

Maritime Strategic Trends in the Asia-Pacific: Issues and Challenges

W. Lawrence S. Prabhakar

The Asia-Pacific has emerged as the maritime strategic hub in the 21st century. The quantum of sea-borne trade of resources and merchandise trade had bestowed the region its strengths and vulnerabilities. The maritime geography of the Asia-Pacific presents the interface of the continental landmass of Asia and the Pacific Ocean and the region is abounded by the maritime flanks of the Persian Gulf and Indian Ocean constituting its intertwined maritime geographical boundaries. The maritime geographical complex of the Asia-Pacific is bounded by archipelagos, and islands of Southeast Asia; hemmed by the extensive littoral of the Asian landmass and the continental powers of the US, Russia and China.

The international relations of the Asia-Pacific in the post-Cold War era is essentially an emergent multipolar Balance of Power system with a continued hegemonic dominance of the US.¹ The rise of new powers has been in competitive patterns of power with growing strategic capabilities with nuclear and missile arsenals even as economic interdependence has ushered in cooperative relations.² The Asia-Pacific is known for its dichotomy of growing economies and spiralling arms races that is persistent. Military power remains a robust variable even as the region emerges to displace the Euro-Atlantic region in

terms of the largest trading area and a region of territorial and sovereignty contestations.

The Balance of Power in the Asia-Pacific is maritime centric as the contiguity of sea spaces have emphasised the significance of civilian shipping and navies. Sea Lanes of Communication (SLOCs) constitutes the arterial networks of resources and energy flows with the deployment of the regional and extra-regional navies in the region.

The Asia-Pacific is a region known for its long spans of latitudinal maritime expanse that has rendered the importance of maritime access and forward presence a vital factor in the maritime balance of power. The analysis of the Asia-Pacific maritime strategic trends would focus on:

- (1) The nature and salience of naval transformation that has affected traditional naval doctrines and force postures.
- (2) The transformation of the concept of Forward Naval Presence of extra-regional powers and the regional naval/maritime responses.
- (3) The pertinent issues of security of sea-lanes of communication, challenges of maritime terrorism; energy flows and its security and the containment of the proliferation of weapons of mass destruction.
- (4) The evolving naval doctrines and technological templates in the region.
- (5) The operational dynamics evident in the competitive and cooperative maritime strategies in the region.

Maritime Strategic Trends in the Asia-Pacific

The Asia-Pacific is known to be the region that is pivoted on geopolitics and geo-strategic factors that conditions the region. While the logic of geo-economics sustains the cooperative relations among the states in the Asia-Pacific, there is strong discernible evidence of geo-political and geo-strategic factors that works as the dynamic of balancing in the region. It presents the coexistence of the territorial state and the globalising state.

The strategic environment of Asia is characterised by the presence of three great continental powers: China, India, and Russia. There is also an arc of maritime powers Japan, South Korea, Taiwan, the ASEAN countries, Australia and New Zealand, and the small island nations of the South Pacific.

The region's maritime expanse is being characterised by the *tyranny of maritime distance* for the US, Japan, Russia, China, Australia and India that has necessitated them for the deployment of merchant shipping and navies to maintain their maritime presence.

The region has emerged as hub of increasing economic development, integration as well as a region of transitional and asymmetric challenges that have been on land and in sea. The increasing prospect of maritime transnational and asymmetric challenges of terrorism, piracy and the vulnerabilities of supply chains has complicated the security of Sea Lanes of Communication.

Naval transformation has been one area that has gained salience since the end of the Cold War that has come along with the concurrent developments in globalisation. The emergent missions and roles of navies in relative peacetime contexts have substantially modified the traditional paradigm of Naval Power and Maritime Strategy. The emergent benign roles of cooperative maritime security are evident in joint exercises, interoperable missions; the constabulary roles in humanitarian missions have been substantially complementing the prevalent coercive and compellence missions of navies.

The Asia-Pacific region is a globalised maritime environment with its accents on global maritime trade and pacific cooperation. There has been a growing significance of transnational maritime issues that has the portents of threats and challenges evident in maritime terrorism and piracy and the cooperative accents in maritime regime building.

The salience of these complementing trends is quite evident in the evolving maritime dynamics of the Asia-Pacific. The evolving dynamics of maritime security has been vivid in the dichotomous nature and scope of competitive and cooperative dimensions of maritime power.

Naval Transformation and its Impact on Maritime Security

Maritime Strategy in specific focus to naval strategy has an “externalised” essence of National Strategy with the scope of enormous momentum and transformation. The scope of transformation is evident in strategy, tactics, operations and the dynamic nature of technology. The impact of transformation is quite profound on the nature and dynamics of national security strategy of maritime and continental powers.

Maritime Strategy and Security is thus evident in:

- (1) The seamless and transnational nature of ocean environment that enables naval deployments in missions of showing the flag, naval diplomacy, littoral power projection cooperative maritime security, and in various modes of strategic articulation.

- (2) Maritime space envisions for a three-dimensional means of power projection in the *maritime-air-space* terrains that provides for a networked operational and technological environment in maritime operations.
- (3) The stealth and speed in deployments of naval platforms provides subtle overtones in diplomacy and leveraging impact in force projection. The possibilities of pre-emptive attacks on naval platforms are remote given the rapid and flexible redeployments and manoeuvres.
- (4) Nuclear weapons at sea provide the most significant and substantial mode of assured deterrence with a viable second-strike capability. Deployments of nuclear-powered submarines with nuclear-tipped ballistic and cruise missiles have formidable roles in posturing and nuclear signalling.
- (5) The preference of sea-based ballistic missile defences on high performance naval platforms would be the emergent strategic and technological templates in the years to come. The deployment of Navy Theatre Wide missile defence systems would be in contiguous sea space of several littoral countries.

Naval strategy and the civilian maritime paradigm have been in the throes of transformation due to the impacts of three cardinal forces:

- (1) The transformed geopolitical and geostrategic canvas of the post-cold war, globalisation dynamics.
- (2) The transformation of alliances and counter alliances that spurn the dynamics of maritime access and basing; cooperative naval and maritime security.
- (3) The transformation of technology and strategy evident in the cumulative impact of the Revolution in Military Affairs (RMA) and more specifically a Revolution in Naval Affairs (RNA).

Forward Presence and Naval Transformation in the Asia-Pacific

The concept of the Forward Presence has been a primary mission of naval forces engaged in Sea Control operations. Naval Forward Presence has been the most visible commitment of a nation's forces to secure its security and economic interests in distant regions. Traditionally, the salience of Forward Presence had provided for coercive and benign naval operations. It has fostered naval diplomacy in the form of joint naval exercises, joint naval patrols and sharing of maritime intelligence and surveillance, humanitarian missions that have been coalition efforts. Significantly, naval presence had also reinforced

expeditionary operations in coercive missions and has enhanced deterrence and compellence in times of crisis.³

The salience of forward presence in the Indian Ocean Region and South China Sea in the post-Cold War and post 11 September 2001 periods have emerged in different contours and they have implications that affect the traditional salience of the concept.

The Cold war and the immediate post-Cold War era had an established pattern of naval forward presence that was structured around the concept of physical access and basing based on onshore facilities.

The post 11 September 2001 period have witnessed the emergence of the new trend of strong littoral opposition to extra-regional forward presence that has emanated from traditional sources of opposition and transnational challenges like maritime terrorism.

