common natural disaster in Sri Lanka, severely affecting the population in almost all districts across the country. Most of the floods are caused by heavy rains brought by the two monsoon seasons. Yala, is the south-west monsoon from May to June and Maha, the north-east monsoon from December to February.  However, deforestation in the upper catchment areas of the central highlands, to make room for rubber and tea plantations, and poor maintenance of tanks and irrigation channels in some areas, along with the unplanned urbanisation, have contributed to the severity of these disasters. Flooding is also one of the most costly disasters, both in terms of property damage and human casualties in Sri Lanka.  A total of 18 floods occurred between 2002 and 2011, killing more than 440 people and affecting about six million people. The direct economic losses from the flood in the last ten years amounted to USD 140 million. The floods in January and February 2011, which affected 1.2 million people, have made an indelible impact on the country's economy. The accumulation of heavy rains from December 2010, that caused devastating damage in districts in the eastern, northern and

north-central Sri Lanka, was further exacerbated by heavy rainfall in January 2011. The intense water pressure released from the already-full reservoirs caused serious damage to crops, essential water tanks and irrigation channels, roads, infrastructure and housing.

• **Landslides**. Investigations carried out by National Building Research Organisation (NBRO) indicate that haphazard and unplanned land-use and inappropriate construction methods in the 1980s, as a result of the economic boom, have led to an increase in landslide susceptibility. However, continued population movement has increased the urbanisation of geologically hazardous ground. This, in addition to steep slopes, rainfall and poor drainage, and earth tremors, has contributed to the higher risks of landslides in the deforested areas, flash flooding and floods in areas downstream. Data from Sri Lanka's online disaster database highlights May 2003 as the last significant landslide event date, when heavy rainfall caused hundreds of landslides, death of 150 people and affected 20,000 others. In addition to damage to life and property, several critical infrastructure of public interest was also affected, including water distribution pipes, hydro-electricity generating centres, and communications systems. Since the 1990s, however, and the establishment of NBRO, significant measures have been put in place by the Government of Sri Lanka to reduce the occurrence and impact of landslides, including landslide hazard mapping, building codes, hill stabilisation measures and landslide warnings. More recently, in 2011, the requirement for NBRO approval for construction in landslide-prone areas is a significant step forward.

• **Cyclones**. The majority of cyclones and storms hitting Sri Lanka pass through the Eastern, Northern and North-Central parts of the country. Most originate in the Bay of Bengal and occur in November and December. Although cyclones do not frequently hit Sri Lanka, the country has experienced some very destructive storms in the past. The last major cyclone occurred in December 2000 with winds of 120 km per hour, killing at least nine people and affecting more than 300,000 people.

• **Drought**. Drought is a widespread disaster in the "dry zone" of Sri Lanka, which extends from the northern plains to the south around the central highlands. The "dry zone" suffers particularly from drought during February to April and occasionally until September, due to low rainfall during monsoon seasons. This "dry zone" receives less than 187 cm of rainfall per year. According to Road Map of Sri Lanka for Disaster Risk Management, serious droughts are usually reported every three or four years. The last major drought in 2004 affected the livelihood of almost 60,000 people.

• **Earthquakes and Tsunamis**. Sri Lanka is not located near any major earthquake-prone faultlines. However, over 60 earthquakes, with magnitudes between five and six on the Richter scale, have been reported in and around the island of Sri Lanka in the last

few decades. Even though major disasters including earthquakes and tsunamis are rare events, experience have shown that a single event can have unprecedented consequences. The Indian Ocean Tsunami that struck Sri Lanka in December 2004 claimed more than 30,000 lives and an estimated economic loss of USD 3.6 billion, making it the worst natural disaster experienced in Sri Lanka's history.

The Indian Ocean Tsunami brought about significant changes to the disaster management system in Sri Lanka. Although preparedness and disaster response had been a government priority for a number of years, the tsunami disaster clearly illustrated the need for Sri Lanka to take priority action in strengthening disaster preparedness and response, and provided additional momentum to do so. The disaster was also a tragic backdrop to discussions about national level disaster risk reduction which culminated in the United Nations World Conference on Disaster Reduction, in Kobe, Japan, in the days following the disaster. The outcome of the Conference was the Hyogo Framework for Action (2005 – 2015), the first internationally accepted framework for Disaster Risk Reduction (DRR). The Framework supports governments in developing a practical approach to strengthen community resilience by providing a set of actions relating to risk governance, analysis, mitigation awareness, and disaster preparedness and response. In May 2005, the Sri Lankan Parliament passed the Sri Lanka Disaster Management Act 13 of 2005, which provides the framework for disaster risk management in Sri Lanka and the legal basis for instituting a disaster management system in the country, including the establishment of the National Council for Disaster Management (NCDM). The NCDM is the highest policy making body in the country on disaster risk reduction. It is chaired by the President, with the Prime Minister, as the vice-chair and includes the participation of the Leader of Opposition, 20 Ministers and Chief Ministers of Provinces.

The Sri Lankan disaster management system significantly covers a large area. Defence services have huge task and responsibility to give hand to those who are affected by any disaster. The Sri Lanka Navy always combines disaster management with rescue operations during disasters in Sri Lanka. The Sri Lanka Navy has been conducting vast number of projects to prevent disasters inland and out at sea.

One of the major reasons for floods is the high intensity rainfall and unauthorised land filling. Illegal construction in reservations and low lying areas also contribute to floods. Availability of drains for few areas, lack of maintenance, narrow drains, unauthorised constructions on drains, narrowing canals and inadequate outlets, lack of reservations and decrease of retention capacity in the wetlands add to the problem.

During last floods, the Sri Lanka Navy did a commendable job. Three flood relief teams were deployed to assist people in the areas of Kiran in the Batticaloa District, and Thimbiriyaya in the Trincomalee District. Two flood relief teams were on standby in the Anuradhapura District

for contingency deployment. The Sri Lanka Navy launched its flood relief operations with the onset of the bad weather conditions, which were triggered by heavy rains and accompanying thunder. The Eastern, North-Central, North-Western, Western, Southern and South-Eastern Naval Commands rendered assistance to rescue and shifting of around 7,100 civilians affected by the floods that ensued. Navy's contribution for floods relief can be described as: -

• Conducting search and rescue operations

• Assisting in establishing Internally Displaced People (IDP) camps and monitoring them.

• Providing rescue teams with boats.

• Providing rations to people in IDP centers and isolated villages.

• Distribution of food and relief items.

• Providing medical support and First Aid.

• Assisting in road / culvert repair

• Deployment of relief items.

• Navy's specialised rescue squadron, 4Rs (Rapid Response Rescue and Release Squadron), was in full deployment providing lifesaving and relief assistance in the areas which had been made inaccessible due to rising waters.

• Providing communications and transport.

• Providing information on flood levels in the areas.

The Sri Lanka Navy's contribution for Tsunami can be described as: -

• Conducting search and rescue operations.

• Assisting in establishing IDP camps and monitoring them.

• Providing Medical support and First Aid.

• Assisting in road / culvert repair.

- Development operations for infrastructure facilities, house building and road development.

The Sri Lanka Navy also undertakes rescue operations out at sea including rescuing fishermen out at sea. Navy contributes significantly in providing assistance and relief during natural disasters in Sri Lanka. What we can do for disasters is preventing disasters using friendly methods rather than taking actions after the disaster. It is recommended that the Sri Lankan Navy is given the opportunity to deal with the environment in a friendly manner. After that we would be able to protect our nation as well as our environment collectively.

Sub Lieutenant MM Widanapathirana is a young officer recently commissioned into the Sri Lanka Navy. The officer is presently undergoing the 14th Executive Sub-Tech Course.

# MONEY TRAIL: PIRACY ATTACKS OFF SOMALIA

*By Capt NP Pradeep, Indian Navy*

## INTRODUCTION

The scourge of piracy is a classic demonstration of how destabilisation in one country has actually affected global trade. The modern day Piracy has become synonymous with Gulf of Aden and Somalia. A large share of the world's petroleum and its products passes through the Gulf of Aden. Thus, one of the most important sea routes in the world is threatened by instability in Somalia.

The scope of this paper is:-

• To examine the ransom paid and follow the subsequent money trail.

• To study the connection between the ransoms paid to the pirates and a possible flow of this illegal money towards money laundering / terror groups.

• To study ways in which international community can cooperate to fill in the intelligence gaps on the money trail.

## LOSS TO EXCHEQUER

The Somali pirates collected an estimated ransom of USD 58 million in 2009, USD 85 million in 2010 and USD 160 million in 2011. Though this sum is not astronomically high, but for a country with an average per capita GDP of USD 600 the financial benefit accrued by all concerned in this lucrative enterprise is substantial and the risk worth taking. Although the primary objective of Somali piracy, ransom payment for release of the crew, ship and cargo make up for only one of the calculable direct and indirect economic costs of piracy, paying increased insurance costs, taking longer routes to avoid pirate-infested areas, deploying armed guards on board ships represent the operating costs for the shipping industry. Oceans Beyond Piracy (OBP) puts the direct and indirect costs of piracy for the global economy between an estimated range of USD 7 to USD 12 billion per year including loss of annual revenue due to lesser traffic and losses for the fishing and tourism industries. The likely effect of 10 additional vessels hijacked could lead to an 11% decrease in exports and catapult the international trade-related-cost of piracy to 28 billion dollars according to some private estimates. The costs of anti-piracy actions apprehending, detaining, prosecuting and implementing / executing the sentences on captured pirates remain largely uncalculated.

The adverse impact of piracy on global trade has been recognised by the World Community. The pirate attack on a single merchant ship has transnational effects due to the following dynamics of global seaborne trade:-

- The nationality of the owner or owners of merchant ships plying the waters of the world.

- The ports-of-registration and hence the 'flags' that these merchant ships are flying.

- The different ports for which the cargo is bound.

- The nationality of the ship's crew.

A typical sequence of activities in a piracy operation is that a vessel is seized, the owner or management company is contacted, and a ransom payment is negotiated, often by third party intermediaries. The insurance company of the hijacked vessel then arranges for a cash payment. The cash is obtained from a financial institution, which may be the insurance company itself, and packaged for delivery, often being airdropped to a prearranged location. But finding out what happens to this money delivered as ransom payments is difficult because Somalia is a country without rules, regulations or a functioning government.

## FOLLOWING THE MONEY TRAIL

It has also been reported that much of the estimated USD 80 million paid out in ransoms so far this year has been laundered by organised syndicates in Dubai and other Gulf states, although the same has been denied by these states. To cut off the pirates' financial resources, the then US Secretary of State Hillary Clinton made "freezing pirates' assets" one of the cornerstones of American counter-piracy policy. However, doing so has been difficult as Somalis lack any national banking system and have no traceable electronic records. The money transactions are exceedingly opaque, also because of the impenetrable way their finance system works. In a sense, Somalis do not need to launder the money they make from piracy because their unique financial system operates on trust and honour, bypassing financial institutions. The same is difficult to track due to the following reasons:-

- As the system - known as "hawala" - often does not involve documentation, with most transactions done verbally, there is no paper trail.

11  Rear Admiral DayaDharmapriya (SLNretd),  'Countering Maritime Piracy: A South Asian Perspective' Regional Counter-Piracy Workshop, Colombo, Sri Lanka 27-28 Sep 12

12  James Bridger, 'Following the Somali Pirates' Money Trail', Atlantic Council of Canada, 26 Apr 11, http://atlantic-council.ca/following-the-somali-pirates%E2%80%99-money-trail/, accessed on 26 Mar 13.

- This makes it almost impossible to find out what happens to money made from ransom payments or any other transaction in Somalia.

- The fact that most ransoms are paid in cash means they simply disappear into the Somali community, rather than ending up in banks or other financial bodies.

The currency of choice appears to be US dollars, in USD 100 notes. A recent ransom payment comprised of USD 100 notes (90%), USD 50 notes (7%), and USD 20 notes (3%). Although there is no universal set of rules, a UN report based on information gathered from pirates based in Somalia's north-eastern village of Eyl, reveals some interesting information about how the ransom spoils are divided:-

- Maritime militia, pirates involved in actual hijacking - 30%.
- Ground militia (armed groups who control the territory where the pirates are based) - 10%.
- Local community (elders and local officials) - 10%.
- Financier - 20%.
- Sponsor - 30%.

It has been reported that the 'mother ships' from which pirate attacks are launched are often refuelled, resupplied and even armed in Yemen. With Somalia being placed under an arms embargo since the beginning of the civil war in 1992, many of the weapons that drive the conflict are acquired across the Strait of Bab-el-Mandeb in Yemen. As they already possess the maritime capacities to do so, transporting weapons from Yemen to Somalia represents a logical alternate source of revenue for pirate gangs. When guns reach the markets of Mogadishu and other cites, they sell for some of the cheapest prices in Africa - AK 47s often going for USD 50 or less depending on how heavy the fighting is at the time. Injecting both hard currency and weapons into one of the world's most volatile states is bound to have destabilising effects. Better armed and better funded warlords and militias can have nothing but a negative impact on the fragile reconciliation process currently attempted in Somalia[14].

## LINKAGES BETWEEN PIRATES AND TERRORISTS

Determining the nature of the relationship between Somalia's pirate gangs and insurgent groups is a difficult endeavour, especially given the fact that the country is something of an

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13   Mary Harper, 'Chasing the Somali piracy money trail', BBC News,   http://news.bbc.co.uk/2/hi/africa/8061535.stm accessed on 26 Mar 13

information 'black hole'. Certain reports indicate that there is a cooperative relationship between pirates and Islamist terrorists, while others portray a more antagonistic relationship between the two factions. On paper atleast, pirates and Islamists have little in common, the former care only for profits and have little time for religious ideology, while the latter consider piracy to be a '*haram*' (forbidden) and punishable offence under Islamic law. Though their motives differ, there are precedents for terrorist groups cooperating with or co-opting criminal organizations including pirates to serve their own ends. These types of relationships begin with simple acts of cooperation that are beneficial to both parties. Canada's Integrated Threat Assessment Centre reports that Al-Shabaab are engaged in 'relationship of convenience' with certain pirate gangs, providing 'weapons, combat training and local protection' in exchange for a share of ransom spoils. There are also indications that the Islamist group through cooperation with central Somalia's pirates has been developing a primitive maritime capacity in order to bring both weapons and foreign jihadists into the country.

Aside from the prospect of collusion, there is the additional threat that insurgent groups may attempt to copy the pirates' tactics. The apparent ease with which Somali pirates have captured hundreds of hostages may encourage terrorist groups in the region to do the same. A precedent was already set in 1985, when four heavily armed members of the Palestinian Liberation Front seized control of the cruise ship Achille Lauro. Similarly, The MNLF, an Islamist insurgency group in the Philippines, hijacked several ships, both to raise awareness of their cause and to secure ransom payments to fund their activities. The sensational nature of hostage taking and the international community's apparent willingness to meet demands makes it an appealing tactic to groups like Al-Shabaab.

If piracy continues to grow, there is a possibility that it will attract major criminal elements. Successful pirate attacks have seen a sharp decline owing to patrolling by naval vessels in the Gulf of Aden(GoA) and Horn of Africa (HoA). Hence, it is important to keep successful piracy attacks to the minimum.

Though the motivation to engage in piracy is largely related to poverty, like any other business venture, it requires a substantial investment to get started. Profits are not generated until a ransom is paid, but preliminary costs include boats, weapons, equipment and bribes for officials. Once a vessel has been taken hostage, the crew needs to be fed for an extended period of time. These expenses often total hundreds of thousands of dollars, thus making external investment a necessity. Members of the global Somali Diaspora (200,000 in Canada alone) also provide funds and equipment, as well as, negotiating and translating services.

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14  James Bridger, 'Following the Somali Pirates Money Trail', 26 Apr 11, Atlantic Council of Canada, http://atlantic-council.ca/following-the-somali-pirates%E2%80%99-money-trail/ accessed on 26 Mar 13

15  James Bridger, 'Following the Somali Pirates' Money Trail', Atlantic Council of Canada, 26 Apr 11, http://atlantic-council.ca/following-the-somali-pirates%E2%80%99-money-trail/, accessed on 26 Mar 13.