Four causal factors affect the salience of the traditional forward presence of naval forces and land bases that host extra-regional powers in the Indian Ocean Region–South China Sea. It is characterised by the emergence of anti-access/area-denial strategies.

- (1) The first causal factor is the *anti-access political opposition* emanating from adverse popular perceptions to extra-regional forces access in littoral and regional deployments in the allied territories. Anti-access political sentiments are frictions that have emanated from a hostile populace in the host nation that have complicated basing and access process of extra-regional powers, for example, the US in Okinawa and in South Korea, despite the host national governments ready acceptance of the forward presence.
- (2) The second causal factor has been the emergence of *strong littoral defence responses* from regional powers in the form of naval forces modernisation as an area-denial measure. New technological capabilities evident in the proliferation of the supersonic anti-ship cruise missile systems and land attack cruise missile systems deployed on improved diesel-electric submarines have opened vulnerabilities in the forward presence of the extra-regional powers.
- (3) The third factor has been the emergence of the regional ballistic missiles and weapons of mass destruction arsenals that are considered as *area-denial measures* that target the land bases and access of the extra-regional forward presence.
- (4) The fourth factor could be the irregular asymmetric threats that are defined as non-conventional threats based on brinkmanship, that is,

maritime terrorist threats that are catastrophic with WMD effects, emanating from state and non-state actors or in collusion intended to *erode* the salience of forward presence.

Naval forward presence has been sustained by the US, UK, France, Russia, Japan and Australia.

United States

The US is the predominant naval power in the region that has durable bilateral strategic relationships with Japan and Korea bound by treaty obligations. It has nurtured several bilateral arrangements with Australia, Singapore, Thailand and Philippines (both declared as US non-NATO allies). The continued role and presence of the US in the region is widely regarded as a factor of stability. In Asia, the US perceives the prevalence of several regional threats. This has been responded by the US and its regional allies with the agency of bilateral alliances and joint responses.

The US Navy display of its capabilities during the 2003 Iraq conflict was a demonstration of its enabling capabilities. Its naval logistical support and deep strike capability through its air power and Tomahawk Land Attack Missiles provided decisiveness in its strike capabilities. US Naval power has been the foundation of US military power and it played an important role in global operations launched after 11 September 2001 Operation “Enduring Freedom” with its first strikes against Afghanistan. The carrier air wings were the mainstay of aerial operations against the Taliban and Al-Qaeda targets even as neighbouring states proved reluctant to let US air forces use land bases. The US Navy has demonstrated the vitality of carrier air power and air expeditionary force projection.

The US submarine force has been in full deployment optimising its cruise missile strike potential. The US is converting some of its nuclear ballistic missile submarines for land attack cruise missile platforms with new options to deploy the Trident D-5 ballistic missile submarines for insertion of Special Operations Forces for littoral operations and modifying those with better intelligence, surveillance and reconnaissance assets for its new missions in the region.

The US Navy is evolving new sea basing capabilities to support marine operations ashore with modified *Wasp* class multipurpose amphibious assault ship (LHD-8) baseline design that could support its new generation F-35 *Joint Strike Fighters* and V-22 *Osprey* tilt-rotor aircraft operations. Its Naval Support Facility at Diego Garcia in the Indian Ocean and its forward access facilities in Oman, UAE, Bahrain, access facilities in Trincomalee in Sri Lanka,

Changi Naval Base in Singapore, facilities in Northern Australia offer the US “lily pads” for a rapid surge in the region from its rearward bases in Guam and Hawaii.

The US Forward Presence is fostered by inducing defence transformation in its allied regional force capabilities with technology transfers. The US forces in the region have emerged to augment the capabilities of its allies; that is, Japan, South Korea, and Australia with whom it has statutory defence agreements. Singapore and Thailand enjoy special relationships with the US in the region. Indonesia and Malaysia enjoy cordial relations. US naval forces posture would be focused for rapid response and surge capabilities in times of crisis and intervention.⁴

The stakes of the US commitments to the allies by its deployment of enhanced long-range precision air strike assets and the deployment of dedicated naval and air assets provide rapid reinforcements in power projection and littoral strike capabilities against adversaries.

The US has a transforming offshore presence that would be in the form of effective expeditionary forces with the advantages of Sea lift, transfer and reinforced with air–naval dominance and lethal strike capabilities. This transformation is in tune with the Quadrennial Defence Review (QDR) 2005 as a follow on of the earlier QDR 2001 force posture and the implementation of the US Navy Sea Power 21 force posture.⁵

United Kingdom

The UK’s commitments in the region have been in the Indian Ocean Region in the form of the Naval Task Group 03 that was constituted as the “East of Suez” operations since 11 September 2001. The NTG 03 was supplemented with the Royal Marines with 19 naval units were deployed in the Persian Gulf Indian Ocean Region. The UK Royal Navy deployments have come in substantial measure in the aftermath of the 11 September 2001 and the War in Iraq. The Royal Navy deployments have been a significant force in the Persian Gulf and Arabian Sea built around the carriers *HMS Ark Royal* and *HMS Ocean*. Its nuclear attack submarines equipped with Tomahawk-TLAM (Tomahawk Land Attack Missiles) cruise missiles. Besides, the units of Commandos 40 and 42 Royal Marines were also involved in operations. The UK Naval forces performed an important role in mine clearing and providing logistical support to the air and land forces.⁶

The Royal Navy deployments are being primed for joint operations with the Army, Royal Marines and the Royal Air Force in the evolution of joint

operations with accents on sea basing of its assets and shape an amphibious and expeditionary force that would be deployed for future operations.

The UK has treaty commitments with the Five Powers Defence Agreement (FPDA) in South East Asia (1971) that entails its naval forward presence and joint naval-air exercises with its allies Australia, Singapore, Malaysia and New Zealand. The scope of the FPDA has been changing from its earlier conventional defence obligations towards cooperative threat engagements in terrorism and piracy since 2004.⁷ The emergent threat perceptions from transnational threats of maritime terrorism, piracy and the possible disruption of Sea Lanes of Communication that are laden with energy supplies from the Persian Gulf has enhanced the threat perceptions in the region engaging the FPDA in new missions rejuvenating its existence.

The UK maintains a robust forward presence of deployment of Royal Navy warships and submarines and has been conducting joint naval exercises with several Indian Ocean littoral powers and has conducted naval-air operations in the Persian Gulf-West Asia region.

France

France has been an Indian Ocean Power with its standing naval force in the Indian Ocean. The French have been an Indian Ocean power with their military presence in the Reunion, Tromlelin and Mayotte, besides they have facilities in the South West Indian Ocean in the sub-Antarctic and Antarctic known as the Eparsé Islands. The French forward presence is thus well established. France like the United Kingdom and Japan are dialogue partners in the IOR-ARC. The French forward presence is in Djibouti with a deployment of a rapid reaction force of 2,700 troops, a detachment of the French Foreign Legion and a French Air Force squadron of Mirage F-1 fighters. The French naval detachment has always been two to three combatant vessels of destroyers, one frigate two inshore patrol craft and a reinforcement of two frigates and a *Dassault Atlantique* maritime reconnaissance aircraft that would be tasked with the visiting French carrier force from the Mediterranean.⁸

The French naval deployments in the post 11 September 2001 have been in support of the operations in the Afghan theatre of operations. The French Navy's regional engagement has been in support of the naval-air operations of the "war on terrorism", in Afghanistan, from the Arabian Sea and Indian Ocean, and has been active since October 2001. It is a fact that France opposed the war in Iraq and is not part of the US-led coalition; however their cooperation in the allied operations in Afghanistan continues.