The reason behind increase in pirate activity is simple. Piracy is a profitable business, and the money earned through hijackings is shared between those who provide the ships, those who actually do the hijacking and the informants in various international ports who keep the pirates informed of the kinds of vessels that are headed their way. Essentially, piracy provides for entire communities within Somalia. The main stakeholders involved in the piracy operations are as follows[16]:-



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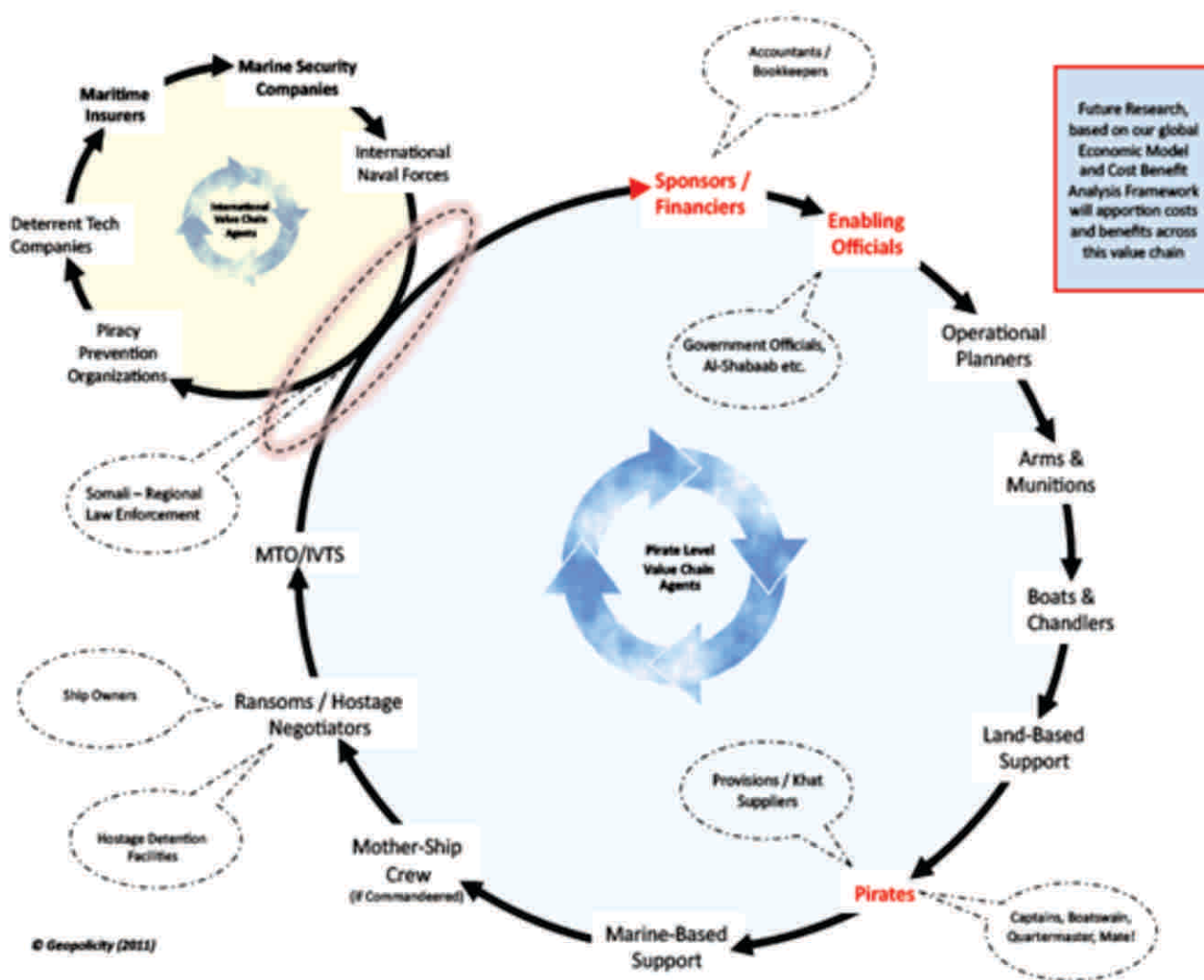
16    'Economics of Piracy - Pirate Ransoms and livelihoods off the Coast of Somalia', Geopolicity, May 11, p12

Reuters has reported that the average ransom in 2010 was USD 5.4 million, up from USD 150,000 in 2005, and that Somali pirates' gross 'revenue' was nearly USD 240 million (a total increase of 359% over 6 years for an annualised rate of 59.8%). Of that amount, Reuters' investigation identified the following payments to Al-Shabaab's 'marine office':-

- 25 Feb 10: USD 200,000 (4.4%) from the USD 4.5 million for the release of the Japanese-owned MV Izumi;

- 08 Mar 10: USD 80,000 (4%) from the USD 2 million for the release of the St Vincent & Grenadines-flagged MV Rak Africana;

- 09 Mar 10: USD 100,000 (2.2%) from the USD 4.5 million for the release of the Singapore-flagged MV York;

- 13 Apr 10: USD 600,000 (10.9%) from the USD 5.5 million for the release of the German ship MV Beluga Nomination;

- 15 Apr 10: USD 66,000 (1.8%) from the USD 3.6 million for the release of the Panama-flagged MV Asphalt Venture; and

- 14 May 10: USD 100,000 from an unspecified amount for the release of two Spanish crew of the Spanish-owned FV Vega 5[17] .

The 'take' from the ransom monies to Al-Shabaab averaged 4.66% and amounts to USD 1.146 million. This low level of 'taxation' indicates that the terrorists have modest aims, for the moment, and are most likely in a building phase as they organise and recruit. The rapid rate of increase in ransoms will generate funds that may even be beyond their ability to dispense until Al-Shabaab reaches a more advanced state of development.

### RECOMMENDATIONS

Targeting financial activity of pirates, especially pirate financiers and instigators, through asset freezes and the seizure and confiscation of the proceeds and instrumentalities of piracy could help in the following manner :-

- Disrupt financial support to pirate organisations.

- Track and seize assets enabling pirate operations

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17  Ken Hansen, 'The money trail reveals linkages between Somali pirates and terrorists',The Daily Caller, 14 Oct 11, http://dailycaller.com/2010/01/19/interpol-heading-down-piracys-money-trail/, accessed on 26 Mar 13
18  'Organised Maritime Piracy and Related Kidnapping for Ransom', FATF Report, Jul 11, p20

- Prevent pirates from using the international banking system and other formal financial systems.

- Prevent pirates from using cash couriers and other informal-value transfer mechanisms to transmit funds.

Somalia has existed as a failed state for twenty years, and the people of Somalia face poverty and death at the hands of warlords, who are tearing the country apart to gain supremacy. Without a stable government, the people of Somalia look to piracy as the only means of providing for themselves.

The stability and restoration of Government in Somalia may be an ideal solution to the problem of piracy, but it may be a long term solution. However, in short term targeting the money trail could pay substantial dividends in anti-piracy operations and it will further ensure that the money generated by ransom payments cannot be diverted for subversive activities in collusion with terrorist organisations. The following is recommended:-

- A task force (may be INTERPOL) under the aegis of United Nations could be created and empowered to track electronic transfers / illegal cash transfers that could be linked to ransom money received by pirates.

- UN may prevail upon the member states not to become safe havens and to implement stringent measures to track the money trail from pirates.

- The serial numbers of bills could be recorded and subsequently tracked as and when they leave the boundary of Somalia.

- USA could take a lead in following the money trail as they have good mechanisms available to do so as has been proven time and again, whenever economic sanctions are placed against any nation.

- The shipping / insurance companies could be asked to reveal the modalities and details of payments in order to initiate tracking.

- Patrol by Navies of different countries off GoA and HoA is recommended to be continued in order to keep the number of successful piracy attacks to a manageable figure and consequently control the ransom generated.

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*By Lt Cdr Abdullah Al Noman, Bangladesh Navy*

*"Your fleet and your trade have so near a relation and such mutual influence on each other, they cannot well be separated: your trade is the mother and nurse of your seamen; your seamen are the life of your fleet; and your fleet is the security and protection of your trade; and both together are the wealth, strength, security and glory".*

*- Lord Haversham*

## INTRODUCTION

The current wave of globalisation has had a profound impact on every State of the world, be it land-locked or coastal, resulting in greater access to resources, raw materials and markets. Today nearly 80% of global trade is transported by sea. States have invested significant resources in maritime infrastructure, containerised trade, energy supply chains, information technology driven cargo movements and processes accelerating financial transactions in order to harness the benefits of globalisation. Bangladesh, being a strategic maritime country in South Asia, possesses a vast sea area of 111,631 sq km which is 70% of her land mass. About 90% of the foreign trade and 100% petroleum import of Bangladesh is handled through sea.

In contemporary world, maritime security remains at the forefront of political concern in many of the littoral countries bordering oceans, bays, gulfs or any other international water body. It is a part of national security and not an isolated strategic entity by itself, thereby requiring integration with the overall national security model of a littoral state.

Traditional concept of maritime security is furnished mostly by the powerful maritime powers with emphasis on a strategy to fight war and restore peace in the seas. In this sense, the thinking that dominated experts on maritime security is the domination of the seas and oceans by the powerful nations somewhat on a conventional wisdom that "one who rules the sea, rules the land".This individualistic, acquisitive and aggressive manner of a few powerful maritime nations ultimately paved the way for development of mighty navies for power projection, gunboat diplomacy and unwarranted intervention in weak littoral state's affairs, neo-colonialism and the like. As a result, the perception of oceanic peace and security had been the monopoly of few powerful nations with formidable military control over a vast span of oceanic space to safeguard their specific security interests on such grounds as historical claims, geo-strategic interests, commercial interests, etc. In brief, maritime security was manipulated by few

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`19  Vijay Sakhuja, "Security Threats and Challenges to Maritime Supply Chains"

as being strictly military-centric in nature, and many newly independent states in post World War II, either due to colonial legacy or for security reasons subsequently embraced this approach as manifested in their rapid naval build-ups alongside their efforts to reduce threats in the terrestrial domain through conventional means.

Maritime security is an indispensable part of comprehensive security of a country. Bangladesh, being a small country in South Asia, faces serious maritime security threats from both traditional and non-traditional sectors as well as changing geo-political dimensions. This paper explores these dynamics and suggests measures to ensure maritime security for Bangladesh.

## AIM

The aim of this paper is to explore the dynamics of maritime security and suggests measures to ensure maritime security for Bangladesh.

## WHAT IS MARITIME SECURITY?

Maritime security is described as measures that government and other stake holders employ against maritime threats; both military and non-military. It is a multi-faceted concept that not only involves domestic and international laws but also takes into consideration geopolitics of the area concerned. Maritime security should be viewed from global and regional geo-political perspectives.

Abu Taher Salahuddin Ahmed (2010) argues that Maritime Security entails security from crimes at sea, resource security, environmental security, and security of seafarers and fishers. Highlighting all these issues, he argues, that Bangladesh being a small country should opt for regional cooperation and proposes setting up of a Regional Maritime Co-Operative Security Mechanism (RMCSM) within the broader framework of SAARC for ensuring regional maritime security.

Barrister Harunur Rashid(2009) argues that maritime security cannot be separated from a broader picture of the strategic environment. Maritime security has two aspects: macro and micro issues and the synthesis of the two will guide Bangladesh in combating threats to its maritime security.

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20   A M A Zaher Zoy, " Maritime Security of Bangladesh"
21   A M A Zaher Zoy, " Maritime Security of Bangladesh"
22   ibid
23   Abu Taher Salahuddin Ahmed (2010)," Maritime Security of Bangladesh: Exploring Regional Cooperation, South Asian Survey"

Rear Admiral Md Khurshed Alam (2009) analyses the traditional issues impinging on Maritime Boundary Delimitation for Bangladesh. He examines all the problematic issues between Myanmar, India and Bangladesh that impinge on the maritime border dispute by UNCLOS.

Dr Abul Kalam Azad (2009) traces the non-traditional threats to the maritime security of Bangladesh i.e. illegal exploitation of resources (illegal fishing, poaching, exploration of oil and gas, extraction of minerals), deliberate pollution of marine environment, ordinary theft, armed robbery, piracy, illegal trafficking in arms, drugs and human; hijacking and sabotage, terrorism, mercenary activities and maritime insurgency operations, illegal trade in ozone depleting chlorofluorocarbons (CFCs), etc. Besides proposing adaptation of developmental measures at national level for maritime security, he suggests that regional cooperation and inception of ocean governance among littoral States can solve the non-traditional maritime security threats facing Bangladesh.

M Habibur Rahman (1984) points out problems related to delimitation of maritime boundaries of Bangladesh. He suggests that Bangladesh needs to fix the boundary at a four-point junction measured from the Bangladesh coast, the coast of India's mainland, the coast of the Andaman and Nicobar islands, and the coast of Sri Lanka; and adds that the boundary of the continental shelf/margin must be fixed at a tri-junction measured from the coast of Bangladesh, Burma, and the Andaman and Nicobar islands.

S Taleb (2010) argues that the most important maritime security issue for Bangladesh is to delimit its maritime boundaries in order to exploit its offshore resources, including gas and oil. However, Bangladesh faces a number of difficulties with neighbouring countries over the demarcation of maritime boundaries, including overlapping claims with India and Myanmar. S Taleb suggests that Bangladesh must establish its claims over its maritime boundaries without delay and adds if negotiations become unfruitful, Bangladesh should submit and win its claims through international legal recourse. These works discuss partial dimensions i.e. traditional/ non-traditional/demarcation problem/geopolitical dimensions only and separately. This paper comprehensively synthesises the previous ideas and developments, thus aiming to give a full picture of comprehensive maritime security of Bangladesh.

24  Barrister Harunur Rashid (2009), Maritime Security: Diplomatic Initiatives, Paper Presented at the Seminar on Maritime Security of Bangladesh organized by the Bangladesh Institute of International and Strategic Studies (BIISS), Dhaka, on Thursday 12 February, 2009

25  R. Adm Khurshed Alam (2009), Maritime Security of Bangladesh: Traditional Issues Impinging on Maritime Boundary Delimitation, Paper Presented at the Seminar on Maritime Security of Bangladesh organized by the Bangladesh Institute of International and Strategic Studies(BIISS), Dhaka, on Thursday 12 February, 2009

26  Dr.Abul Kalam Azad (2009), Maritime Security of Bangladesh: Facing the Challenges of Non-Traditional Threats, Paper Presented at the Seminar on Maritime Security of Bangladesh organized by the Bangladesh Institute of International and Strategic Studies (BIISS), Dhaka, on Thursday 12 February, 2009

27  M. Habibur Rahman (1984), Delimitation of Maritime Boundaries: A Survey of Problems in the Bangladesh Case, Asian Survey, Vol. 24, No. 12, pp. 1302-1317 published by: University of California Press

# GLOBAL SCENARIO

The increase in pirate attacks on merchant vessels has now extended far and wide across the Indian Ocean. In 2010, there were 219 reported attacks in which 49 vessels were hijacked, 1016 seafarers taken hostage, 13 seafarers injured, and 8 seafarers killed. In mid-2011 there were more than 150 pirate attacks, 21 hijackings, over 360 seafarers taken hostage, and 7 seafarers killed by pirates. At the time of writing of this article, more than 20 ships and 430 seafarers were being held hostage by pirates for ransom.

The growing number of pirate raids and the resultant security nightmares facing the international shipping industry have led to an incremental increase in shipping and insurance costs. This worrying scenario has had a knock-on effect on the oil and gas industry in the region, as most of these valuable cargos pass through threatened areas in the Arabian Sea, Indian Ocean and Red Sea regions. Faced with mounting insurance and security costs, shippers, importers and exporters alike are increasingly looking for security solutions to safeguard their cargos, which end up costing the end user even more. These security challenges affect the industry as a whole.

In recent months, many countries have reversed longstanding legal bans or serious restrictions on direct arming of merchant ships. The policy change comes in response to the rising number of attacks. Even though the success rates of pirate attacks is falling, random rates are rising—doubling in the last year on an average payment of USD 4 million a ship, according to a law firm that follows the case[28].

# THE BANGLADESH CASE

Bangladesh, an Indian Ocean littoral State, has a maritime zone that engenders significant security implications for the country. However, the maritime component of the country's national security continues to remain less debated with little effort to sensitise its constituent issues. In particular, the need for a of comprehensive maritime security in Bangladesh is absent, and the strategy, plans and actions with respect to it are inadequate. Comprehensive maritime security as understood in contemporary ocean governance has two facets – conventional/traditional and non-conventional/ non-traditional.

Bangladesh has to secure 12 miles territorial sea, 200 miles EEZ and another 150 miles of continental shelf from the limit of 200 miles, declared by the 1974 Territorial Waters and Maritimes Zones Act.

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29    Capt Md Faridul Alam, Harbour Master, Chittagong Port Authority, " Security Stimulas for Safer Maritime Bangladesh"

Bangladesh has the exclusive right to explore and exploit marine and continental shelf resources. These include not only fish but other minerals as well. Furthermore, seawater contains about 300 chemical elements which can be extracted with the assistance and support of the technologically-advanced states. Bangladesh has to safeguard these maritime interests.

## SHIPPING AND MARITIME THREATS

Bangladesh has to cope with transnational non-military threats emanating from the seas. Relaxed security on the seafront facilitates easy illegal entry and departure from seas.

An important adjunct to maritime terrorism is drug trafficking. Terrorist groups often work hand-in-hand with drug cartels. Geographically located between the Golden Crescent and the Golden Triangle, Bangladesh could be used as a transit point for drug trafficking.

Gunrunning by sea is the safest means of transferring illegal arms and ammunition around the world. Ever since the seizure of arms and ammunitions including submachine guns and AK rifles, Rocket Propelled Grenades and their launchers, 2000 grenades and other weapons during unloading from MV *Hazard Dan and FB Amana at* the jetty of Chittagong Urea Fertilizer on 02 April 2004, there have been several reports in newspapers of such entry of illegal arms and weapons through our sea ports.

The Home Ministry of Bangladesh, has recently, declared its commitment to undertake a thorough investigation to find those responsible for the illegal entry of weapons and the financiers of such vast quantities of weapons brought though the Chittagong port. Furthermore pirates are quite active on the high seas and they may operate in the cumulous zones. Maritime piracy consists of any criminal acts of violence, and detention, committed against a cargo/ passenger ship on the sea.

Another threat has emerged from an unlikely quarter. This is container security that is often linked to maritime terrorism. In 2002, the US Navy found that Al-Qaida terrorists hiding inside a well-equipped container managed to escape before being detected. In another case, a suspected terrorist smuggled himself halfway around the world inside a shipping container that was well equipped with a bed and toilet. He was carrying computers, cameras, mobile phones, maps and seaport security passes for Thailand, Egypt and Canada. It has been reported that cargo ships are often used for unloading supplies for terrorists and it has been reported that the terrorists who bombed US embassies in Kenya and Tanzania in August 1998 were provided with supplies by cargo ships.

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29   AMA Zaher Zoy, " Maritime Security of Bangladesh"

## NEED FOR MARITIME SECURITY OF BANGLADESH

Bangladesh is a maritime country with huge Exclusive Economic Zone. The need for maritime security for Bangladesh's sea lines can hardly be over-emphasized. Maritime patrol is one element of the multi-layered approach to maritime security that Bangladesh could employ to protect national interests. In practice elsewhere, maritime security has moved well beyond the traditional concepts of naval or military threat although, of course, the protection of sovereign interests against military force remains a fundamental issue for any government.

The need for maritime security for Bangladesh can be divided into two broad categories: -

• **Civilian Requirement**. Bangladesh has a huge maritime economy to protect. The maritime sector is very important for Bangladesh's overall national economic growth and social life. Bangladesh's maritime sector is important to the nation's economy and quality of life in a number of ways: -

- About 90% of our external trade goes through sea routes.

- Huge deposits of hydrocarbon and investments in this sector.

- Marine fisheries - one of the largest export earning sectors.

- Tourism industry.

• The importance of Bangladesh's marine resources in the national economy will grow in coming years because of the extraction of large deposits of minerals. Bangladesh could find its sovereign civilian interests challenged directly or indirectly in many ways such as:-

- Illegal resource exploitation;

- Non-compliance with national or international law;

- Illegal transportation of goods or people;

- Creation of environmental hazards.

• Addressing these varied challenges today requires a wider range of capabilities, processes and policies namely,

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30   Capt Md Faridul Alam, Harbour Master, Chittagong Port Authority, " Security Stimulus for Safer Maritime Bangladesh"

- **Surveillance**.  The detection of activities, events or changes in condition within an area of ocean jurisdiction;

- **Monitoring**.  The systematic observation of specific activities, events, or conditions;

- **Control**.  The execution and effective rendering of international and national rules and regulations; or other responses as appropriate.

## RECOMMENDATIONS

The following three steps might be inaugurated for Bangladesh's maritime security: -

•       Enhancing capability at the national level by promoting mechanism at regional level as well as solving maritime demarcation issues bilaterally.

•       The choice of aircraft as a platform for maritime patrol is very important as they have high endurance and can operate at long ranges.

•       The government of Bangladesh should consider the maritime issue as an important aspect of national security and economic prosperity. It should promote technical developments for maximum utilisation of marine resources. To enjoy the economic opportunities provided by the United Nations Convention on the Law of the Sea (UNCLOS), Bangladesh must demarcate its maritime boundary.

•       Steps may be taken with a view to establishing and implementing of a SAARC Maritime Security Centre/Institution in India, having its sister-branches in Chittagong and Mongla Ports of Bangladesh. Within their ambit, introduction of a SAARC Maritime Security Chair (e.g. at Universities of Madras, Bombay, Andhra, JNU (Delhi) and Kolkata) would be helpful in introducing undergraduate and graduate courses on marine resources and technology, and on maritime security. These will promote awareness about maritime security and ocean management, contributing towards addressing maritime security and ocean management issues effectively.

## CONCLUSION

According to various reports, Bangladesh is now considered a global hot-spot for maritime crime in national waters. Unfortunate incidents are creating an image crisis for the

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31    AMA ZaherZoy, " Maritime Security of Bangladesh"

Chittagong and Mongla Ports. Due to rampant occurrence of various crimes in these ports, they have been labelledas vulnerable and insecure for international trade. Moreover, this has forced foreign shipping companies to impose additional charges for discharging cargoes resulting in higher export and import costs. Bangladesh ratified the UNCLOS 1982 and is a party to Regional Cooperation Agreement Combating Piracy and Armed Robbery (ReCAAP), a government-to-government agreement that addresses the incidence of piracy and armed robbery in Asia. However, Bangladesh is yet to ratify the 1988 SUA convention (Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation) aimed at curbing piracy and armed robbery at sea.

In order to combat sea piracy and other crimes with regards to vessels, prompt measures to ensure proper surveillance, patrolling and checks in port areas need to be instituted. If necessary, Bangladesh should consider the prospect of entering into an agreement with neighbouring countries on joint patrols. Regular air patrol may be introduced on the outer anchorages of ports and in the Bay of Bengal to curb criminal activities out at sea. Port Authorities need to strictly implement the ISPS Code and take measures to strengthen maritime security and safety of the vessels calling at the ports. Authorities need to ensure that strict physical security is maintained as per Port Facility Security Plans approved by the designated authorities. Only a nationally coordinated response can help prevent and suppress the threat of maritime crime.

*Lieutenant Commander Abdullah Al Noman was commissioned on 01 December 2003 in the Executive Branch of Bangladesh Navy. He has attended various courses at home and abroad. He underwent the Officers' Weapon Course from SI&T and Potential Platoon Commander Course from BMA. The officer has also undergone the Shipboard Artillery Officers' Course from China. He completed his Gunnery Specialisation Course from BNSIssa Khan. Lt Cdr Noman served in different capacities on board various ships of Bangladesh Navy. He also served as an instructor of Bangladesh Naval Academy. He did his UN Mission in Lebanon under UNIFIL. Presently, he is serving as the Executive Officer of BNS Meghna.*

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# ANTI-PIRACY OPERATIONS

*By Insp G Cheetamun, Mauritius National Coast Guard*

## INTRODUCTION

November 2008 will remain a milestone in the history of piracy. Never before in the history of maritime trade, had piracy gained so much attention and media coverage. A handful of poorly, but dangerously, equipped Somali fishermen-turned pirates boarded and hijacked a Saudi owned VLCC, Sirius Star, with its crew. Immediately, this audacious incident gained international media footage. The entire world witnessed the scene when ransom was paid by parachute and the subsequent debacle that followed where some of the pirates drowned. Pirates were no longer viewed as the romantic buccaneers (Bendall, 2009). This brought to sharp focus the dangers lurking along sea route off the Eastern Coast of Africa for the seafarers.

The disruption of this sea route, reputed as one of the busiest sea lanes in the world, can have immediate and multi-fold national, regional and international implications. The world community cannot turn a blind eye to the age-old scourge of piracy in terms of cost to the shipping industry and to international trade. These attacks have a direct impact on the cost of merchant shipping and thus indirectly on international trade and the forces of globalisation. Insurance premiums of ships transiting through pirate-infested waters have risen exponentially and that rise directly affects freight rates. These costs are ultimately passed on to businesses and consumers as increased costs (Bendall, 2009). In addition, piracy has humanitarian implications, as the shipping crew are killed, injured, traumatised or taken hostage. Ransoms are paid by the million by ship's owners eager to get their ships and crew back, resulting in further increase of insurance premiums. Piracy has, in fact, led to the development of multi-million dollar business industry.

Piracy carries in its wake potential geopolitical repercussions and the end results are still being gauged. The international response has been to deploy navies to protect merchant shipping and international trade. To avoid pirate infested sea routes, ship's owners have started diverting their vessels. However, these actions are not the solution to the scourge of piracy. In fact, this will only contribute to considerably increased operating expenses as fuel costs rise; additional time spent in re-routing vessels limits the number of voyages per year and thus hindering revenue making opportunities.

If decisive actions are not taken by the international community, if piracy is not combated and remains unpunished and continues to grow, it will have serious consequences for international transport and trade, affecting both developed and developing economies. Despite

international efforts, piracy in this region is threatening to put a chokehold on one of the world's busiest shipping arteries (Bendall, 2009).

The author contends that antipiracy operations are complex and thus a holistic and systemic approach need to be adopted to combat the scourge of piracy off the East Coast of Africa and South West Indian Ocean. Therefore, it is intended here firstly to examine the advent of piracy in this part of the world. Secondly, the term piracy will be explained and thirdly, the 'DIME-FIL' framework would be proposed to analyse antipiracy operations. Lastly, a way ahead would be put forth.

## OVERVIEW OF SOMALI PIRACY

Somalia has experienced two civil wars which have significantly contributed to the present state of affairs. The internal situation is characterised by rampant poverty, unstable government, unending struggle for power, non-existent law enforcement agencies, poor institutions, rise in extremism dovetailed by pilfering of sea resources, contributing to the rise in maritime piracy. The phenomenon of piracy along the coasts of Somalia can be traced back to the 1990s. However, it is only at the beginning of the 21st century, that it has attracted the attention of the world community as a result of the intensification of piracy activities.

Merchant ships using this route have been an ideal target of opportunity for fishermen-turned pirates who find this activity to be lucrative and high returns can be earned through the ransom collected. The willingness of ship owners to pay ransom to recover their ships and crew has further fuelled piracy activities off East Africa and in the Gulf of Aden.

The recent developments have led to piracy becoming high on the list of sensitive security topics of all maritime nations and the shipping industry. This has become a major concern in the field of international security, pushing many international players into taking action. The response of the international community has so far been in essence reactive, by taking measures to reinforce the security of ships at sea. For instance, the European Union (EU) has created the EU Naval Force Somalia (Operation EUNAVFOR Atlanta), which was launched in December 2008 to protect ships of the World Food Program (WFP) and other vulnerable vessels sailing in the area, and to operate against acts of piracy at sea, including Somali territorial waters if necessary(Mouche, 2010). This force is also backed by the Multinational Combined Task Force 151, led by the USA. Additionally, NATO has launched Operation Open Shield to fulfil specific tasks in the fight against piracy (Chalk/Smallman 2009, Mouche, 2010). However, numerous observers underline that focusing on the sea may only be efficient in the short term, and for specific cases, but that it is likely to be inoperative in the long term. They recommend that the international community should start turning its eyes to where the pirates originate: the shores of

Somalia (Geise 2009, Chalk/Smallman 2009, Blanchard et al. 2009). Accordingly, the presence of naval forces providing security to merchant ships, have caused the Somali pirates to venture further out to sea. There are reports that these pirates are using hijacked vessels and their crew as mother ships.



Expansion of pirate operations
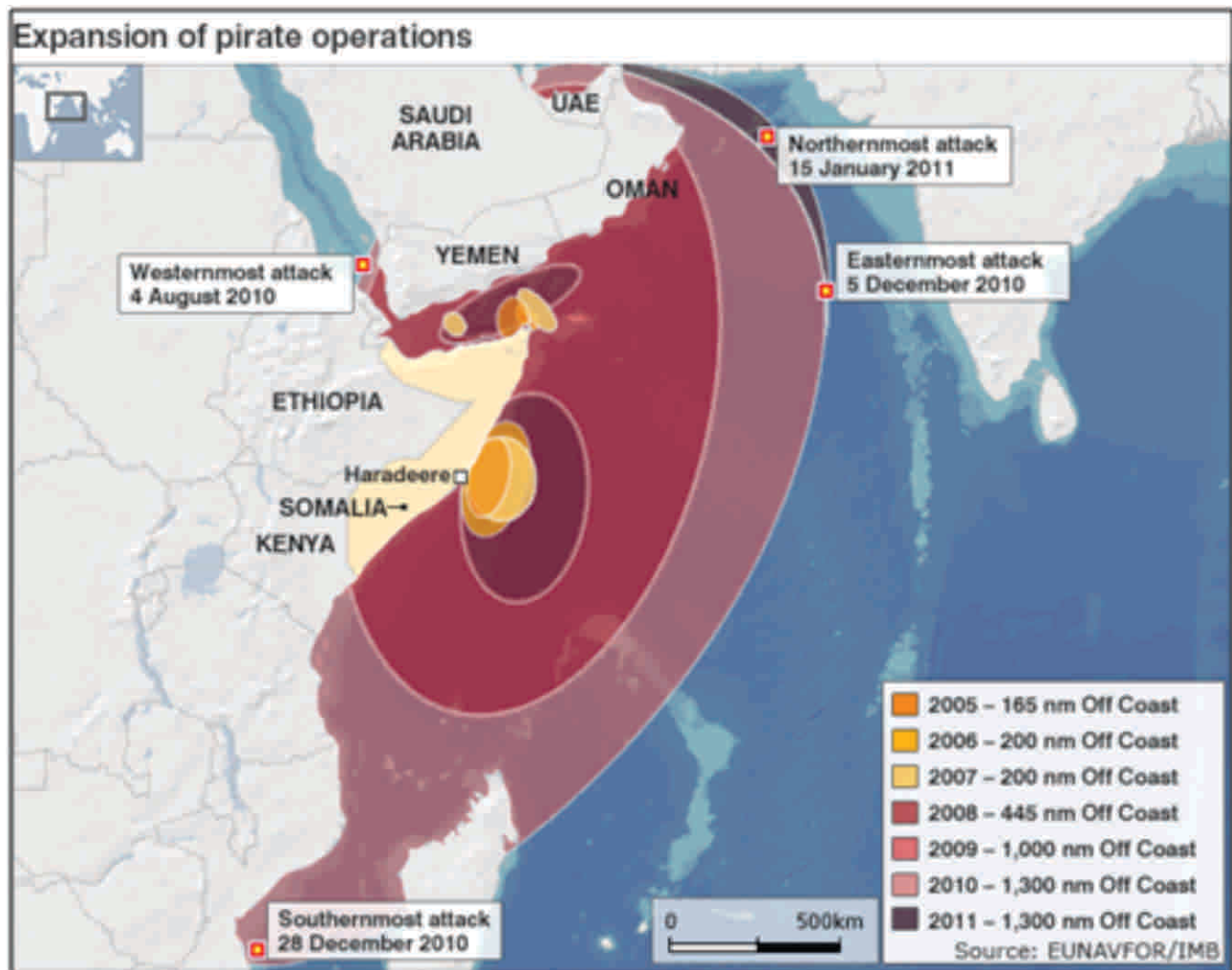
There are substantiated reports that piracy off Somalia is a highly organised and lucrative business. There are investors, accountants, pirate leaders on land and pirate attack groups that put to sea. Statistics indicate that there has also been decline in piracy attacks. For instance, 163 incidents involving piracy were reported in 2009 off the coast of Somalia as compared to 33 to date (EUNAVFOR, Oct 2012).  IMB Piracy Reporting Centre accounts 11 vessels and 188 hostages held by Somali pirates (IMB, Sep 2012).

# DESCRIBING THE TERM "PIRACY"

Piracy has always provided a good opportunity for ruthless men to seek their fortunes, experience the thrill of danger and engage in casual violence and cruelty (Cordingly 2006, Bendall, 2009). The word pirate can be traced from the Latin pirata but ultimately to Greek Roots. Peirates, means "brigand", and peira, means "to attempt, experience and find luck on the sea". Acts of piracy have become part of folklore since antiquity as waterways, seas and oceans began to be used as trade routes. Pirates robbed, maimed, killed and captured people for mercenary gain. In 13th Century BC the 'sea people' were one of the first whose exploits were documented as terrorising the Aegean and Mediterranean Seas(Bendall, 2009). The Phoenicians were victims of pirate attacks in the Mediterranean, and at times resorted themselves to acts of piracy, capturing and trading in slaves (Bendall, 2009). Pirates have also operated in Eastern Europe, Africa, Asia and Polynesia throughout history (Bendall, 2009).