France has been a dominant arms supplier to the region and has been conducting bilateral naval exercises with the Indian Ocean littoral states. Its interest in South-east Asia emanates from its stakes in the South Pacific and its burgeoning trade and military ties with China.

The US, UK and French naval presence is considered to be the dominant extra-regional great power navies in view of their deployed naval orders of battle and the deployment of nuclear propelled platforms in air-craft carriers and nuclear attack and ballistic missile submarines.

Japan

Japan's maritime security concerns in recent times have been focused beyond its territorial waters on the sources of threat from terrorism; piracy and environmental safety. The strategic significance of the post 11 September 2001 has added the gravity of the situation. The concerns over security of SLOCs have been crucial for Japan given its overwhelming reliance on sea-lanes for roughly 90% of its imports.

The Japanese Maritime Self Defence Force (JMSDF) has considerably bolstered its capabilities for patrol and defence of its major ports and key straits as the threat of foreign incursion has risen. The recent incursions of a Chinese nuclear submarine and the earlier North Korean naval incursions have served a powerful reminder of Japanese maritime vulnerabilities.

The Japanese Diet in October 2001 had enacted a set of three new laws addressing terrorism; The Anti-Terrorism Special Measures Law is quite significant that empowers the Self-Defence Forces the right to provide non-combat assistance to US-led military forces engaged in operations related to the global "war on terrorism".⁹ The new legal framework has enabled the deployment of several JMSDF vessels in operations in the Indian Ocean since November 2001 to provide escorts and assist with US efforts in Afghanistan.

Japan also has a JMDSF role in Iraq. The deployment plan has emerged after the legislation of the July 2003 Law Concerning Special Measures on Humanitarian and Reconstruction Assistance to Iraq. This has led to deployment of units of the Japanese Air Self Defence Forces and the JMSDF in logistics operations of reconstruction materials and humanitarian relief supplies. Japan had also deployed a 30-member Japanese Ground Self Defence Forces advance unit which arrived in Iraq in January 2004 along with a JMSDF destroyer and troop ship.¹⁰

Russia

Russia appears to be increasingly interested in asserting itself as a significant maritime power. In April 2003 and August 2005, the Russian navy had deployed a large naval grouping to the Arabian Sea to conduct joint exercises with the Indian Navy. The deployment had about 10 warships of two Udaloy class frigates from Vladivostok, one Slava-class cruiser, one Project 1135 Krivak-class frigate, one Project 61M Kashin-class destroyer, the Project 775 Ropucha-class landing ship from Sevastopol accompanied with the Project 1559V tanker Ivan Bubnov and the Project 712 ocean-going salvage tug Shakhter.

Their passage was into the Mediterranean and through the Suez Canal and rendezvoused with the two Pacific Fleet frigates off Socotra Island. There were three cruise missile-carrying nuclear submarines deployed in support of the group. This show of the Flag presence represented the most significant projection of Russian naval power onto the high seas in recent times.¹¹

The deployment included two naval infantry companies reinforced with main battle tanks and armoured personnel carriers. The occasional deployment of the Russian Fleet in recent times since the Cold War is shaping its forward presence as an instrument of its foreign policy. Russia's forward presence in the Cam Ranh Bay has ended in 2002 and its exit marks the end of its forward presence in South East Asia. Its exit has been due to its economical situation and its ill affordability to maintain its presence. However, Russia's support to Vietnam and its supply of military hardware have continued.

Cam Ranh Bay is now a contended spot for forward presence for China, India and the US in a bid to promote their respective maritime forward presence. China has its interests in South China Sea and the Spratly's island disputes are a historical legacy that has not faded away and hence its access is ruled out. The US would like to have places and not bases and hence would like to use as a hop for a surge into South East Asia. India's interests in the region have been keen in view of its expanding naval presence in the region and its countervailing naval presence in the South China Sea for the Chinese naval presence in Myanmar.

Australia

The Royal Australian Navy (RAN) has expanded its roles beyond its territorial waters with maritime support operations in the Indian Ocean in the Operation Enduring Freedom. The forward presence has been in support of coalition operations in the Indian Ocean region. The Royal Australian Navy Maritime Doctrine envisages its Navy operations in support of coalition forces

that symbolise the essence of a limited forward presence taking into account Australia's interests and concerns of shipping and sea-lanes security.¹² The RAN has committed an LPA and two frigates in support of Operation "Enduring Freedom", and the RAN ships are serving in the Arabian Gulf as part of the Maritime Interception Operations. The RAN has deployed the LPA, HMAS *Kanimbla* and the two frigates HMA Ships *ANZAC* and *Darwin* along with a team of navy clearance divers for the Iraq war in Operation "Falconer".

The Asia-Pacific is thus a maritime hub of the dominant powers of the US, China, Japan and India rung by the middle-sized powers of South East Asia and Oceania. The US continues to be the anchor of the hub with its overlay of influence and dominance in the region networked with a ring of bilateral alliances with its nuclear umbrella in the region guaranteeing against instability. The UK and France have their extended maritime interests in the region given their colonial linkages and alliances that have staked their presence in the region.

The post 11 September 2001 and the War in Iraq have enhanced the imperatives of the salience of forward presence given the intertwined nature of the high geo-economic and geo-energy stakes in the region and the geo-strategic stakes of West Asia and its contiguous regions.

The persistence of terrorism and asymmetric conflict, the potential of failed states and the emergence of strong littoral resistance to extra-regional presence have accentuated the new roles of the powers.

Forward Naval Presence and naval transformation has been premised with the development of doctrines and capabilities derived from:

- (1) The evolution of Joint doctrines and new capabilities that equips forces with enablers to effective intervention.
- (2) The new accents on defence transformation that has revolutionised war and intervention operations providing a seamless integration of systems and platforms to prosecute operations on a 24/7 basis.
- (3) The stealth and speed in deployments of naval platforms provides subtle overtones in coercive diplomacy and Compellence missions with its leveraging impact in force projection.
- (4) The emerging technological possibilities of a sea power doctrine that fuses offensive, defensive and logistical capabilities at sea built on pervasive sea strike capabilities from surface, submerged and aerospace platforms integrated by net-centric platforms constitute the emergent strategic-technological paradigm of power projection that intends to overwhelm the frictions of anti-access and denial strategies and wresting the initiative of the offensive.

The salience of forward presence in the 21st century would be *From the Sea* that would provide enhanced autonomy to the dominant maritime extra-regional powers seeking to reduce their vulnerabilities on land yet persisting with strong littoral intervention capabilities. The US leads the defence transformation process that is being followed by its extra-regional allies and regional partners.

The first implication is the emergence of Joint Forces that would have expeditionary and amphibious capabilities that are increasingly premised on maritime-air-space platforms; the synergies of manned and unmanned platforms in air-sea and submerged terrains and reliant on sea based logistics.

The second implication in the evolving patterns of forward presence is the growing interoperability between the United States forces and its allies in the region. Japan, Australia, South Korea, Singapore, Thailand, Taiwan are in different stages of transformation that is converged on the premise to evolve interoperable standards with US forces in the region.