In recent times, the romantic notion of the privateers, cutlasses, Jolly Rogers and walking the plank have been replaced by sophisticated operations with pirates using fast speed boats with the power to outrun most modern day freighters. Their vessels have latest satellite communication and positioning systems. Pirates are armed with assault rifles, rocket launchers and grenades (Bendall, 2009). Captured vessels are typically held on average for three months before a ransom can secure the vessel and crew release (Costello 2008). It is estimated that in 2008 Somali pirates had netted USD 120 million in ransom payments (Gettleman 2009). One of the concerns of the international community is its links to armed Islamist groups. Ransoms are an ideal funding source for terrorists ever since the international banking system tightened up. There is however a distinction between acts of terrorism and piracy from a legal point of view with regard to rights of pursuit and penal sanctions, which has created a problem for the international community's attempt to protect international shipping.

The term "piracy" was defined by the Geneva Convention on the High Seas in 1958 and was adopted by the UN 1982 Convention. The United Nations Convention on the Law of the Sea (UNCLOS) states in Article 101 that piracy consists of any illegal acts of violence, or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or private aircraft that is directed on the high seas against another ship, aircraft, or against persons or property on board such ship or aircraft. It specifically states that the act can occur outside the jurisdiction of any state and includes any act of voluntary participation and any act of inciting or of intentionally facilitating an act of piracy. For acts of violence against ships, persons, or property on board to be classified as piracy the following conditions must be met simultaneously: The act of violence must be committed by the crew or passengers of another vessel, is illegal and serve private purposes and it must be committed on the high seas or at a place not subject to state sovereignty (House of Commons 2006; IMO 2000).

# DIME-FIL APPROACH

The maritime industry includes multitude of actors with various interests. With the advent of modern piracy off the East Coast of Africa, other actors are involved to serve their self-interest, for instance private military security organisations. Thus, in order to deal a severe blow to the scourge of piracy, a holistic and integrated approach needs to be adopted. For this purpose, the DIME-FIL(Diplomacy, Informational, Military, Economic, Financial, Intelligence and Legal) approach is proposed to deal with antipiracy operations. These are important instruments of state power through which a nation's objectives are met. Securing the sea route infested with pirates is a war on several fronts and antipiracy operations cannot be dealt in isolation given the complex nature of such operations.

- **D for Diplomacy**. Piracy activities are threatening one of the busiest sea routes of the world, and, have created a synergy among many nations that these activities pose a significant threat to their economic and social development. It is pertinent to mention that under the United Nations Conventions on Law of the Sea (UNCLOS), the sea is regarded as the heritage of mankind, and any nation bounded by the ocean may, as part of its jurisdiction, claims a territorial sea, a contiguous zone and an Economic Exclusive Zone, all of which are regulated by specific regimes. Since piracy pertains to unlawful acts committed against people and property at sea, the sovereignty aspect makes this crime a complex one depending where the crime at sea has been committed. Given the unique nature of such crimes, this further adds to the complexity of piracy as a criminal offence. In this regard, there is worldwide consensus that the age-old scourge of piracy in this part of the world needs to be dealt in a global manner. Since 2008, the Security Council of the United Nations has debated and passed 10 resolutions in respect of piracy off the Coast of Somalia. These resolutions involve, among others, allowing ships involved in antipiracy operations to close up to the territorial waters of Somalia, criminalising the offence of piracy and so on. The Djibouti Code of Conduct is another important diplomatic effort which goes in line with antipiracy operations.

- **I for Information**. Sharing of information on a timely basis among the different governmental bodies involved in maritime security operations is crucial and may contribute significantly to any antipiracy operation. However, not all the maritime security centres in this part of the world are fully equipped with sophisticated tools to disseminate information in a timely manner.

- **M for Military**. In response to the bane of piracy off the coast of Somalia, the international community has responded by deploying their warships to provide security to ships navigating in the region. This was made possible when the United Nations Security Council adopted Resolution 1838 (2008). About 25 vessels from the EU and

NATO countries, as also India and China, are engaged in maritime antipiracy operations. With the exception of Kenya, South Africa, Mauritius and Seychelles, other island States do not have in place a robust maritime agency for combating piracy at sea. A collaborated effort is required to reinforce physical presence in the far reaches of the EEZ of countries in this part of the world. Further, there are the requirements of building capacity of these countries through appropriate training. For instance, various training programmes are being mounted to provide necessary exposure to law enforcement officers who are directly involved in antipiracy operations. The trend towards deploying private security personnel onboard merchant ships is on the rise. Private maritime security contractors are therefore mushrooming. Most of these agencies are managed and run by ex-military officers. This is adding to a dangerous mix of small arms at sea.

- **E for Economy**. Maritime traffic accounts for 90% of international trade and transportation. Most nations of the world are connected through the oceans to some extent. The sea route off the coast of Somalia, reputed to be one of the busiest, plays an important economic and social role in the development of countries bordering the East coast of Africa, Gulf and Aden and Suez Canal. Ships transiting in these waters contribute significantly to regional national economies and towards creation of employment. One can imagine the repercussions if the ship's owners decide to use alternate routes. The snowball effect will be felt on economies as far as the EU, and in the American and Asian continents. This is one further argument for the international community to jointly engage in anti-piracy operations.

- **F for Financial**. The shipping industry, the coastal nations in this part of the world and the families of seafarers are paying a huge price because of piracy off the coast of Somalia and Gulf of Aden. It has been reported that the economic cost of piracy in 2011 was estimated to be between USD 6.6 and USD 6.9 billion in 2011and the shipping industry bore 80% of this cost (OBP, 2012). According to the same report the factors contributing to the overall cost include:-

  - **Ransoms**. In 2011, 31 ransoms were paid to Somali pirates, to talling around USD 160 million. The average ransom was approximately USD 5 million, up from around USD 4 million in 2010. While 2011 saw a lower success rate for Somali pirates, the increased sum of ransoms meant that pirates received greater revenue for fewer hijackings.

  - **Insurance**. The two major forms of piracy-related insurance are war risk and kidnap and ransom (K&R). This insurance market has evolved in 2011 to reflect continued developments in piracy. The 'war risk' region was expanded to include the larger Indian Ocean at the beginning of the year, and many shipping companies

have received premium reductions for having private armed security on board ships. The total cost of war risk and insurance was approximately USD 635 milion.

- **Security Equipment and Guards**. A notable trend in 2011 was the rapid escalation in the use of private armed security. The total cost of both security equipment and armed guards in 2011 was between USD 1.06 to1.16 billion.

- **Re-routing**. In 2011, some ships opted to avoid the piracy high risk area by hugging the western Indian coastline. This report assessed the cost of that re-routing for bulk carriers and tankers, and estimated the cost was around USD 486 to680 million in 2011.

- **Increased speed**. To date, no ship has been successfully hijacked that was travelling at 18 knots or faster. Therefore, many ships will 'speed up' when transiting the high risk area. Since more fuel is burned by ships transiting at faster speeds, these increased speeds are a large added cost. This project finds that the extra costs of increased speeds for containerships alone is around USD 2.7 billion.

- **Labour**. In 2011, around 1,118 seafarers were held hostage, and 24 died. Due to this grave risk, many seafarers are entitled to double compensation when they transit the HRA and/or for the duration they are held hostage by pirates. This study estimates that the total cost of this additional compensation was USD 195 million.

- **Prosecutions and Imprisonment**. 20 countries have arrested, detained or tried Somali pirate suspects. The total cost of prosecutions and imprisonment was around USD 16.4 million in 2011.

- **Military Operations**. Over 30 countries contributed military forces, equipment, and vessels to counter piracy activities in 2011. This report estimates the total cost of administrative and headquarter operations, military vessels, aircraft, and unmanned aerial vehicles to be USD 1.27 billion in 2011.

- **Counter-Piracy Organisations**. A number of new civil society and multilateral initiatives were launched in 2011 with a mission of reducing piracy, and its impact. This report calculates the total cost of funding and operational budgets for these organizations to be approximately USD 21.3 million.

- **I for Intelligence**. Collecting, assessing and dissemination of timely intelligence may contribute positively in the fight against piracy. A network centric approach towards collecting intelligence (Human and Electronic) would significantly aid in antipiracy

operations.  However, this can only be possible whereby all the stakeholders involved contribute and display a high level of commitment towards sharing intelligence on illegal activities, including piracy, in the maritime domain.

- **L for Legal**.  Unless all the actors involved in the chain of piracy are brought before a court of justice and dealt with accordingly, all efforts towards combating it would be in vain.  For this to occur, all nations involved in antipiracy operations need to criminalise piracy and have the political will to proceed with the prosecution of pirates. United Nations Security Council Resolution 2012 (2011) makes a provision that member States may take measures to criminalise piracy under their respective domestic laws and to support the prosecution of individuals suspected of piracy off the coast of Somalia and imprisonment of convicted pirates.  As on  24 Oct 2011,  42 Member States have legislated this offence: Australia, Austria, the Bahamas, Bangladesh, Brazil, Bulgaria, Chile, China, the Czech Republic, Denmark, Djibouti, Estonia, Finland, France, Georgia, Germany, Greece, Ireland, Italy, Jamaica, Kazakhstan, Kuwait, Latvia, Lebanon, Liechtenstein, Lithuania, Malta, Mauritius, the Netherlands, Norway, Oman, Panama, Qatar, the Republic of Korea, the Republic of Moldova, the Russian Federation, Singapore, Slovakia, Slovenia, Spain, Turkey and the United Arab Emirates. Though at first Article 101 of UNCLOS appears simple and comprehensive, it is in fact very complex. This has resulted in legal issues, which have limited the enforcement of the Convention. For example, Article 101 does not include politically motivated acts, such as terrorist attack, which in more recent times have become blurred. Many believe that the sophistication of more recent attacks demonstrates links to Al-Qaeda. The Institute for South East Asian Studies (ISEAS), report that it is Al-Qaeda's intention to disrupt maritime trade, targeting dependence of nations on oil. Of particular concern is the potential for the Straits of Malacca or the Suez Canal to be blocked, which would force costly diversions and add to world commodity prices. Intelligence reports indicate that Al-Qaeda has its own naval manual with entries showing which points to target on a vessel, how to attach limpet mines, how to fire rockets from a speedboat travelling at high speed and how to transform gas tankers into floating bombs (Mouche,2010). Pirates have provided training to the maritime wing of Al-Shabaab, and Al-Shabaab is using some pirate groups for arms smuggling (Mouche, 2010).Further, the definition of what is meant by "illegal" has led to debate whether piracy should be judged from the perspective of international law or national law in the prosecuting countries? Should it be under civil or penal code? The problem is exacerbated as every legal system has its own definition of the act of piracy. The complexity of the legal situation and the problem of obtaining a conviction can be best illustrated with anexample. Consider a vessel flying a Panamanian flag and carrying a shipment from Japan. The cargo is insured in Germany, the crew comes from the

Philippines and the Netherlands. The vessel is boarded on the high seas by Indonesian pirates. Which law would apply in such a circumstance? (Mouche, 2010).The availability of a competent court with qualified prosecutors to prosecute pirates is another important issue that begs serious consideration. In this regard, there are reports that international organisations such as the UNOD Care supporting countries dealing with prosecution of pirates. Further, financing and sustainability of such courts is another issue that merits attention.

## THE WAY AHEAD

Prima facie, piracy represents a multi-million dollar business venture for many. More importantly, the scourge of piracy presents serious threat to peaceful navigation along sea routes. Piracymust be eradicated wherever it exists. This paper has tried to support the actions taken by various nations involved in antipiracy operations. This paper has also adopted a holistic and integrated approach towards eliminating this scourge. The short term priority would be to continue facilitating a safe passage for all ships in this part of the world. The long term goals would be to politically stabilise Somalia and establish working institutions.

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# MARITIME SECURITY CHALLENGES IN THE INDIAN OCEAN

*By Lt Cdr MDS Jayatilaka, Sri Lanka Navy*

## IMPORTANCE OF THE INDIAN OCEAN REGION

The Indian Ocean occupies about 20% of the total ocean area of the world, covering a total of 73,427,000 sq km of the globe, stretching from East Africa to Western Australia- a distance of about 6,400 km or 4000 miles from West to East and from South Asia to Antarctica in North-South orientation. The Indian Ocean Region (IOR) constitutes 50 states with a total land area of 33 million sq. km. These states and regions accommodate about 2.6 billion or 39% of the global population.

The Indian Ocean has become a key strategic arena in the 21st century. One reason is the growth of the Asian economies and their increased need for raw materials, including energy from the Middle East, to provide for their economic growth. On the other hand the increasing flows of Asian labour, and consumer goods, particularly to the countries of the Arabian Peninsula. In addition, the end of the Cold War and the ongoing crisis in Iraq and Afghanistan has boosted the importance of the Indian Ocean as a conduit for transportation of military supplies.

The IOR is rich in heavy minerals, and offshore deposits are being actively exploited. Fishing is a growing occupation in the coastalregions of all IOR littorals for domestic consumption and for export.

## MARITIME SECURITY

"Maritime security", as a term has no universal legal definition. Elements of the maritime security regimebroadly are: -

- International peace and security.

- Sovereignty / territorial integrity/ political independence.

- Security from crimes at sea.

- Resource security.

- Environmental security.

- Security of seafarers and fishes.

# SECURITY CHALLENGES

The different challenges pertaining to maritime security in the IOR, faced by the regional States manifest themselves in various ways, such as: -

- **Power Competition in the IOR**. Several non-maritime security issuessuch as adversarial great power competition. If any two countries ever engage in armed conflict in Asia, the maritime arena could be the deciding factor in the final outcome.

- **External Naval Presence in the Region**. The Indian Ocean has long been the hub of great power rivalry and the struggle for its domination. Due to its crucial geo-strategic role, the US remains the most significant player in the region.

- **Maritime Terrorism**. At sea, incidents related to maritime terrorism have fortunately been infrequent. The two well-publicised ones have been the bombing of USS Cole, while at anchor off Yemen in 2000 and of the oil tanker MV Limburg, a chartered vessel flying the French flag that was rammed by an explosives laden dinghy, again off Yemen, in October 2002.

- **Drug Trafficking**. The "Golden Crescent," and the "Golden Triangle," notorious for illegal drug production, are in the IOR.It is natural that narco-terrorism is a major security concern for littoral States of the IOR.

- **Gun-Running**. Gun-running is the quickest means for transferring illegal arms and ammunition around the world. There are numerous terrorists' outfits operating in the region. The Liberation Tigers of Tamil Eelam (LTTE), for example, had an entire flotilla engaged in dubious maritime trade. Most of these were registered under flag of convenience, and were difficult to track as they routinely changed names and registry.

- **SLOC Protection**. The Indian Ocean is home to important SLOCs and maritime choke points. A large volume of international long haul maritime cargo from the Persian Gulf, Africa and Europe transits through this ocean. Imports to South Asia from West Asia use the Straits of Hormuz. Closure of the Straits of Hormuz practically cuts off Gulf supplies to the East altogether and also affects the West considerably. Similarly, the closure of the Straits of Malacca, through which nearly 9.4 million barrels of oil per day flow (according to the EIA), can seriously threaten the economies of Southeast Asia and the energy intensive economies of China and Japan.

- **Piracy**. Most of the pirate attacks and hijackings on high seas are clustered in three areas: the Gulf of Aden and the eastern coast of Somalia; the coast of West Africa; and the Indonesian archipelago. Piracy also occurs in Southeast Asia, off the African west coast

and in the Caribbean, but the explosion in the number and scope of incidents in the Horn of Africa has captured the world attention.

- **Maritime Pollution and Oil-Related Environmental Disasters**.  Oil-related disasters at sea create havoc with the ecology in the maritime environment and have the potential to affect maritime security. Regional governments are deeply concerned with major oil spills or wrecks of oil tankers at narrow approaches to harbours and choke points, since such spills can seriously affect the flow of merchant shipping traffic.

- **Natural Disasters**.  The IOR is sometimes called the "World's Hazard Belt" is subject to floods, droughts, cyclones, earthquakes, tidal surges, landslides, Tsunamis etc. Almost 50 per cent of the global natural disasters occur in this region and these are mostly climatic or seismic in nature.

- **Security against Mining**.  Mining of waters is one of the cheapest ways to conduct maritime warfare. Mines may also be laid by non-state actors to a limited extent. It is not even necessary to carry out actual mining operations. The mere threat or a well-calculated disinformation campaign about the laying of a minefield can deter any merchant ship from entering an affected channel or strait.