The third implication of transformation of forward presence is the real time effectiveness in intelligence and surveillance operations of the evolving Command, Control, Communications, Computation, Intelligence, Information Surveillance and Reconnaissance (C4I2SR) platforms and sensors that is integrated into the Joint strike platforms. This integration provides the value addition of the transformed forward presence.

The fourth implication of forward presence is the integration of homeland security concerns with forward presence by way of deploying the sea-based Theatre Ballistic Missile Defences on forward high performance AEGIS cruisers that provides assurance and deterrence against littoral ballistic missile threats in the region. The forward basing of sea-based ballistic missile defences are viewed as vital assurances to regional allies. The sea-based missile defences are also being complemented with the deployment of sea-based nuclear weapons launched from ballistic missile submarines like the Trident D-5 class. The US Nuclear Posture Review 2002 and the adoption of SIOP 04 provides for the flexible targeting of Submarine Launched Ballistic Missiles against hostile regional states.

Issues and Challenges in the Asia-Pacific Maritime Complex

The stakes of the Great Power Navies in forward presence are based on the contentious issues of their extra-regional presence. The critical significance of

each of these issues would determine the nature of their forward presence in their competitive and cooperative operational deployments.

Sea Lanes of Communication (SLOCs)

The security of SLOCs in the region is the vital link to the region's access to energy, resources and trade. The SLOCs in the region run through several straits. There are various factors that affect SLOC security:

- (1) The unstable political relationship among regional countries.
- (2) The varied interpretation over the freedom of the seas principle; islands sovereignty disputes and overlapping maritime jurisdictional claims.
- (3) The emergent regional naval build-up; and
- (4) The non-traditional threats such as pollution, piracy, drug-trafficking.

The contentions over the SLOCs commence with the Indian Ocean funnelling into the Straits of Malacca and the South China Sea that provides the shortest access for shipping routes connecting North East Asia with South East Asia and the Middle East. The archipelagic profile of the region and the narrow sea gates has complicated the issue of SLOCs in the region.¹³ The Straits of Malacca, Singapore Straits, the Sunda, Lombok and Makassar Straits in South East Asia, and the Straits of Tsushima, Tsugaru, Osumi, and Soya (La Perouse) in North East Asia dot the sea space in the region. The regional SLOCs are well known for their controversies.

The contentious issue is of innocent passage through the territorial waters. The extra-regional powers have always assumed the right of innocent passage also applies to warships. Littoral states have been reluctant to permit passage to warships without prior authorisation or notification given the colonial histories of the region. The littoral countries like Bangladesh, Myanmar, China, India, Indonesia, South Korea, North Korea, and Pakistan require authorisation or notification for the innocent passage of foreign warships.

The fact assumes importance since several warships of the extra-regional powers are nuclear propelled and some carry nuclear weapons. The Indonesian interpretation of the innocent passage imposes some rules to regulate the movements of foreign warships using the Java Sea. Warships sailing outside designated sea-lanes should abide by the norms that govern the rights of innocent passage. It would entail that submarines should sail on the surface, weapons and surveillance radars must be switched off and aircraft-carriers must keep their planes deck-bound.

Indonesia's conditions have been unacceptable to the US. The US has pointed out that maintaining less than battle readiness for more than 300 kilometres for its warships traversing in the Java Seas would not be acceptable.¹⁴ This has been polemical since many of the vessels were nuclear powered and the effects of navigation of nuclear-propelled vessels in littoral waters were politically and environmentally sensitive.

The second issue has been the transit passage through international straits. The UNCLOS defines it in terms of freedom of navigation and over flight solely for the purpose of continuous and expeditious transit in the normal modes of operation utilised by ships and aircrafts for such passage. The controversy persists on the mode of transit of submarines in submerged status in the straits. Yet another dimension of the controversy are the rights of a littoral state to interfere with transit passage due to suspected pollution incidents and the nature and scope of regulatory responsive measures to accidents and pollution taken by a littoral state. Contesting on issues of sovereignty the littoral states want to impose additional restrictions on transit ships like tolls that have been resisted by the international users of civilian and naval traffic.

The third issue has been the differences that have arisen between the littoral states and the extra-regional maritime powers in terms of archipelagic sea-lanes passage. The LOS Convention states that an archipelagic state may designate sea-lanes and air routes suitable for the continuous and expeditious passage of foreign ships and aircrafts through or above its archipelagic waters. These archipelagic sea-lanes must include all normal passage routes and all normal navigational channels. While sovereignty claims are staked by the littoral states, the maritime powers have insisted on free passage.

The fourth issue has been that the contention on the naval activities in the Exclusive Economic Zone (EEZ) constitutes yet another issue. The EEZ regime in UNCLOS balances the competing interests of coastal states for greater control over offshore resources, and those of maritime powers for maintaining traditional freedom of action in waters beyond territorial seas. The restrictive regime of the EEZ poses a threat to the mobility of navies and the ongoing controversy over the EEZ regime includes the freedom of action of foreign navies within EEZ. The issue of extra-regional navies to conduct military manoeuvres within the EEZ without requiring prior notification or authorisation from the coastal state is strong. The future deployment of the US Navy Mobile Operating Base for its sea-based operations in contiguity of the EEZs would further trigger a controversy as the US Navy would deploy the same to conduct pre-emptive action against any of hostile littoral states in the region.

The South East Asia Nuclear Weapons Free Zone (SEANWFZ) Treaty signed by the ASEAN countries in December 1995 has its sensitivities of transit of nuclear propelled nuclear equipped warships of the US and the other major powers in the region. China besides the US would have its nuclear submarines transit the regional waters into the Indian Ocean or to the Sea of Japan.

The fifth issue has been the legal contentions relating to the shipment of nuclear wastes through certain ocean areas and EEZs, territorial seas and straits. Japan has been transporting spent plutonium fuel and receiving reprocessed plutonium from the UK and France. Japan, UK and France have asserted that the shipments are free to navigate through any part of the ocean under the traditional doctrines of innocent passage, transit passage, and freedom of the high seas.¹⁵ The issue has been controversial since the littoral states have been restricting the passage of vessels carrying nuclear or other hazardous cargoes through the Malacca Strait, which can be potential targets of maritime nuclear terrorism.

Maritime Terrorism

Maritime Terrorism in the Asia-Pacific has been an emergent threat since 11 September 2001. Though the maritime designs of the threat in the Asia-Pacific region persisted for over several years with the capabilities of the Liberation Tigers of Tamil Eelam (LTTE), the capabilities of the other groups have remained largely dormant and not experimented.

In the aftermath of the 11 September 2001, maritime terrorism has often been linked with piracy and the nexus between the two have been highlighted. There is yet an incident to prove the linkages though apparent inferences have been drawn.

As a transnational threat, maritime terrorism exposes the vulnerabilities of the SLOCs to disruption with the mass catastrophic incidents that would have serious spiral consequences in the damage of the economies of the region, disruption of energy and trade flows through the narrow sea passages and significantly complicate US bilateral relationships in the region.¹⁶

The following aspects are considered critical in the light of the threat of maritime terrorism in the region:

- (1) The rimland of South East Asia that commences with Thailand, Malaysia, Indonesia, Philippines are now dotted with several radical Islamic groups whose capabilities of terror operations on land have gained strength and have been gradually permeating their presence in the region. With the

exception of Singapore whose Total Defence architecture has been able to successfully foil such infiltration, the other countries of the region are increasingly vulnerable to such disruption.