- **IUU Fishing**.  Illegal, unreported and unregulated (IUU) fishing has become a threat for the livelihood of the people in the region as it causes fishery depletion. Poor monitoring and over-fishing is also a serious matter that the international community must address.

- **Human Smuggling**.  Forced migration due to rising sea levels and polluted sea water is a problem that all Asian countries have to address seriously in the coming years. This is paralleled by growing desertification in East Africa leading to food shortages, which in turn increase migration, much of it illegal. Further, high poverty levels and lack of job opportunities exacerbate the issue.

## RESPONSES TO CHALLENGES

One of biggest challenges faced by the IOR bordering countries is to find ways to overcome the challenges stated earlier. Following are some suggested responses: -

- Creating a multilateral Indian Ocean Region Forum for security discussions.

- Holding an annual conference on maritime cooperation in the Indian Ocean Region.

- Creating a systemic approach that preventsthe hegemonic attempts/claims of regional and extra-regional powers.

- Ensuring socio-economic development of the countries.

- Committing to environmental protection.

- Seeking cooperation rather than competition, but this approach calls for re-organisation and prioritisation of national issues as well as harmonization of policies across territorial boundaries.

- Cooperation among regional organizations is a force multiplier and is often most desirable.

IOR, being a key oceanic body, has a tremendous impact on global maritime trade. It also attracts various traditional and non-traditional security challenges from state and non-state actors. In order to fight these challenges all littoralnations need to come together, not for competition but for cooperation.

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# MARITIME DOMAIN AWARENESS – COASTAL SURVEILLANCE

*By Police Sergeant Koobher Mohesh, Mauritius National Coast Guard*

## INTRODUCTION

Maritime Domain Awareness (MDA) is the effective understanding of anything associated with the global maritime domain that could impact the security, safety, economics, or environment of any island State. Maritime Domain Awareness is a key component of an active layered defence in depth. It will be achieved by improving our ability to collect, analyse, display and disseminate actionable information and intelligence to operational commanders.

To achieve persistent awareness in the maritime domain, the Mauritius Coast Guard has come a long way with new and sophisticated Maritime Domain Awareness tools to preserve and prevent any illegal or illicit activities in the waters of Mauritius. These tools have been reoriented and reinforced with current and emerging capabilities such as the Satellite Automatic Identification System, the Coastal Radar Surveillance System, the Vessel Monitoring System, the Camera Close Circuit TV cameras and the fitment of AIS on surveillance aircraft.

### Need for MDA in the Maritime Zones of Mauritius

In Mauritius, the Maritime Rescue Coordination Centre based at the National Coast Guard Headquarters, is the central point of connectivity to fuse, analyse and disseminate information and intelligence for shared situational awareness in the Maritime Zones of Mauritius. With the current situation as regards to Piracy in the Indian Ocean, the Maritime Security Centre for Horn of Africa has decreed a Piracy Threat Zone for vessels transiting to and from Asian to African Countries. According to the Best Management Practices, all masters of vessels are to navigate outside these piracy vulnerable zones, passing east of the Maldives and Seychelles. This creates a very active sea lane of communication south of Mauritius, making Mauritius a suitable and safe bunkering destination for replenishment and transfer of crew and security guards.

The requirements of safety and security in the maritime domain will keep on increasing and so will NCG's responsibilities and tasks at sea to guard Mauritius to achieve the vision statement of any Coast Guard officer in providing Maritime Safety and Security in the waters of Mauritius.

However, the challenges/threats in the Maritime Domain are diverse and plenty. Many have existed since long but are now being addressed/ capitulated and Mauritius being an island

State in the Indian Ocean has an Exclusive Economic Zone (EEZ)/ Maritime Zones of 1.9 million sq km. This is likely to increase further by an area of approximately 703,000 sq km, if the claims of extended EEZ submitted with the United Nations Commission on the Limits of the Continental Shelf (UN-CLCS) are accepted. Some worthy facts concerning the Maritime Zones of Mauritius are enumerated below:-

- The Maritime Zones of Mauritius together make an area about 1000 times the land area of Mauritius.

- The EEZ of Mauritius is comparable to the EEZ of countries like India, which has an EEZ of about 2.01 million sq km.

- The Search and Rescue Region (SRR) of Mauritius is about 2349 times the landmass of Mauritius.

- Nearly 30% of the EEZ of Mauritius currently falls in the piracy prone area.

- The EEZ of Mauritius is rich with stock of a variety of fish, including pelagic and demersal species. Fisheries resources exploited in the EEZ include the island-based artisanal fisheries, the offshore demersal fishery off the banks of the Mascarene Plateau and the Chagos Archipelago, and the tuna fishery in the Western Indian Ocean. The fisheries sector presently accounts for 1% of the country's GDP and employs some 12,000 people.

- The policy of the Government of Mauritius is to develop Mauritius as an important seafood hub and Government is actively engaged in projects relating to the conservation of fisheries biodiversity and the development of aquaculture.

- 99% of the external trade of Mauritius transits over the sea. Any disruption of the same could have severe effects on the economy.

- Lastly, the NCG is the only specialised maritime arm under the Mauritius Police that is tasked with the safety and security of such a vast EEZ, as also to coordinate SAR in the vast SRR.

The NCG being the only maritime organisation of Mauritius, whose main duties are the enforcement of laws relating to the security of the state of Mauritius, the enforcement of laws relating to the protection of the Maritime Zones of Mauritius, and the detection / prevention and suppression of any illegal activity in the Maritime Zones of Mauritius (the term implies widely different responsibilities in different countries, from being a heavily armed military / Naval force with customs and security duties to being a volunteer organisation tasked with SAR functions).

Further, among the various responsibilities that may be entrusted to a Coast Guard are:-

- Search and Rescue.

- Enforcement of Maritime Laws.

- Safety of Vessels.

- Maintenance of Seamarks.

- Border Control.

- Pollution Response.

## ENHANCING MDA IN MARITIME ZONES OF MAURITIUS

The recent incidents that have occurred on some island States and the terrorist attacks in Mumbai, and the fact that Mauritius is a tourist destination and a potential sea-food hub in the Indian Ocean, the Government of Mauritius has taken several measures to tighten the security of all mariners and sea users operating in the waters of Mauritius and enhance the safety of boat users and tourists operators. The succeeding paragraphs highlight the various MDA tools at the Maritime Rescue Coordination Centre manned by the NCG that have been commissioned to enhance the safety and security of mariners operating in Mauritian waters.

The Coastal Surveillance Radar System was commissioned into the NCG in April 2011. The system can further be upgraded using modern technology to allow closer monitoring of seaborne activities inside remote bays and inlets that are not adequately covered at present. The system comprises essentially a network of eight manned remote stations with a local radar and AIS (Automatic Identification System) display. Five of these stations are located along the coastline of mainland Mauritius and three are positioned on the Outer Islands (Agalega, Rodrigues and St Brandon). Mainland radar stations are located at Grand Gaube, Pointe du Diable, Gris Gris, Le Morne and Albion. This system aims at assisting the NCG in the following:-

- Expanding maritime domain awareness.

- Enhancing coastline and EEZ surveillance.

- Improving monitoring of fisheries activities.

- Enhancing Search and Rescue capabilities.

The radars, which primarily operate in the S-band, are used to detect surface as well as air targets up to a range of 40 to 45 nm. However, radars do not give information about target identity. For this purpose, the stations are equipped with AIS that can pick up identity information broadcast by the following types of ships under IMO Regulations:-

- Ships of 300 tonnes and above engaged in international voyages.

- Cargo ships of 500 gross tonnage and above.

- All passenger ships irrespective of size.

The radar station therefore receives two types of information. One is about the presence of a vessel (at a certain range and on a certain bearing) and the second is about its identity (in the event she is an AIS fitted vessel). These data are then routed via a communication network (Internet) and shown on a Common Operational Picture Display (COPD) at the Control Centre at NCGHQ Operations Room. The following are salient in this regard: -

- The radar based Coastal Surveillance System is intended to detect surface and air targets within the elevation beam of the antenna and provide an integrated picture of movement of targets around Mauritius and its islands.

- The system consists of a network of manned remote stations with a local radar and AIS display.

- Remote stations are networked with a Control Centre.

- An integrated picture of radar and AIS targets displayed at the control centre and made available for viewing on the internet through secured login.

- Coastal Surveillance systems are a means of detecting unknown vessels, allowing them to be identified and monitored, as well as providing 'Command and Control' to permit direction, vectoring and interception protection.

## CSRS' Contribution towards Enhancing MDA in Mauritian Waters

Since the its commissioning, the system has proved extremely useful in generating MDA in the territorial waters of Mauritius whereby all the vessels are interrogated and all information shared with NCG stations around the island. If in doubt regarding the safety of the vessel, sufficient time is available to take action to prevent an environmental disaster. It is pertinent to

note that since the commissioning of the Coastal Surveillance Radar System, three cases of merchant vessels loaded with cargo and fuel oil, which had encountered machinery breakdown and were drifting dangerously towards the mainland, were detected in time and an environmental catastrophe avoided by mitigating actions being taken in time.

The NCG Ops Room also exercises control on all vessels entering Mauritian territorial waters. Vessels over 500 GRT, fitted with AIS, are easily picked up by the CSRS and their movements are monitored. Moreover, vessels are calling at Port Louis Harbour for non-standard port calls for operations such as transfer of arms, bunkering, change of crew, ship-to-ship transfer, etc. Therefore, the NCG Ops Room has adopted a proactive approach to prevent vessels without proper authorisation from misusing the right of innocent passage in the territorial waters of Mauritius. The NCG is making best use of the recently installed CSRS to maintain round the clock vigilance in the Port Louis harbour, numerous bays and especially over the large number of passes in order to monitor vessel traffic in and out of Mauritian lagoons. The CSRS is also being utilised to detect, track and monitor shipping movements in the EEZ of Mauritius, up to an exploitation range of 96 nm. NCG ships and aircraft patrols are also coordinated by NCG Ops Room to augment the surveillance effort.

The system has enhanced the MDA of the NCG in the following domains:-

- Command and Control of maritime/ SAR forces/agencies.

- Border Control.

- Fight against Drug and Smuggling.

- Prevention of smuggling and illegal immigration.

- Fisheries and EEZ monitoring.

- Disaster response.

- Search and Rescue.

- Environmental protection.


**Vessel Monitoring System (VMS)**

The NCG Ops Room keeps strict control over all local and foreign fishing vessels licensed to fish in the EEZ of Mauritius through the VMS. The licenses of fishing vessels, which have been authorised to fish in the EEZ of Mauritius, are communicated to the NCG on a regular basis and are strictly monitored. As such, vessels fishing with expired licenses or those failing to communicate to the NCG or Ministry of Fisheries regarding their entry or exit in the EEZ of

Mauritius are booked accordingly. IUU (Illegal, Unregulated and Unreported) vessels are also strictly monitored. The system has also proved very efficient in the maritime domain in informing all fishing vessels operating in the vast EEZ of Mauritius about any seasonal climate change and natural disaster. It is also an important tool to advise masters of fishing vessels with information sharing in the event of any piracy attack in the Indian Ocean.

## Long Range Identification and Tracking (LRIT)

Piracy has become a serious problem for shipping in the Indian Ocean. Passenger ships have avoided using the sea route in the Indian Ocean, especially closer to Somalia. Merchant ships are at threat of being hijacked and losing their trading goods. NCG Ops Room closely monitors piracy alert websites and plots all piracy incidents reported in its SRR, as received through MSCHOA (Maritime Security Centre Horn of Africa) or directly through the IMB KL (International Maritime Bureau Malaysia). LRIT is used to localise the position of Mauritian flagged vessels in the Indian Ocean. These vessels are thereafter alerted regarding any piracy attack/alert in their vicinity.

## Satellite Automatic Identification System (Satellite AIS)

Other than the AIS system integrated in the CSRS, the NCG Ops Room is also equipped with Satellite AIS to monitor all merchant vessels fitted with an AIS transponder. The NCG uses this MDA tool to obtain information about any vessel in the area and it has proved very effective in various SAR operations and casualty evacuation missions coordinated by the MRCC at Mauritius.

## AIS fitted on Dornier Aircraft/Coast Guard Ships

The NCG has fitted AIS receivers on its Dornier surveillance aircraft and the patrol vessels of the NCG fleet to enable tracking of vessels during their deployment in the maritime zones for Anti-Piracy Patrols. This is especially relevant to the Northern part of the Mauritian EEZ, which has been proclaimed as a Piracy Threat Zone by the Maritime Security Centre. This also serves to reassure the masters of all vessels encountered by NCG patrol vessels regarding their safety and security in the waters of Mauritius.

## Global Maritime Distress and Safety System (GMDSS)

With a view to enhance the safety and security of all vessels plying in Mauritian waters, the NCG broadcasts safety messages through GMDSS or Mauritius Radio Services as regards inclement weather conditions, Cyclones, Tsunamis, Notice to Mariners, and Piracy Alerts.

## <u>CONCLUSION</u>

To conclude, it is worthy to mention that though the efforts of the Mauritian authorities to maintain the vision statement of the NCG for the enhancement of Maritime Safety and Security in the Mauritian waters have been laudable, Mauritius being a small island State and still in the initial stages has been able to upgrade the Maritime Domain Awareness capability to a great degree.

The testimony of these efforts is the fact that the National Coast Guard of Mauritius has been referred to as the third best in the East African region by the *Jane's Defence Weekly* for its commitment, dedication and professionalism in the maritime domain.

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# NEW STAKES IN THE INDIAN OCEAN AND FRENCH POLICY

*By Colomban Lebas, French Navy*

The Indian Ocean has long been considered as a secondary area in most Western geopolitical thinking, particularly in comparison with the strategic centrality of the Atlantic Ocean and, more recently, the Pacific. During World War I, the nodal point of the conflict was located in Europe, even though the Ottoman Empire and the Suez Canal issues - which played a significant role during that war - arose from the concern over ensuring the free flow of commercial supplies.

World War II emphasised the strategic role of the Indian Ocean. Naval forces were deployed in that region to prevent German and Japanese military forces from consolidating at any point between the Caucasus and India, while the Allies attempted to control the Red Sea. The Cold War once more enhanced its importance; in 1966 this prompted the United States to sign an agreement with the British authorities to use Diego Garcia as an air and naval base, in order to counter Soviet challenges in Aden, South Yemen, and Somalia.

Nevertheless, the Indian Ocean has never been considered as an integrated area, wherein the continental concerns of coastal countries are interlinked with the naval issues implied by the presence of an ocean. In the traditional approach, maritime and naval questions were addressed as if they were almost totally distinct from local or continental stakes, whether the events occurred in Pakistan, Iran, India or East Africa: their main explanation was often confined to expertise in a regional perspective and followed a territorial reasoning.

However, globalisation and the growing dependence of major powers on shipping lanes overturned this perception at the turn of the century. International power increasingly stems from economic superiority, and the commercial success of a nation is inextricably linked to its ability to control and maintain the maritime security of its environment, exchanging the support of a big security supplier against the acceptance of a "bandwagoning[33] foreign policy". Thus, the geopolitical stability of the main areas serving as shipping lanes has become an increasingly important issue of international life. These phenomena have led to a major change of perception regarding the Indian Ocean, making this relatively neglected area one of the biggest challenges of the 21stcentury.

Several factors have contributed to the rising strategic importance of this ocean. First, in recent years, China has emerged as an increasingly major global player, shifting the centre of gravity of the global economy to Asia. The subsequent emergence of India, which will probably

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33   Cf. Quincy Wright in A Study of War (1942) and Kenneth Waltz in Theory of International Politics (1979)

be one of China's main strategic competitors, even forecast to eventually exceed its demographic weight, is yet another factor that could explain the growing attention being paid to the Indian Ocean.

The dual threats of piracy and terrorism are also behind the rising concern over the Indian Ocean, and a symptom of its new strategic centrality. We should not forget that fighting terrorism and piracy can also be analysed, from China's point of view, for example, as a "convenient means" to get involved in the global security of this crucial oceanic area, without frightening its smaller neighbours nor generating tensions with its geopolitical competitors, such as India and the United States.

The Indian Ocean should be seen from at least four main angles.

• Firstly, it can be understood as a transition space from European and Mediterranean countries to South Asia and Western Asia.

• Secondly, it appears as a crucial communication space between the key energy resources of the Middle East and the potential superpowers, China and India, whose growth hinge on their access to crude oil.

• Thirdly, it can be analysed as a main source of potential growth and economic prosperity for the three coming decades. This hypothesis raises the question of what the geographical definition of the relevant zone should be: Indian Ocean or Indo-Western Pacific region?