- (2) The targets of the radical Islamic groups like the Al-Qaeda and Jemaah Islamiah (JI) are varied in the region and the regional archipelagic geography seems to provide the terrain advantages to these groups. This is in particular reference to Southern Thailand and the northern Malay provinces that are now infested with radical Islamic violence. It is no coincidence that these are proximal to the Andaman Sea on the west and the Gulf of Thailand on the east. The terror groups in the region have been using the Bangladesh–Myanmar–Thailand corridor and the potential capabilities of future sea-based terror attacks or offshore incidents at sea operating from the coast is increasingly probable.
- (3) The Straits of Malacca, the Sunda, Lombok straits are other vulnerable targets that would be targets for the maritime terror groups. The potential targets could be the international users of the sea in the region who could be prime targets much less the littoral users of the sea. Given the existing complications on the SLOCs in terms of the contest of stakes between the littoral sovereign users like Malaysia, Indonesia and Philippines vis-à-vis the international users like Japan, South Korea, US and Australia. Major catastrophic terror incidents at sea in the region targeting the civilian or even naval warships of the international or extra-regional powers could spiral into a regional crisis. Such a situation would necessitate yet another case of pre-emptive action in the region. The probabilities of such scenarios has made the Regional Maritime Security Initiative of the US Pacific Command a necessity as a cooperative threat engagement strategy.
- (4) The increasing probabilities of terror at sea could be there, as the US would be realigning its force posture in the region. The evolving US access strategy to develop several access points in the form “places rather than bases” strategy and the new visitation rights that they would be gaining in the region in Thailand, Singapore, Philippines, Australia are all in contiguity of the rimland of the region where the possible bases of terror are located in southern Thailand, Indonesia, and Philippines respectively. The imperative to avert the probability of terror incidents at sea or at ports or on shipping in the international waters would fall as prime responsibilities of the littoral powers who are claiming sovereign rights. In the event of a major sea catastrophe targeting the shipping or the military logistics of the international users (who stake the claims of innocent passage under the UNCLOS) the probabilities of a crisis

escalation in the region is bound to increase. The escalatory possibilities would emerge from: (1) the inabilities of the littoral powers to foil and initiate preventive actions in the region prior to the incident, owing to lacunae in intelligence; (2) the incident would be viewed as an anti-access measure by the extra-regional powers to their rightful innocent passage and hence would insist on their naval patrols and escorts in station for the safety of their SLOCs.

- (5) The persistence of the claims of the regional states in the archipelagic waters and their inabilities to curb Islamic militant activities in the region would signal to the terror groups to initiate major catastrophic incidents that would drive further wedge between the extra-regional powers and the regional states.
- (6) The vulnerabilities of the region to major catastrophic incidents would be severe in view of the congested geography and the spiral of such incidents could trigger persistent inter-state differences in the region. There could be two opinions that would either invite extra-regional cooperative threat engagement strategy or the hostile opposition to such initiatives.

Thus maritime terrorism has its critical trigger potential that could disrupt the regional stability, trade, energy flows and the security of sea-lanes of communication.

Energy Security

The critical dependence of Asia on the Persian Gulf–West Asia oil supplies and on the sea-borne supply of the same to South East Asia and the Far East has critical implications in maritime security of the sea-lanes and the vulnerabilities of the region to shocks and disruptions. China and Japan, besides South Korea are the predominant consumers and importers of the Persian Gulf–West Asian supplies.

The vulnerabilities of the sea-borne trade of oil supplies from West Asian region has motivated China to consider the options of a limited forward presence of their naval units in the Indian Ocean. Japan and South Korea have been toying with options of their expanded operations in the Indian Ocean as part of their coalition operational efforts in Iraq.

China's Indian Ocean policy has been one of expansion since 2000 with the quest to build access and bases in the region. China has justified that it needs these facilities to secure its oil and trade SLOCs in the region. China has financed and has built the Gwadar port complex with an initial aid of

US\$200 million in Pakistan that would entail China's PLA-Navy warships and nuclear submarines to access the port.¹⁷ The Chinese have been building a signals intelligence facility on the Great Coco island, 40 nm from the Andaman Islands, to monitor shipping in the Malacca Straits and Indian missile tests from testing ranges off the east coast. At a cost of over \$2 billion China is also modernising Myanmar's naval bases at Munaung, Hainggyi, Katan island, Zadaiky island and Mergui for its surveillance and monitoring missions and basing its naval units for a surge into the Bay of Bengal with access to the Indian Ocean region.

The Chinese are also constructing a road and waterway link from southern Yunan province to Yangon port in Myanmar to provide Beijing with access to the Indian Ocean through the Bay of Bengal for an alternate route to the Malacca–Singapore straits.

Japan has been concerned about these developments and has since revised its National Defence Program Outline in 2004 and has been augmenting its capabilities for an out of area engagement in the Indian Ocean with respect to the operations in Afghanistan and Iraq. These engagements are perhaps the first steps of the JMSDF for extended operations outside Japan and possibly have given it the opportunities to craft access into the region. Japan has expressed interest in these exercises and has offered to conduct visits by Japanese Coast Guard units. It would involve training and exercise of the regional coast guard forces in counter terror operations with Japanese special operations forces in naval–air coordination exercises. Japan has also contributed about 400 million Yen to a revolving fund called the Malacca Strait Council to tackle and manage disasters in the region that could emerge from oil spills and environmental damages resulting from disruptive attacks.¹⁸

Given the vulnerabilities of the extended sea-lanes of the oil traffic, Japan, China, South Korea and the ASEAN nations are keen to exploit the Australian and Indonesian natural gas reserves and to venture to exploit the offshore natural gas reserves in the archipelagic waters.

There have been agreements with Russia to have the natural gas from eastern Siberia. China, Japan and South Korea have been rivalling each other in this regard.

Nuclear power for energy generation has been an option to diversify dependence on oil and natural gas for power production. China has been serious on its nuclear power development projects with several European companies aggressively bidding for projects. The US maintains a very strict regimen on exports related to China on nuclear materials in view of proliferation concerns,

but has in recent times relaxed to facilitate entry of its entities into the Chinese nuclear energy market.

The energy security concerns in the region could be stabilised with cooperative energy security initiatives that would engage, Japanese, Chinese and Korean energy markets with prospecting and exploiting the natural gas reserves in the region in an apparent move to reduce oil SLOCs from Persian Gulf–West Asia.¹⁹

Proliferation Security Initiative

The Proliferation Security Initiative (PSI) has emerged as a cooperative maritime convergence in the counter proliferation initiatives that envisages for the proactive and voluntary interdiction of maritime shipping suspected of carrying merchandise of weapons of mass destruction. The PSI is a response to the growing challenge posed by the proliferation of Weapons of Mass Destruction (WMD), their delivery systems and related materials worldwide. The PSI builds on efforts by the international community to prevent proliferation of such items, including existing treaties and regimes.

With the exception of Singapore and to an extent Thailand, the other South East Asian states of Malaysia, Indonesia and Philippines consider the PSI as an extra-regional proposal of interdicting shipping on grounds of suspicion. Given the high sensitivities and strong tendencies in South East Asia to protect national sovereignty, the involvement of extra-regional naval forces in the interdiction of shipping in archipelagic waters is viewed as interference in the sovereign rights of the littoral states.