• Fourthly, and more pessimistically, this ocean can be seen as one of the main theatres of major international rivalries in coming years. The Indian Ocean circle includes not only China, India, Singapore, Myanmar, Thailand, Indonesia, the US and France (with 1 million French citizens in the region), but also Pakistan and Iran, as well as regions like the Arabian Peninsula, and, lastly, East African countries: the latter could be the drivers of a future growth dynamic, possibly led by South Africa, succeeding the current era of Asian arising.

## A Heterogeneous Area Lacking Unity

The main characteristic of this region is its heterogeneity. The Indian Ocean is at the confluence of several major historical civilisations. Predominant in India, Hinduism has influenced other religions and cultures throughout the region. Islam, notably present in its Sunni, Shiite and Sufi forms, is followed by an especially wide range of people in Indonesia, Iran, Pakistan and India. Buddhism and Confucianism are present too. African cultures, Malagasy and Mauritian cultures are also present in this area where the West left its footprint long ago. The

religions are numerous and inextricably entangled. Heterogeneity can equally be observed in the political and economic situation of most of the States that make up this region. Some of them, like India or South Africa, are democratic. Others are under authoritarian rule, as may be seen in many African or Middle Eastern States.

It is this diversity that lies behind the numerous conflicts that destabilised the region in the past. Undermined by a sort of fatal propensity for fragmentation, this area seems to waver between a common interest for stability and prosperity, and centrifugal forces that easily counter these positive intentions. The other main original characteristic of this oceanic area is the considerable place of major extra-regional players. From the old UK conception of the Indian Ocean as a "British lake", to the well-known era of US domination of this strategic theatre - particularly prevalent from 1945 to 2005 despite the intense competition between the two Cold War superpowers period - it seems to have been either used for the deployment of a hegemonic power, or, at other times, become the stake of strong rivalries fed by external players. Today, the perceived waning of the US presence - due to financial difficulties and despite the much touted "Asian Pivot" - has created a major regional uncertainty and, if it is verified, could jeopardise stability. These factors will probably prevent much-needed credible and solid multilateral institutions from being built. Beyond this, the reasons for concern over the future of the region are many, with large-scale environmental problems likely to be the number one issue in the coming ten years. Piracy and terrorism remain major threats to shipping lanes, which are necessary for the prosperity of both Western and Asian economies; they also increase insurance and security costs. The consequence of all these factors is that the Indian Ocean is potentially a troubled and unstable region, apparently without any real unity, common identity or collective goal.

## A Key Area for the World Economy

In spite of this turbulent environment, the Indian Ocean appears as a key trade area in the context of the economic globalisation of the early twenty-first century. More than 80% of global oil exports are dependent on free shipping in the Indian Ocean's three crucial chokepoints - Bab el Mandeb, the Straits of Hormuz, and the Straits of Malacca. Further, energy supply requirements will likely rise by 50% over the next 20 years, mainly because of China's and India's growth, which will automatically increase the weight of the Indian Ocean in global energy transportation. These perspectives will also underline the need for stability and security in the area required to ensure continued growth. These points are and will be major challenges for the main players of the region, such as India and China. On the other hand, considerable Asian exports that are vital for Europe use the Indian Ocean to reach major maritime infrastructures like Rotterdam (the Shanghai-Rotterdam flow, for example, can be qualified as "a vital artery of globalisation"). Moreover, the economic weight of Australia is another important aspect that should be taken into account to appreciate the importance of promoting security and stability in the area.

Nevertheless, the Indian Ocean area is at the heart of varying strategic tensions, some exogenous, others endogenous. In addition, some threats are transnational, while others are state-centred.

The foremost of these tensions is the heightened Sino-Indian naval rivalry. It is well-known that China has been financing maritime infrastructure along key chokepoints in the Indian Ocean. The purpose of the acquisition of these naval facilities is viewed by some observers as to attain not only an economic objective, but also an unrevealed, future strategic goal. China is well aware that terrorism and piracy are not the only threats it faces. This aspiring superpower has identified its growing dependence on maritime spaces and ocean resources and the undeniable geographical advantage India enjoys precisely in the "Indian Ocean". On the other hand, China has perceived India's considerable ambitions with acuity, particularly regarding naval power. All these are points that lead the analyst to conclude that there is a very classic security dilemma between the two emerging regional competitors, as described by international relations theory in its neo-realist version. The Chinese "challenge", despite its diplomatic veneer, has been a key driver of India's resolve to develop its naval power, alongside growing economic dependence on the Maritime domain. China is gradually becoming a major naval power by improving its naval capabilities to a point that would enable it to defend its economic interests.

While the "string of pearls" theory tends to overstate the military-strategic purposes behind the establishment of a network of maritime facilities spread out across the Indian Ocean (more precisely, along the sea routes from the Persian Gulf to the South China Sea), it cannot be ignored that, in a fighting configuration, such accessible approaches to the main strategic chokepoints could hold the key to military success.

The naval ambition of China in the Indian Ocean is also a key factor in its decision to develop a submarine base near Sanya, in South China Sea. A number of explanations could be offered to understand this decision, from nuclear strategy to maritime delimitation considerations. Whatever the complex motivations for setting up this naval base, one key reason is its proximity to the Indian Ocean and the Malacca Straits, which is of major military interest. New Delhi views this strategic Chinese choice with much concern.

Further, close Sino-Pakistani ties are another source of anxiety for India. Pakistan's naval capabilities alone are not in themselves a big challenge for India. But the cumulated naval forces of the two countries could prove to be a serious threat for New Delhi. In this context, China's involvement in building the deep-sea port of Gwadar is another subject of concern for India. Is this not the first step towards setting up an overseas Chinese military base? Shen Dingli, a prominent Chinese professor and intellectual, has advocated a military policy highlighting the benefits that such an overseas establishment would provide China. It would, in fact, be a convenient way to diminish the logistical constraints arising from the remoteness of the vital waters of the Indian Ocean.

Those challenges highlight the importance of its US partnership for India. The US is obviously a major player in the Indian Ocean, but its present difficulties need to be studied: will it be possible in the long term for America to continue sufficient force projection to monitor the delicate balance of power in the Indian Ocean? Or will the crisis drastically reshape the global balance of power to the benefit of new or emerging powers, such as China, India -South Africa and Brazil? This would result in leaving the "more ordinary powers" alone to cope with a likely unrestrained China. For obvious economic reasons, maintaining balance of power and its strong involvement in Iran and Israel, it is highly improbable that the US will disengage from the Indian Ocean. Nonetheless, its moves need to be carefully and thoroughly analysed.

For India's part, the ongoing acquisition of the aircraft carrier *INS Vikramaditya* (formerly *Admiral Gorshkov* in the Russian Navy) and strategic assets (Scorpene submarines, loan of one SSN from Russia, etc.) should be seen as the logical consequence of the emerging Indian awareness of the tough naval competition building up in the Indian Ocean. In coherence with this choice, the Indian Navy is trying to acquire a 140 to180ship fleet over the next decade. The goal is not to balance the future Chinese naval power but to develop enough access denial capacity to prevent China from strategically exploiting the Indian Ocean in the event of a major conflict. In order to ensure the credibility of their strategies, the two main powers in the area have initiated a diplomatic competition for regional partnerships. For instance, in congruity with its US strategy, India has identified Australia as a promising key partner to help counter the rise of Chinese influence.

To complete this quick overview of the strategic configuration of the Indian Ocean, mention must be made of other non-conventional threats, such as piracy and terrorism, which could spike in the coming years in an ideologically and religiously disharmonious area that includes failed or collapsed States. There is a real risk of spreading endemic chaotic configurations. And their uncontrolled proliferation could significantly disturb the economic development of the area. It should also be kept in mind that Pakistan, India and China are nuclear powers and Iran has very well-known nuclear ambitions, which adds a very specific complexion to potential conflicts in this area.

## A Nascent Unstable and Complex Security Architecture

It therefore follows that the security architecture of the zone is far from optimal. What can be observed is the overlap of numerous but often impotent or weak organisations that cannot prevent bilateral relationships from weighing on the determination of a regional strategy? Instead, what the heterogeneity of the region demands is the promotion of a flexible cooperation of sub-regional organisations that can co-ordinate with each other in the general institutional environment of the Indian Ocean.

**<u>French Policy in the Indian Ocean: An Ambitious Diplomacy for a Potentially Crucial Area in the Twenty-First Century</u>**

Thanks to its longstanding presence in the Indian Ocean, France benefits and will continue to benefit from a real and deep influence in this area, which is vital for its interests. The 2008 "Livre Blanc" (White Book) has clearly extended the French Area of Interest to the limits of the Indian Ocean. The establishment of a new military base in Abu Dhabi in 2009 should not too hastily and exclusively be associated with the Iranian concerns. Such has been the stance of several commentators, but this should rather be seen in the light of the increasing strategic and economic centrality of this region and as the natural outcome of dynamic commercial military relationships with the Emirates for the past ten years.

The first reason for France's strong involvement in this region and a long term guarantee of its permanent presence is the obligation to protect its several territories and over one million French nationals living in this area. The second reason is, of course, a question of international economy. The vital flows of Shanghai-Rotterdam, or more precisely Malacca-Suez, should be completely secured to protect French and European economic health. The third reason could be France's ambition to maintain - and participate in the preservation of - a stable balance in a region that is the privileged crucible of the reshaping process of the new global balance, in an ocean where latent antagonisms are numerous and complex. The fourth reason could be the beginning of a new dynamic of prosperity in a region that includes a significant part of the future major economic players of the twenty-first century, be they Asian, Middle-Eastern or even American countries. The fifth reason, possibly, albeit not necessarily due to present conditions, is the French duty as a major player in the area to participate in the fight against terrorism and piracy, which Paris has done, particularly by its active contributions to the European Union anti- piracy Task Force, EU NAVFOR Atalanta, to the CTF 150 and more globally to Operation Enduring Freedom.

To reach these ambitious goals, Paris can draw on its long-established presence in the region. France has territorial positions in Reunion Island, Mayotte (also a "French department" since a popular vote in 2009), and the French Southern and Antarctic Lands. These territories entitle France to be part of some regional groups, multilateral organisations and international forums e.g. IOR-ARC (Indian Ocean Rim Association for Regional Cooperation, established in 1984) and develop privileged interactions with yet other groups. Moreover, it can also use its proximity with Djibouti, where it has a military base.

Due to all the preceding considerations, France has an important role to play in overseeing the overall Indian Ocean maritime security, in close co-operation with not only its US partners and European allies but also key regional powers, such as India. Both countries are working in the framework of their Strategic Partnership, in which Defence and Counter-Terrorism are key pillars.

As French Admiral Jean Dufourcq stated in a recent interview , the Indo-French relationship is strong, because of great strategic convergences: common perceptions about what would be an ideal geopolitical order; a strong shared vision of balance in the Indian Ocean; and major commonalities between their oceanic schemes and their independent strategic personalities. It is in this context that the French and the Indian navies are performing joint exercises regularly and are working on important submarine programs.  From France's point of view, marked by the location of French settlements, the area could be virtually divided into three different zones from North to South. First, a Djibouti-Persian Gulf axis: Paris has a new base (Abu Dhabi) in this region and defence treaties with Djibouti and several Gulf States. Second, the area of the South Indian Ocean: there are the two French departments of Reunion and Mayotte where the present forces could be deployed to ensure security in the East African area, in which France has been strongly involved for a long time. The third region is the one that leads to the extreme south, which is clearly a very different area and not only because of its inhospitality. However, it is yet another region with strong French involvement because of its territories (eg the Kerguelen Islands, Crozet Islands and the Scattered Islands), scientific and meteorological stakes, and, lastly, natural resources and environmental concerns.

The Indian Ocean region, indeed, appears as a key oceanic system for the future of the planet, as much from a geopolitical and security point of view as from an economic and environmental one. This area will probably be the stage where major global games will be played in the coming decades. The outcome of this game will probably decide the future trajectories of the major world powers. France has the golden opportunity of being well established in this region, first for historical reasons but also because of geo-strategic and geo-economic considerations, and, of course, because of its determination to be at the top of the international hierarchy of power in the coming decades. To reach this goal, France must strengthen its historical links with its local partners, while adapting the relative intensity of its involvements according to regional changes and the emergence of new stakes. There is no doubt that, despite difficulties, by combining a perceptive analysis of this evolving situation with an intelligent, precise, rational and continuous readjustment of its main involvements in this zone, France may be able to attain these ambitious aims.

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34   Herodote Review, n145, La Découverte, 2ème Trimestre 2012

# CONVENTIONAL V/S CONSTABULARY ROLES OF NAVIES

*By Lt Sonam Shah, Indian Navy*

## INTRODUCTION

In the present era, navies of the world are called upon to fulfil multifarious functions, ranging from power projection capabilities entailing massed fleets comprising aircraft carriers and submarines to engaging asymmetric threats, and anti-piracyoperations that envisage a totally different dynamic. More so, due to the advancement in technologies and the emergence of the 'blue water' capabilities among various Navies, the gamut of maintaining regional and economic stability, providing deterrence and halting aggression in an early conflict have also fallen within the purview of this dynamic, self-sustaining and multi-dimensional force. With respect to its multi-dimensional operating methodology, the question of Humanitarian Assistance and Disaster Relief (HADR) has also been adequately tackled by the navies of the world, as and when the need has arisen.

## AIM

This essay attempts to engage and argue the topic "Conventional v/s Constabulary Roles of Navies". Firstly, it would discuss the 'conventional' roles which the navies of the world have been fulfilling in the present era. Then it would go on to discuss the 'constabulary' roles and why they have garnered pivotal proportions today. It would shed light on the reasons which make the constabulary role of navies a critical one, and attempt to delineate the factors which link the conventional and constabulary roles.

## CONVENTIONAL ROLES

By conventional roles, we generally refer to the control of the seas for purposes of projecting power and maintaining political influence, economic prosperity and military superiority. Since it would be both inconvenient and cumbersome to list the roles as envisaged by all the navies of the world, a generic, yet not inaccurate, list of roles and functions has been drawn out from a survey of the South African, Indian and US Navy's general charter of duties and tasks. The roles as envisaged by a navy are military, diplomatic, constabulary and benign.

It would be easy to discern a marked similarity in the vision prescribed in the ascribed doctrines of most navies. This can be attributed to the fact that most navies belong to countries, which are often in a similar position in regard to their geopolitical predicament in their respective

geographic domains. While South Africa is the only country in Africa with substantial naval resources, India is one of the fastest growing economies and is set to play a significant role in South Asia. Moreover, it does have a strong and fast-growing navy. Hence, the two and their concerns vis'-a-vis' focal areas can be taken as being representative of the wider paradigm of nations with similar economic and geopolitical concerns.

Since a country's military and naval policies are very much determined by its foreign policy, it would be logical to think whether the roles and functions envisaged by the navies of the developed countries of the world be different from the developing ones. To an extent, the two have common ground. But as the foreign policy of most developed nations is different from the developing ones, there are various divergences which become evident in their maritime strategies as well.

It should also be brought out that certain changes in the global maritime scenario have re-emphasised how the navy, acting in its conventional capacity, has been instrumental in bringing about those changes. Conversely, it is also true the focus of the navies today is being very much determined by a plethora of ever-changing geopolitical and diplomatic dynamics.

Discussed below are some of the geopolitical dynamics, which highlight the ever-evolving 'conventional' roles of the navies and how they have been instrumental in bringing about those changes.

## Changing Global Maritime Environment

The dynamics of the global maritime environment have changed more dramatically over the last few decades than in any other era. With nations such as China, India, South Africa, Brazil and Indonesia coming to the fore in view of their growing economic and military potential, and Europe, as a whole, experiencing the pangs of a post-recession economy, the power equations on the world political stage are in the process of transition. Initiatives like BRICS and ASEAN are slowly gaining momentum. The United States, which happens to be the sole superpower, has also responded to such a transition with poise and deliberation. Such a transition is, apart from other reasons reflected in the •changing naval doctrines and practices, taking shape among the various navies of the world.

An example that would adequately illustrate how a changing global scenario is affecting maritime relations is by taking a view of the Indian Ocean region. The Indian Ocean region is seen as the 'energy highway' of the world. The concerns of the emerging powers and of European countries would be that this region is one of the major lines of energy imports. Not only does most of oil and gas shipping transit through this passage, but most energy resources are also produced in the littoral states. The navies of the major littoral states, namely India, China,

Indonesia and the NATO countries will play a major role in ensuring that focus on the lOR is constant and continued.

From the above illustrations, which encompass United States, India, China and a host of other littoral states on the Indian Ocean rim, it becomes adequately clear that the role of the navies of the world predominantly entails maintaining a presence, projecting power, securing the commercial interests of their respective countries and if the need arises, then taking pre-emptive action to prevent any contingency, which threatens their interests in the region.