There are strong divergences on issues of nuclear proliferation and perceptions in regard to the interdiction of maritime shipping carrying the WMD merchandise. One of the major reasons of the divergence has been the domestic constituencies and opinion that countries like Indonesia and Malaysia have to contend. The compulsions of the domestic constituencies have resulted in the opposition to the US led initiatives and US unilateralism. On the hand, other Indonesia and Malaysia have called for greater regional cooperation on security with an emphasis on regional initiatives from the region and a strong disdain of outside interference in littoral issues.

The second perception has been that the provisions of the South East Asia Nuclear Weapons Free Zone (SEANWFZ) Treaty prohibit the countries in the region from developing, possessing, manufacturing, acquiring or transporting nuclear weapons or related materials. Philippines, Malaysia has taken the stand that the provisions of the SEANWFZ hold sufficient statutory enforcement to proliferation concern. The main issue has been that the maritime merchandise

of WMD does not emanate from South East Asia, but from North Korea that uses the transit routes of the sea passages of the region in this trade.

The North Korean maritime commerce of WMD in the region has prompted acute concerns for Japan and Singapore to join in the cooperative threat engagement measures.²⁰

Japan, Singapore, South Korea have been active participants in the PSI exercises in the region that have demonstrated the capabilities of shared intelligence, tracking and monitoring of suspected vessels carrying the merchandise and have evolved interoperable roles in naval–air coordination for such tasks.

Given the strong divergence and opposition to the PSI, the ability to interdict vessels of suspicious cargo cannot be made in the littoral waters of Malaysia, Indonesia and Philippines, the ability of the United States and its extra-regional allies to interdict vessels suspected of transporting WMD cargoes. They would have to rely on the littoral states to take voluntary action and would not be able to engage in intrusive actions.

The resistance to PSI efforts by Malaysia and Indonesia confirms a pattern of political trend of anti-access to extra-regional presence. The regional rationale to this resistance seems to be pitched from international principles of Maritime Law that prohibit interdiction on high seas and the economic angle to say that it would affect trade and maritime shipping in regions.

The bilateral alliances that the US has with Japan, South Korea, Australia and the access arrangements with Singapore and Thailand serves it to engage with such threats in the region.

Alliance Dynamics

The nature and scope of alliance dynamics in the region has an important role in the assessment of the nature and engagement of extra-regional powers in the region.

Four types of alliances that have emerged in the region:

- (1) Formal statutory bilateral treaties, such as US–Japan, US–Korea that are in the form of mutual defence treaties that provide for US Forward Presence and dedicated naval and air commitments to the defence of the respective states.
- (2) Allied partners that are not within the realm of bilateral and multi-lateral treaties but are regarded as strategic for reasons of geo-strategic, geo-political considerations — the US conferment of non-NATO allied status to Pakistan, Thailand, Philippines for purposes of strategic expediency.

- (3) Strategic alliances that has drawn the regional and extra-regional powers that have the convergence of trade and defence technology relations, such as Russia–China relations, China–France relations.
- (4) Multilateral collective security alliances like the Five Power Defence Arrangement.

The nature and salience of these treaties and alliances have been premised on the form and substance of these agreements that have been changing with the changing threat perceptions and the international security milieu.

The Five Powers Defence Agreement was formed in 1971 in anticipation of conventional threats and to enhance the defence capabilities of Malaysia and Singapore with coordinated naval–air exercises in the region. It had served to reinforce regional stability in South East Asia with the extra-regional participation of Australia, New Zealand and the UK with Malaysia and Singapore.

In the June 2004 defence ministers meeting, the Five Power Defence Arrangement reviewed its primary mission objectives with focus on the combat of terrorism in the region.²¹ Maritime Security and counter terror operations were considered as new and vital missions of the alliance. The FPDA is an enduring alliance that has nurtured cooperative security concerns and has aided in the build-up of cooperative threat engagement strategies in the region. The new consensus on counter terror and maritime security operations has been aimed to build new capacities for joint operations and increased convergence on intelligence and surveillance operations.

The US–Japan, US–Korea alliance dynamics have been in review with the US Global Posture Review and the renewal and restructuring of these bilateral mutual security agreements have been broadened with the following objectives:

- (1) Enhance defence capabilities of its allies Japan, South Korea, Australia, Thailand, Singapore through US arms sales and aid in the defence transformation efforts.
- (2) Aid in the development of interoperability of US forces with Japan, South Korea, Australia, Singapore, Thailand and Philippines with the objective to nurture coordinated defence operations in the region with a surge of US forces in the region.
- (3) Build access and places in these countries that would enable the US marine and air expeditionary forces to be deployed with minimal footprint while optimising its naval and air strike power for littoral dominance in hostile environments in the region.

China and France, China and Russia have forged bilateral strategic relationships that are centric on strategic cooperation and defence trade relationships.

The China–Russia strategic relationship began in July 2001 that has engaged the two powers in defence technology transfer and arms sales. Russia has been China’s predominant supplier of military hardware and naval hardware specifically. By 2006, Russian defence technology transfers and arms sales would include 400 Sukhoi fighters, (SU-27; SU-30 MKKs) many upgraded for multi-role missions; unspecified numbers of Russian anti-air and precision ground-attack weapons for aircraft; several hundred Russian S-300 SAMs; 12 Russian KILO submarines, 8 with CLUB long-range anti-ship missiles; 4 Russian SOVREMENNY class missile destroyers; Russian weapons and electronics packages for three new classes of stealthy warships; Russian 1-meter electro-optical and radar satellites.²²

The French have been China’s emergent strategic partner eager to vie for defence contracts. The French have been lobbying hard in the EU to lift the embargo on arms sales, despite the EU’s rejection of the French call. France and Germany are keen to lift the embargo for arms sales to China notwithstanding the enhanced threat to Taiwan. France and China have been exercising in the South China Sea in March 2004 that featured offensive helicopter tactics; ship refuelling at sea and simulated search-and-rescue missions.²³ France has also supplied surface to air missiles and anti-aircraft radars to the Chinese Navy.

The dynamics of alliances and coalitions would be dependent on a host of variables that would interact with the prevalent geo-strategic, geo-economic and geo-political milieu derived from the terms of economic aid, technological transfers, military aid and hardware supplies, infrastructure development ventures, leverages of the extra-regional powers over littoral powers and vice-versa, patterns of intervention, posture and deployment of extra-regional forces and basing patterns.

The convergence and divergence of the alliance patterns would be dictated by the dictates of geo-energy profiles and markets that would drive the geo-political and geo-strategic forces in the region.

Evolving Maritime/Naval Doctrines and Regional Implications

The emergence of new maritime doctrines has been a signal event since the end of the Cold war. The strategic milieu, the regional and global maritime

developments, the technological templates and the national interests drive policy that has led to the derivations in maritime doctrines. The forward presence and roles of the extra-regional navies have been driven by these considerations. Maritime doctrines have been significant drivers in the force modernisations of the naval forces. The US, Japanese, PLA Navy, Indian navies have been prominent in the enunciation of new maritime doctrines.