## Trade and Energy Security

In the present era, trade, and more so, international trade is one of the key ingredients which fuels a country's economy in particular, and the world economy in general. Also, in view of the emergence of burgeoning economies with vast populations, the criticality of energy security can't be stressed upon more than it has already been. The critical relationship between trade and a country's GDP vs INB (International Bunker Fuel), in regard to the OCED (Organisation for Economic Cooperation and Development) countries, underscores the importance of trade and the constant need to safeguard it. Hence, safeguarding their respective trade routes vis'-a-vis' energy interests is one of the major agendas which have determined the naval policies and will continue to do so in the future. This is only one of the major reasons why the United States in particular, and the other western countries in general have begun taking the IOR region very seriously.

The much talked about 'String of Pearls' strategy which China has supposedly been pursuing in and around the Indian Ocean region is another case in point. China's expansionist aspirations are closely linked to its growing dependence on maritime space and resources in the Indian Ocean. With almost 80 per cent of China's oil passing through the Strait of Malacca, China has moved to build up its naval power at choke points along the sea routes from the Persian Gulf to the South China Sea.

Hence from the above cited instances, it becomes adequately clear that a country's commercial and economic interests will continue to determine the role of its navy in the future. Thus it would be problematic to circumscribe the focus of navies to one or two functions.

## Humanitarian Assistance Disaster Relief

Administering Humanitarian Assistance and Disaster Relief or HADR was, is and will be one of the omnipresent roles of the navies of the world. The characteristics of a maritime force-readiness, flexibility, sustainability, mobility, manoeuvre and interoperability - ensure that such will be the case for as long as natural calamities befall mankind.

A massive earthquake hit the South Asian region on 26 December 2004,

killing more than 200,000 people and affecting countless more. Many countries pressed relief efforts in the region. About 647,000 people were moved to safer places-about 630,000 on the mainland and about 17,000 in the Andaman and Nicobar (A&N) Islands. This large-scale movement of people was made possible by the mobilisation of 22 Indian naval ships, 11 coast guard ships, 12 airplanes, and 17 helicopters.

The versatility and quick-reaction characteristics of the navies (and other armed forces in the above cited) show how critical the role of the armed forces in general and the navies in particular is during a contingency like this. HADR is a recurring and important role which the navies of the world are called-upon to fulfilduring times of contingencies. It would be important to mention that enhancing their HADR capabilities would also figure among the focal points of naval operations and evolutions.

Thus, apart from power projection, securing a State's trade vis'-a-vis' economic interests and HADR another role which has arisen and garnered adequate weight age for itself in the international arena is that of conflict prevention and halting (internal and external) aggression amongst two parties in an early conflict.

## Counterterrorism

In the aftermath of 9 / 11, this aspect of security has garnered immense weight age among the governments of the world. Yet, navies of the world, as instruments of their respective governments, have recognised and responded to this threat as a formidable and valid one. In the aftermath of the fall of the Taliban regime in Afghanistan, the focus of the NATO members in general and that of America in particular, has shifted to countering terrorism in other parts of the world. The vast naval resources of the NATO countries are one of the chief enabling features in pursuing these goals.

## CONSTABULARY ROLES

The sharp increase in theincidence of piracy and armed robbery on the high seas and around coastal areas is what brings the constabulary role of the navy to the fore.Piracy off the coast of Somalia has not only increased over the years but also expanded into the deep ocean.

The significance of this constabulary role can be gauged from the fact that for a third of the world's navies, this is a major facet of their functions. It would be of more significant to discuss the role that navies of the world are playing in their constabulary capacities in containing this asymmetric threat and how this will continue to be a major preoccupation until more effective

strategies and policies are devised to address piracy. The security concerns in the Red Sea, which has amongst its littorals Egypt, Saudi Arabia, Israel and Yemen, happens to be a critical conduit for east-west trade and for the transit of naval forces between the Atlantic and Indian Ocean. The security concerns include trafficking of illicit drugs, weapons and people, piracy and armed robbery at sea. The navies of a host of nations including Egypt, Israel, Saudi Arabia, the American 5th Fleet and other NATO countries are involved in countering these non-state agencies.

Similarly, the Malacca Straits off Indonesia provide a vital shipping lane for vessels sailing from Europe and the Middle East to East Asia, as well as smaller vessels on local voyages. However, whereas piracy off the horn of Africa has grown and expanded over the years, incidents have been on the decline in this region.

## In Hindsight

It would be important at this juncture to pause and reflect upon the problem and how it has led to an increased stress upon the constabulary roles of the navies. The main cause of piracy is economic. The estimated cost of piracy for the international community was between USD 4.9-8.3 billion, and the total income to pirates from piracy was USD 75-238 million in 2010. Thus, it would not be too inaccurate to state that piracy and armed robbery is and should be viewed as economic terrorism. It becomes amply clear why the scourge of piracy has taken such formidable proportions for the governments of the world, who, in turn have responded to it by vehemently stressing upon the roles of their navies in constabulary roles to address and if possible, eradicate this menace.

## CONVENTIONAL VS CONSTABULARY: THE FOCUS OF NAVIES

To put the issue in perspective, the constabulary roles of navies of the world arise from the fact that there are many non-state agencies (NSAs) which depend on a plethora of illegal activities carried out in the high seas for their sustenance. If these illegal activities are confined to small-scale trafficking and smuggling, the local state agencies such as the coastal police, coast guard and navy of a particular nation or state addresses, engages and neutralises them. However, if the illicit activities of NSAs reach a humongous scale, width and proportion (as found on the horn of Africa for instance), it begins to nip the nations at a place where it hurts most: their trade line, which in turn bears adversely on their economies. No nation today, or earlier, is exonerative of such developments.

However, this does not imply in any way whatsoever that the conventional roles of the navy take a backseat. Rather, the conventional roles of the navy, such as power projection,

HADR, sea control and national security only gather more weight and momentum with the changing global scenario. In addition, the constabulary role of the navies should be seen in a broader paradigm of ensuring safe seas that entail greater trade, cooperation and freedom of navigation of all sea going nations. In essence, constabulary roles not only call upon the navy to protect a nation's or national interest on the high seas, it entailsthat they protect the interests of humanity at large. And this would be a befitting way to look at the constabulary operations carried out by navies, irrespective the nationality of merchant vessels they are called upon to protect.

## CONCLUSION

To conclude, the issue isn't and shouldn't be conventional v/s constabulary as the objectives vis'-a-vis' contending interests of both roles are fairly diverse. Also, the operational methodologies during responding to constabulary roles are very different from conventional ones. More so, while speaking of the focus of navies, any opinion must include the prevailing maritime scenario. And in the current scenario, we see how incidents of piracy and armed robbery have increased with a corresponding increase in trade volumes. Hence, the role of navies in constabulary capacity will assume greater gravity in times to come. However, due to the dynamic and (often) volatile nature of inter-state relationships, and in view of the changing paradigm of world politics, conventional roles of the navy were, are and will be at the focal point of the foreign policies of all sea-going nations, irrespective of them being first world, second world or third world. Hence the focus should be on devising a holistic operating principle keeping in mind the various contending issues and scenarios.

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# HUMANITARIAN ASSISTANCE AND DISASTER RELIEF

*By Lt NaingAung, Myanmar Navy*

## INTRODUCTION

The delta region of Myanmar was devastated by Cyclone Nargis on Tuesday, May 2, 2008, causing over 140,000 deaths, injuring over 50,000, and rendering over 50,000 homeless. The cyclone affected more than 50 townships, mainly in Yangon and Ayeyarwaddy Divisions, including Yangon, the country's largest city and the commercial hub of Myanmar. Cyclone Nargis was the worst natural disaster in the history of Myanmar. The warning of the eminent storm was received in good time. However, the magnitude of the impact of the cyclone was unimaginable, and left the authorities as well as the inhabitants ill-prepared to take sufficient precautionary actions. Until the storm struck, none had heard of, or expected, a calamity of such magnitude. Cyclone Nargis was big news at the time of the event, and the extreme death toll and devastation serve a reminder that cyclones remain a major threat to IOR littoral nations.

## DISASTERS

Natural disasters are the result of natural forces as well as human activities. War, genocides, armed terrorism, pollution, global warming and climate change are manmade disasters whereas, floods, draughts, hail storms, landslides, earthquakes, forest fires, volcanic eruptions and epidemics may be called natural disasters. Disasters, whether a result of natural forces (extreme weather or geological activity) or human activities (conflict, social upheaval and pollution) cause inestimable devastation, loss of lives and property, human displacement, besides leading to trauma and a slowdown in economic and social development for a decade or more.

Large scale calamities or disasters, which have occurred in different parts of the world in the last decade have highlighted the importance of effective coordination and response by various governmental agencies including military forces, especially the Navy, and NGOs.

### Disaster Relief

Disaster Relief is the emergency assistance provided to ease the effects of natural disasters such as typhoons, floods and earthquakes, and, manmade calamities such as industrial accidents and / or the results of conflict. The Asian region is disaster prone due to its geographical location and inherent geology of the landmass. Whenever a disaster occurs, the government and the community undertake first-aid emergency measures, followed by supply of relief goods by other internal agencies, NGOs and foreign aid. However, the provisions received make up only a fraction of the required volume.

Relief and rehabilitation tasks after occurrence of disaster include rescue and rehabilitation. Coordination with other organisations is necessary in carrying out these tasks. Systematic management of rescue and rehabilitation is essential in disaster affected areas.

## Disaster Management

Disaster Management is a term covering preparedness, prevention/ mitigation, emergency response or implementing relief and recovery measures. The goal of Disaster Management is the effective delivery of essential and follow-up services to an affected region. Plans, structures, and assessments are established by national emergency management agencies to coordinate the procedures to deal with such emergencies and calamities.

Disaster preparedness missions cover prediction, rapid response, relocation and emergency actions. Preparedness is linked to mitigation of destruction. However, long-term and short-term actions are dissimilar. Preparedness means preparations undertaken to mitigate destruction to a minimum level in case of an imminent disaster. Disaster Mitigation consists of all preparations and measures taken before, and all recovery measures taken after, a disaster to moderate the severity of the impact of any disaster on the population and the environment. However, mitigation process may be achieved only through mindfulness and awareness. When a disaster breaks out, it is imperative to set up relief centres without delay, and relocate to safe places.

In a contingency plan, the following factors must be taken into consideration:

- Preparation
- Response
- Rehabilitation
- Alleviation

The four steps are not, and may not, be sequential. These are emergency matters that may be carried out simultaneously. Only the government is in a position to implement the contingency plans most effectively and expeditiously. Therefore, the government and its agencies must take the lead in the implementation of disaster relief / mitigation / management tasks.

Being one of the littorals of the Indian Ocean, Myanmar must cooperate in prevention and relief missions in disasters which occur in the Indian Ocean. Relief and rehabilitation missions cannot be accomplished by individual organisations or by an individual government. Governments, NGOs and international organisations must work in concert to achieve desirable results.

In this respect, the role of a Navy is a significant one. For the Navy, there are difficulties unique to disaster response that stem from the dynamic nature of the operations as well as the use of military forces for what has historically been a non-traditional mission set. It is difficult to predict exactly where the next disaster may strike, and it is equally difficult to predict the magnitude of any given disaster. In addition to the uncertainty that disasters present, humanity is also facing a situation in which the number of disasters reported each year is on the rise.

The causes of the increase in disasters include an increase in world population, resulting in a large spread of populated areas. The unique difficulties that disasters pose, combined with the increase in their frequency, make it imperative that the Navy continue to sharpen its level of preparedness and its internal disaster management / relief organisation.

## HUMANITARIAN ASSISTANCE

Humanitarian Assistance aims to save lives, alleviate suffering and maintain and protect human dignity during, and, in the aftermath of emergencies. Humanitarian assistance consists of activities conducted to relieve or reduce human pain, disease, hunger, or adversity created by conditions that might present a serious threat to life or that can result in damage to or loss of property.

### Humanitarian Assistance and Disaster Relief

The immediate objectives of HADR are to save lives, alleviate suffering and maintain and protect human dignity during and in the aftermath of natural disasters and manmade crisis. However, in the last decade the role of HADR has become broader, encompassing all elements of the disaster management cycle.

HADR can be divided into the following three broad phases as follows, each requiring different types of assistance: -

- Phase I - Immediate lifesaving. Search and Rescue, and medical first aid.

- Phase II –Stabilisation.  Life preserving relief operations such as the delivery of aid to prevent deterioration in the situation.

- Phase III - General recovery.  Ensuring humanitarian needs continue to be met in anticipation of long-term rehabilitation and reconstruction.

These phases are not necessarily sequential, and in most cases the second and third are undertaken concurrently. Consequently, effective coordination will be required between agencies with relevant skill sets in each phase.

Each HADR operationis unique. The initial response may occur in relative chaos and there is often a mismatch between necessary resources and situational needs, adding to uncertainty and tension. The government of an affected state may be overwhelmed by the effects of the disaster and the scale of the required response.

As a major component of military forces, the Navy has assumed a large portion of the responsibility. The Navy's surface ships can quickly deploy high quantities for providing aid to the affected areas. The Navy refers to its relief operations as HADR operations, which as on date have the maximum contribution in OOTW (Operations Other Than War) missions executed by any navy. Over the past decade, navies have been instrumental in the relief efforts of the Haitian Earthquake, the Indonesian Tsunami, and Hurricane Katrina, to name a few.

To become more effective in HADR operations, navies will need to understand which asset will be best equipped in responding to specific disasters. The limitation of HADR operations is the inability to predict the nature or frequency of disasters. The unpredictable nature of disasters is what poses the greatest challenge to the HADR process.   Without the knowledge of when or where a disaster may occur, it becomes difficult to predict needs and dedicate assets in providing relief and succour.

## HADR Capabilities

HADR capabilities of a navy must be quick to respond and carry sufficient capability and sustainment for the initial response phase to allow time for planners to generate a more robust medium and long-termHADR response plan. The uncertainty of the environment and multiple requirements in HADR operations only increase the complexity of the planning and response process. In the process of quick response, rescue of survivors, first aid to the wounded, post cyclone sanitation facilities, distribution of food and clothing to the needy, transportation of relief goods for affected areas are the action must be prioritised according to the HADR response plan. Dependent on the size and severity of the HADR situation and what local facilities are available, a response plan would be formulated.

Navies are key deliverers of HADR capability, although HADR is not a primary or frequently executed military mission. Most naval forces receive little training in this area. Assessing own force training and expertise in the requirements of this non-traditional activity is a vital requirement for any navy today. It may be necessary to conduct remedial training using experienced personnel to mitigate risk. Expeditionary Strike Groups (ESGs) do receive training in this area, which may be leveraged in preparing other elements of any force.

## Coordination and Cooperation in HADR

Large scale international HADR response usually encompasses an inter-agency

approach, with military support being one element. Whilst formal coalitions are not normally formed, there may be opportunities to develop multinational support from and for other deployed forces, using arrangements for Affected State support, logistic support and Memoranda of Understanding (MoU).

Neighbouring countries need to be aware of transit issues such as over-flight rights and staging of forces. All efforts on the ground should be coordinated with other contributors in order to generate the desired unity of effort in addressing the needs of the affected State. An integrated approach is required which is facilitated by establishing liaison officers and coordination cells.

In the initial stages of a HADR operation, deployable national elements would be the predominant representatives (military, police civil defence agencies with humanitarian support). Later stages would see the withdrawal of those deployed elements and an increase in the economic/infrastructure/commercial elements to assist in reconstruction and rehabilitation. The success of HADR operations depends on the strength, structure and capability of the contributing national contingents and their effective coordination within the wider relief effort.

## Logistics Planning in HADR

HADR operations by outside agencies are mounted when the Affected State is unable to cope with the magnitude or scope of the situation, usually because of degradation of the Affected State's communication and logistic infrastructure. The Affected State may seek, and invite, international aid and assistance in mounting a dedicated HADR effort.

Effective and timely logistic support is therefore crucial to HADR operations. HADR logistic contingents are frequently provided by Assisting States that do not regularly operate together. Standards of training, doctrine, methods of operation and equipment specification and capability generally vary. Distances and infrastructure limitations from national support bases may often dictate lines of logistic support beyond the capability of national chains.

Military logistics, being expeditionary in nature, is generally most suited for these functions, although there are an increasing number of civilian global logistic partnership organisations that provide similar services. Logistic functions generally required to support HADR operations are: -

- Construction and engineering;
- Accommodation and shelter;
- Provision and preparation food and sustenance;
- Water distribution and purification;

- Power generation;
- Heavy lifting and transport equipment;
- Air/sea port handling assistance;
- Cargo consolidation, prioritization and tracking;
- Personal protective equipment;
- Communications equipment;
- Health and medical supplies;
- Fuels, oils and lubricants;
- Distribution, and transport including movement coordination and assistance;
- Warehousing, supply and distribution;
- Provision of emergency supplies (including packaged water); and
- Hazardous waste and rubbish collection and removal.