The US Navy had enunciated the Sea Power 21 Concept a follow up of the 1994 *Forward from the Sea* doctrine. The Sea Power 21 advocates the role of forward naval presence that builds capabilities based on net-centric effects based operations. It advocates the elements of *Sea Strike*, *Sea Shield* and *Sea Basing* that would account for the conduct of littoral dominance operations in the event of littoral powers engaged in hostilities against the US.²⁴ The US envisions a maritime doctrine that is based on expeditionary forces and projection of power from the sea for a complete littoral dominance overwhelming the undersea, air, surface resistance and anti-access strategies.

The US Navy doctrine is perceived to be transformational and premised on the synergies of joint warfare capabilities and platforms that would project power into the littorals with joint forces enabling strategies of access. The US Navy *Sea Power 21* doctrine envisages the development of new capabilities and platforms that would enhance the agility of US intervention, rapid surge into the region, restructured amphibious and expeditionary capabilities, precision strike and reduced foot print on land bases with increased accents on mobile sea bases.

The JMSDF has developed the out of area deployments in the Indian Ocean for the Afghanistan and Iraq operations. The deployments have been the modification of its National Defence Program Outline. The National Defence Planning Outline (NDPO) revised in 1995, was focused to reorient the Japan Self Defence Forces' (JSDF) missions and capabilities to meet the challenges of the post-Cold War security environment.²⁵ It was notable in stressing the need for closer US–Japan alliance cooperation — under the 1960 Treaty of Mutual Cooperation and Security — for the defence of not only Japan, but also the surrounding East Asia region. The revised NDPO focuses on power projection beyond the Japanese shores to defensive escort operations in interoperable roles with US naval deployments.

The focus on sea-based Ballistic Missile Defences that would be deployed on its Aegis-destroyers deployed as a missile shield against possible North Korean missile intimidation. Japan's focus is on the creation of a "multi-functional flexible force" capable of inter-service joint operations for its immediate defence and for international cooperation overseas. The revised

NDPO calls for the creation of a standby force — exclusively for overseas dispatch — that can deploy two units, each of 1,300 GSDF troops, to two different locations simultaneously. Japan's power-projection is enabled on the basis of its maritime power with a joint forces focus and interoperable with US forces.

The Chinese maritime outlook views the development of its naval doctrine focuses on the capabilities of “offshore active defence strategy”. It aims at the evolution of the new “green water active defence strategy”. The span of Chinese naval power projection is envisaged as “Green water” was defined reaching from Vladivostok in the north to the Strait of Malacca in the south and to the “first chain of islands” in the east. Plans involve the creation of a green water navy for early in the 21st century. The Chinese define “blue water” as reaching to the “second island chain”. The creation of a PLAN blue water navy is a goal to be realised by 2050.²⁶

The PLA Navy has been focused on the operational concept that envisages for an extended strategic depth that projecting the PLAN as a strategic force and the spearhead of China's national defence. The formulation envisages the PLA Navy in warfare strategies that would be focused on littoral operations. The offshore active defence strategy intends to assert China's image of regional maritime power with a robust surface action fleet and formidable submarine fleet with air independent propulsion. Its naval capability is primarily meant to protect its flourishing coastal economic regions and defend its maritime interests. It seeks to generate maritime technological development in both economic and military applications through the navy modernisation programme; and it wants to maximise the navy's strategic functions in national defence planning and establish a sea-air-coast-island integrated defence system.

The Indian Maritime Doctrine is an articulation of the strategic missions of the evolving naval order of battle. The doctrine addresses the coercive and benign dimensions of naval operations and diplomacy enunciating its operational tenets of Security, Offensive Action, Flexibility, Surprise, Containment, Defence in Depth and also Maintenance of Morale. The tenets of India's Maritime Power range from Surveillance and Intelligence, Sea Control, Sea Denial to Fleet in Being and “Guerre de Course”. It has the vital missions of convoy, Blockade, Submarine/Anti Submarine Campaign, and Amphibious Operations. The Maritime doctrine highlights the attributes of the Indian Navy and its strengths in mobility, versatility, resilience and poise with the evolving missions and roles that are Military, Diplomatic, Constabulary and Benign. The Indian Maritime Doctrine effectively has translated the objectives

of its Strategic Defence Review 1998 into the following three functions: Naval Presence; Preventive and precautionary diplomacy and Pre-emptive diplomacy.²⁷

The Indian maritime doctrine emphasises the vital need to secure its maritime environment and to secure its Exclusive Economic Zone. It also addresses its geo-strategic imperatives in terms of the competitive build-up of naval forces in the Indian Ocean, the maritime peacekeeping missions, security of its SLOCs with over 90% of its oil requirements flowing from the Persian Gulf–West Asian region and securing of its off shore oil assets and the performance of Humanitarian missions at sea. Indian Maritime Interests are also very wide ranging, largely due to India's unique geographical position. The primary interests, however, are to protect sea-borne trade, safeguarding the EEZ, protection of, harvesting living and non living resources and keeping the SLOCs open and safe. India's maritime interests are closely bound with India's economic security, as 90% of India's trade is sea-borne.

Operationally the Indian Navy is emerging as a “network centric” force with its evolving dedicated satellite links for its surface naval ships, submarines, aircraft, and shore bases. There are follow-up stages in this process that is built to interlink its long range missiles, radars and sensors on the warships through satellite with the objective of decisive strike force into the littoral of the adversary. The net-centric capabilities would envisage the Indian naval battle order to exchange and transfer real time data providing for a digital tactical battle space view of the dispersed fleet formations, aircraft locations and submarine deployments.²⁸

India's nuclear navy is emerging with its procurements from Russia of the lease/purchase of two Akula (Bars)-class Type 971 nuclear-powered submarines (SSNs) and armed with the three-stage, 300 km-range Novator 3M-54E1 Klub-S (SS-N-27) cruise missile, for use against surface ships, submarines and shore targets. The Indian Navy's dominant role would be further augmented by the deployment of its indigenous nuclear submarines that would be armed with the Sagarika missiles, complementing the Russian Akula and Amur class submarines in assortment.²⁹

Competitive and Cooperative Maritime Strategies in Asia-Pacific

The analysis of the maritime doctrines and the operational capabilities of the extra-regional navies provide the sense of intents and capabilities of the extra-regional navies in the region.

The common denominators in the *Intents-Capabilities* matrices are the following:

- (1) Forward Presence and power projection that serves the military, diplomatic, coercive, cooperative, benign and constabulary missions at sea.
- (2) Littoral dominance to exert force to neutralise anti-access strategies.
- (3) Combination of coercive and benign naval operations to secure oil SLOCs, containment of maritime asymmetric threats.
- (4) Extensive surface, submerged and naval-air capabilities for maritime surveillance, reconnaissance and precision strike capabilities.
- (5) Net-centric warfare capabilities.
- (6) Nuclear deterrence and nuclear compellence during peace and crisis situations.
- (7) Explicit and implicit threat assessments in regard to possible primary and secondary threats in the region and competitive naval build-ups in the region.
- (8) Preference for sea-based limited theatre missile defence systems could be the possible indices that determines the competitive naval strategies in the IOR South China Sea region.