Without coordination, resources may not be shared or distributed according to needs. Poor coordination and communication may result in duplication of effort, overlaps and gaps, and unproductive activity. Resource coordination is often a weak point in multi-agency responses and special attention must be given to this area.

## CONCLUSION

There have been many challenges in recent years that have called for large, fast and coordinated HADR efforts. What tools and practices will be needed when the disasters affect any country? Without addressing these challenges, there might be unnecessary impact on human lives, economic and social development and political trends. Hence, there is a need to boost the capacity of governments and other agencies involved in disaster management and relief. Not only will this ensure that a well-structured HADR system would be in place at the grass root level thereby improving the HADR mechanism, but it would also reduce the impact of disasters that may be looming on the horizon.

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# THE INFORMATION FUSION CENTRE (IFC)-ENHANCING MARITIME SECURITY THROUGH INFORMATION SHARING

*By LTC Nicholas Lim, Republic of Singapore Navy*

## The Maritime Environment Today

In the interconnected world that we live in today, the maritime security (MARSEC) issues in any country can have the potential to affect its neighbouring countries and even to regions beyond. This is especially true given that more than 80% of the world's trade is transported via the sea. The porosity and expanse of maritime borders mean that illegal activities can sometimes go undetected, despite the best efforts by national maritime enforcement agencies. The maritime security threats faced are largely similar in many regions, although the priorities of the types of threats may differ. These include piracy, maritime terrorism and the proliferation of weapons of mass destruction, amongst others.

All the MARSEC threats mentioned can have the potential to morph into transnational security issues. For example, in the area of piracy, the fear has always been of a nexus between piracy and maritime terrorism. While this has not been verified, we are well aware of the dotted line transactional linkages between the Al-Shabaab group and the pirates from Somalia.

## Momentum Towards Information-Sharing Collaboration

What this means is that no one country or agency alone is able to grapple with the full range of maritime security issues that confront it, given the border less nature of maritime threats today. To ensure safe and secure seas for all, there is a need to embrace a collective security approach, where cooperation and collaboration will create the critical capabilities to face the wide array of threats. Achieving Comprehensive Maritime Awareness (CMA) is therefore necessary to cue effective and appropriate operational responses. By and large, all countries have acknowledged the need for collaboration in one way or another. However, the momentum towards information sharing cooperation has only gained traction in the last few years.

Information-sharing is now a common thread championed at various security dialogues and forums. Information-sharing and sense-making are the cornerstone of any collaboration to achieve CMA. There is a whole spectrum of modalities, from fairly basic ones to more advanced ones. For a start, information-sharing can be as simple as establishing a hotline via telephone or email between the Operation Centres. In essence, a hot-link between one agency and another. This is easiest to achieve. At the other end of the spectrum, this involves the sharing of proprietary information automatically and electronically. This removes the man-in-the-loop and allows for the focus on the higher end activities of sense-making which may be done unilaterally, bilaterally or amongst some partners. Sense-making would refer to the development of threat

evaluation matrices, anomaly alerts and critical-path analysis capabilities, which can take place at various levels and for different time horizons.

**Information Fusion Centre (IFC)**

One of the first models for information-sharing is the Information Fusion Centre (IFC) – an initiative by the Republic of Singapore Navy (RSN) . Formally launched on 27 Apr 2009, the IFC is located at the Changi Command & Control Centre (CC2C). As a multinational maritime security information-sharing centre, the IFC's aims are:-

• Provide actionable information on MARSEC threats, in order to cue early warning by its partners,

• Contribute to the regional knowledge repository on MARSEC, and

• Enhance the collective maritime awareness, information-sharing and sense-making capabilities in the region.

The IFC isfocused on the collation and fusion of information in eight maritime threat categories in the Asia-Pacific region. This information is then promulgated to partners for awareness or for necessary operational responses. In order for the IFC to achieve its aims, it has several unique propositions. First, it is a multinational set-up designed to look into regional maritime security issues. The integrated team comprises International Liaison Officers (ILOs) working hand-in hand with the RSN personnel. The ILOs provide the interface between the IFC and their own national operations centres, reaching back to their respective operational centres to access and share maritime shipping information, as well as to prompt collaborative action where applicable.

Till date, 16 countries have deployed ILOs to the IFC, and several more countries are in the process of doing so. Since the IFC's inauguration in 2009, the ILOs have facilitated many cases of information-sharing cooperation, which have resulted in successful operational outcomes. These include the active monitoring and handing-over of ships in the southern reaches of the Malacca Strait in Mar 2010 and sharing real-time information on hijacked ships such as the SINAR KUDUS, which have been critical in facilitating the decision making of their own respective national agencies. There were also several occasions when the ILOs facilitated the real-time operational responses by other partners.

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35   There is currently no centre of this nature in Asia.  Even in North America and Europe, similar centres are focussed narrowly on specific threat areas such as curbing narcotics smuggling or on counter-piracy alone.

One such occasion was the incident of the Malaysian-flagged tanker ZAHIRAH on 20 Nov 2012. The IFC had received notification that the shipping company had lost communication with the tanker in the South China Sea, while it was heading to its next port of call in East Malaysia. The IFC immediately informed its Indonesian, Malaysian, Thai and Vietnamese partners. It was subsequently ascertained that some pirates had boarded the tanker and were controlling it. Through real-time information sharing and close collaboration between the shipping company, the ILOs as well as the regional partners, the tanker was localised and actively tracked. When the pirated vessel subsequently made its way into Vietnamese waters, the Vietnam Peoples' Navy and Marine Police promptly despatched maritime enforcement vessels to interdict the tanker. The perpetrators were quickly subdued and the vessel recovered.

The other unique proposition is the near real-time recognised maritime situation picture that the IFC maintains. This picture is collated from the extensive database linkages established with maritime partners, supplemented with commercial databases and open sources. The shipping database has grown from one hundred thousand ships to more than five hundred thousand ships in the span of four years. Part of the database also comprises contributions from the shipping community through the Voluntary Community Reporting system that the IFC had initiated. The IFC has also grown its linkages from 14 countries to 33 countries during the same period. It is now linked to 62 operation centres worldwide and this list is growing. An extensive partner linkage is important, as this allows the IFC to reach out instantaneously to our partners in the event of any maritime security incidents.

Given the huge volume of information, the IFC uses information technology to improve its work processes. The IFC's database system, called the Open Analysed Shipping Information System or OASIS, is able to collate and fuse wide-ranging reports pertaining to the various aspects of maritime security. These include ship tracks and text reports. Using the automated sense-making engine known as Sense-making Analysis and Research Tool or SMART, rules can be created based on certain factors or anomalies to data-mine the OASIS for a specific list of ships to monitor. To enable greater accessibility by our partners, the information at the IFC is shared using secured internet-based information-sharing portals.

Different information-sharing portals exist for different communities. For example, there is the Regional Maritime Information Exchange System or ReMIX to facilitate inter-Operation Centre collaboration amongst the Western Pacific Naval Symposium community. Similarly, the IFC also manages the Malacca Strait Patrol (MSP) Information System or MSP IS to facilitate collaboration amongst the navies of Indonesia, Malaysia, Singapore and Thailand under the MSP framework. The MSP IS, for example, is used day-to-day by the air and ship patrol sub-working groups. In Jul 2012, the ASEAN information sharing portal or AIP was also launched. Unlike the other information-sharing portals, the AIP's main purpose is to facilitate quick access by the ASEAN regional naval commanders. The AIP has a mobile application version, which

allows the ASEAN regional naval commanders to access the information of maritime security incidents through a notification module using their own SMART mobile platforms such as iPads and Android phones.

Another key function undertaken by the IFC is the conduct of confidence and capacity building activities. These are necessary to promote and reinforce the culture of information-sharing in the region. The IFC has conducted maritime security workshops such as the annual Regional Maritime Security Practitioner Course (RMPC), training for the regional maritime partners as well as various information-sharing exercises, such as the international Maritime Information-sharing Exercise or MARISX and the MSP series of information-sharing Exercises. In Jul 2012, the IFC also conducted the inaugural ASEAN Maritime Security Information-Sharing Exercise (AMSISX). The aim of these activities is to provide greater awareness and increase inter-operability amongst the different maritime partners by reinforcing the utility of information-sharing and the procedures and processes of sharing and sense-making.

## Challenges to Information-Sharing

Even though the IFC has been established for only four years, there have been some distinct observations. Clearly, information-sharing is easier said than practised. There are also issues with regards to the comfort in the level and types of information to be shared. For some partners, while they are keen to contribute to the bandwagon, they also face restrictions in terms of budget or policy. As such, the IFC has focused its efforts on three fronts.

First; fostering mutual understanding and trust between partners. This is a necessary first step in establishing any cooperative maritime security framework. This can be built through regular exchanges and interactions between the partner countries and agencies, at the strategic as well as the operational levels. This is also the reason why the IFC spends a significant portion of its time on the aforementioned confidence-building activities.

Second; establishing collaborative information sharing framework. While there has been an increasing realisation by partners that they need to get onto the information-sharing bandwagon, there is no need to start from scratch. Partners can leverage on the "network of networks" by collaborating with centres such as the IFC and using available information-sharing systems. For example, the AIP was endorsed at the recent ASEAN Navy Chiefs' Meeting held in Brunei as the platform for information-sharing within the ASEAN region. This allows countries that are new to information-sharing to quickly utilise a system to jump-start their own capabilities. In a policy report by the Rajaratnam School of International Studies (RSIS) entitled "ASEAN and the Indian Ocean" , there was a recommendation that countries in the Indian Ocean Region (IOR) be plugged into the IFC, to ride on momentum and resources of the IFC. This will allow the IOR countries to raise their maritime situation awareness in a quick and cost-effective manner.

Third; enhancing interoperability and the capacity to collaborate. This is best established through bilateral, multilateral and multi-agency exercises to build familiarity and interoperability. Again, the IFC has been at the forefront, conducting multinational exercises like MARISX, the MSP series of exercises, the AMSISX as well as bilateral exercises. This is important so that partners are familiar with the workings of one another, which will be useful when we are called to work together for real operations.

## Conclusion

Maritime security threats have no respect for borders and can only be effectively curtailed through strong partnerships. International collaboration remains the key to any working solution. The IFC has shown itself to be an operationally valuable platform to create common maritime situation awareness. It has increased the awareness of its partners and is an available platform to link up with new ones. This is achieved by fostering mutual understanding and trust among partners, establishing collaborative information-sharing networks, and the building of interoperability and capacity that will serve to enhance maritime security and safe and secure seas for all.

## The IFC Team

- LTC Nicholas Lim, Head IFC, Republic of Singapore Navy

- LCDR Nicholas Zillman, Royal Australian Navy ILO

- LCDR Jean-Michel Kergoat, French Navy ILO

- LCDR Deepanshu Bura, Indian Navy ILO

- LCDR Erwin Herdianto, Indonesian Navy ILO

- LCDR Fairuz Mohamad, Royal Malaysian Navy ILO

- CDR Angel Viliran, Philippine Coast Guard ILO

- LCDR Aldrin Montalvo, Philippine Navy ILO

- MAJ Gary Ow, Republic of Singapore Navy

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36  Accessed at http://www.rsis.edu.sg/publications/policy_papers/RSIS_PolicyPaperASEAN_A4_211011.pdf

- CDR Chartchai Chaichoochoke, Royal Thai Navy ILO

- LT Ryan Bohring, United States Navy ILO

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*By the Royal Navy of Oman*

Oman is developing and maintaining capabilities to monitor various activities within its EEZ, and where appropriate, conduct effective intervention to meet the challenges and threats that exist therein. Currently, the responsibility of maritime security protection lies with the Royal Navy of Oman, with the support from other military agencies of the Sultanate. However, this requires an integrated civil-military approach to ensure essential situational awareness to aid decision making and effective response to emerging challenges. Within the government, there are a number of ministries that are responsible for exploiting or protecting Oman's national maritime resources and activities and all these contribute to effective maritime security. A Maritime Security Committee has been formed to generate a better common understanding of the diverse threats and challenges that Oman faces, and, to co-ordinate closer integration between various ministries so that all activities collectively contribute to security. The Maritime Security Agency/Centrehas been formed to continue to enforce national jurisdiction and sovereignty in the maritime domain in order to regulate and protect the maritime interests of Oman, along with all other concerned agencies.

## Challenges and Threats to Oman's Maritime Security

As a result of its strong regional and international foreign policy, Oman has not been directly involved in any maritime hostility. However, there are diverse threats to legitimate mariners within the EEZ of Oman, and, to the resources that enable sustainable wealth generation. The seas also provide open access to Oman's shores and these can be exploited by criminal or undesirable non-government actors who may pose a direct threat to Oman's society. Oman, like any other country in the region, faces a variety of threats and challenges which require early response and effective action. These threats may be categorised as: -

- **Piracy**. Over twenty years of lack of effective governance in Somalia has resulted in an inexorable rise in piracy across the Indian Ocean. Moreover, the trend has been for pirates to range further into the Arabian Sea, Sea of Oman and Oman's territorial seas. There is a direct threat to Omani vessels and mariners. Maritime Piracy could undermine the development in Oman to make its ports the port of choice for trans-shipment and maintenance services. Therefore, The Royal Navy of Oman, with the help of other military agencies in Oman, has been striving hard with given assets to keep Oman's territorial seas and EEZ under effective surveillance and protection.

- **Illegal Fishing**. Oman currently has abundant and varied fish stocks within its EEZ. However, its finite resources must be carefully managed and protected in order to sustain a viable industry and livelihood. Illegal fishing is a major threat to sustainable diversity

and population, and over-fishing will lead to reduced catches in terms of quantity and size. Efforts are on at various levels to secure the resources, and to deter and reduce these illegal activities as far as possible.

- **Pollution**. Pollution by illegal flushing of storage tanks at sea, collisions and groundings are a most significant threat to the marine environment. These incidents lead to pollution of the territorial seas and the EEZ, including beaches and vital installations, and marine life in general. Moreover, since most of the Sultanate governorate areas are dependent on desalination plants for producing water for drinking and other domestic uses, this may also pose a health concern to the Omani population. Therefore, and within its role, the Royal Navy of Oman is the leading force in implementing environmental protection for the Ministry of Environment and Climate Affairs. However, RNO's capability to control any such catastrophe still needs to be improved. The Ministry of Environment and Climate Affairs has a National Oil Spill Contingency Plan as a proactive action supported by all other agencies in the Sultanate.

- **Search and Rescue**. Every coastal State has a responsibility for search and rescue of vessels sailing near its coast as far as applicable. Therefore, the Sultanate is committed to the fulfilment of those obligations under the International Convention for the Safety of Life at Sea 1974 and other international conventions relevant to search and rescue of life at sea. The Royal Air Force of Oman is currently responsible for the management and coordination of maritime search and rescue operations with support from the Royal Navy of Oman and the Royal Oman Police (Coast Guard).

- **Trans-National Crime**. Organised crime involving the trafficking of drugs, weapons or people and the illegal immigration has increased across the world. This threatens lives and economy through the disruption and corruption of legitimate trade and livelihood. The Sea of Oman is, unfortunately, one of the various international drug smuggling routes. It is the responsibility of the Sultan Armed Forces to deter and seize such illegal activities in the Sea of Oman.

- **Maritime Terrorism**. There are a number of States within the region of interest of the Sultanate of Oman where ideology has fermented terrorist organisations. Although not directed towards Oman, the instability caused directly affects national security often through the criminal activities used to fund these organisations, and leads to displacement of innocent people by their actions. Terrorist organisations may use Oman as route for people, weapons and money. However, a direct threat to offshore petrochemical installations remains a possibility.

## Collaboration with Regional Countries

Collaboration and maintaining effective liaison with regional countries always remains the essential hub for promotion and establishment of effective law enforcement at sea. Maritime security is the collective responsibility of various civil-military agencies, which requires maintaining a beneficial liaison with the law enforcement agencies of neighbouring countries.

## Conclusion

Oman will meet its obligations under UNCLOS and GMDSS to take a global view on maritime security. Oman will work within regional bodies that promote effective management of fisheries, the marine environment and promote safe navigation at sea. Trans-national crime and pollution have no boundaries and it is only through international cooperation that effective maritime security can be achieved. The requirement of guarding the entire spectrum of maritime economic activities, therefore, will correspondingly rise. Maritime security can be achieved only with close coordination between different governments, the police, Coast Guard and the armed forces.

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