The patterns of the competitive naval strategies in the region could likely evolve in the following typologies:

- (1) The US led naval concert of the UK, Japan, Australia, India, Singapore, South Korea, and Thailand.
- (2) The China naval concert in future could have Iran, Pakistan, Bangladesh and Myanmar.
- (3) France would be the opportunistic naval partner to the concert that serves its great power ambitions in the region. In most instances, it would aim at an independent role or would bandwagon with China for their quest for a multipolar naval balance in the region.
- (4) Sri Lanka, Philippines provide for the vital access points in the respective regions and hence they could tend to maintain equidistant balance between the rival concerts.
- (5) Russia would prefer bilateral naval ties with India and would like to have its occasional presence in the Indian Ocean in the form of show the flag diplomacy but would not be able to sustain regular forward basing and presence.

The patterns of competitive naval strategies in the region could have the access and forward basing facilities in the region in the form of carrier task forces, amphibious and expeditionary formation, naval aviation from carriers and attack submarine deployments typical of the US task forces augmented by the UK, Japanese, Australian naval flotillas.

The second pattern could be the deployment of destroyer-submarine squadrons with frigate and fleet auxiliary support that would have naval exercises in the region and would have semi-permanent basing facilities typical of the PLA Navy in the Arabian Sea, Bay of Bengal with access facilities in Pakistan and Myanmar.

The third pattern could be the forward presence and cooperative naval engagement in forward deployments in support of multinational or US-led coalition naval operations with strong defensive orientation provided by the JMSDF, the RAN and the Republic of Korea Navy.

The fourth pattern would be the forward presence and limited deployment with emphasis on joint naval manoeuvres with regional navies on extended deployment would be typical of the Indian Navy that would have joint exercises with China, Singapore, Indonesia, Malaysia, South Korea, Philippines, Japan and Australia. The Indian Navy would also be the dominant navy after the US Navy in the Indian Ocean in view of its naval order of battle and could play decisive operations in future Indian Ocean naval operations.

Patterns of Littoral Dominance

Littoral operations and littoral dominance would be the accents of the extra-regional naval powers in the region. The scope of forward presence in the 21st century would be centred on the projection of power into the hinterland and the deployment of sea-launched cruise missiles with conventional and nuclear payloads for strike. The maritime doctrines and concept of operations of the US, UK, France, China and India are specific in regard to littoral control operations.

Four factors have led to the quest for littoral control in the respective theatres of operations in the North Arabian Sea, the Indian Ocean, the Bay of Bengal; the South China Sea and in the Taiwan straits.

- (1) Surface platforms of the littoral powers evident in the stealth platforms like frigates, missile corvettes armed with supersonic anti-ship missiles and anti-ship cruise missiles has dented the sea control capabilities of the

great powers in the region, enhancing the area-denial effectiveness of the defending powers.

- (2) Short range ballistic missiles with nuclear, biological and chemical payloads have increased the retaliatory potential of the littoral powers denting the power projection capabilities of the extra-regional power's surface naval forces that could hypothetically be targeted by land-based missiles.
- (3) Submarines in the littorals offer the best-submerged defence of the littoral powers. The enhanced capabilities of the diesel-electric submarines armed with high speed homing torpedoes with fire and forget capabilities provides the effective stealth strike options. In combination with the supersonic cruise missiles, the endurance of the new air independent propulsion submarines offers the potent strike force.
- (4) Shore-based naval aircraft armed with anti-ship and air-to-surface attack missiles provide for the emerging platforms for strong littoral defence capabilities that complicate the access and basing operations and the ability to sustain littoral control operations.

Sea basing and joint forces enabling technologies and capabilities are the responses to the increasing frictions of the anti-access strategies that are strengthening the littoral defence operations.

Nuclear Forces and Missile Defences at Sea

Nuclear weaponisation at sea would be the evolving order in the 21st century even as sea-based missile defences would emerge to offer possible limited defence against the ballistic missile forces in the region. Sea-based nuclear weapons on board nuclear submarines counter offers, endurance, survivability and credibility of the assured retaliatory capabilities of the nuclear powers. The substantial deployments of the US SSBN (submerged ship ballistic nuclear) Trident D-5 force, the UK Trident; the French SSBN boats; the PLA Navy Type 94 deployments have been for the maintenance of nuclear deterrence in forward deployments. The advantages of nuclear forward presence are as follows:

- (1) Sea-based deterrence provides the optimal policy and strategic solution for the regional powers given its feasibility. Sea-based deterrence would give credence to assured strike capability that could be based on either cruise missiles or ballistic missiles launched from submarines with the advantages of dispersal and stealth.

- (2) The saturation of the ground–air defence environment with anti-missile defences would result in newer means of dispersal of land-based nuclear assets of manned attack aircraft and land based missiles to newer locales with the high probability of being tracked and destroyed in pre-emptive strikes. The option of sea-based deterrence as credible and the assured retaliatory capability enhances the deterrence stability of the contending powers. The optimal dispersal of the platforms and payloads would enable the maintenance of a credible deterrence in terms of survivability.
- (3) Sea-based deterrence would reinforce the delayed yet assured retaliation in the face of an omni-directional threat. It would provide for sufficient options to retaliate from different locations in the seamless medium of the oceans so as to avoid detection and maintain stealth and precision.
- (4) Sea-based deterrence enhances the ability of a viable targeting strategy by and avoids the possibility of a “defanging strike” against a defending power. The operational impact of sea-based theatre missile defences (TMD) deployed to thwart regional ballistic missiles with WMD/nuclear payloads would constitute the shield along with the deployed Submarine Launched Ballistic Missiles (SLBMs). The TMD deployments would be on board the *Arleigh Burke* class destroyers and *AEGIS* cruisers. The emerging US, Japanese and even South Korean *AEGIS* cruisers with naval theatre ballistic missiles is gaining credence. The obvious implication of substantial sea-based TMD deployments in the Indian Ocean region, North East Asian region in the Sea of Japan would be to target and neutralise the regional nuclear arsenals with ballistic missile inventories in the MRBM/IRBM and extended IRBM ranges of the littoral missile powers. The sea-based Navy Theatre Wide systems would be primarily oriented to intercept missiles as early as possible in flight before countermeasures are dispersed and allow time for secondary attempts.

Sea-based Missile Defence systems provide for mobility and flexibility, and shipboard systems enable a new dimension of power projection ability premised on an offence–defence technology template. Sea-based missile defence systems offer the advantage of mobility in that it makes the defensive missile system less vulnerable to a pre-emptive strike and allows for adaptation on a flexible scale. It also allows for offshore basing without having the deployment in land territory that is vulnerable to pre-emptive ballistic missile strikes and the political consequences of deploying missile defences in allied territory.

Cooperative Naval Strategies in IOR and the South China Sea

The Indian Ocean Region and the Asia-Pacific would emerge as the hub of economic development and a maritime security complex that would have to be based on cooperative maritime strategies to deter and balance the aggressive force build up in the region. The complexities of extra-regional rivalries, aggressive littoral dominance strategies, nuclear weapons and ballistic missiles compounded with persistent archipelagic disputes offer the triggers to crisis escalation. The maritime realm offers scope for cooperation even though competition remains at stake. Cooperative security requires a transnational approach and requires states to build the relevant capacities to transcend primary sources of contention and evolve a functionalist perspective in cooperation for mutual benefit.

Maritime Cooperative security is a functionalist process that has prospects for success. The maritime transnational space facilitates the common goals of cooperation, search and rescue, and disaster management. The accents of cooperative security in the Indian Ocean–South China context lies in the bilateral and multilateral aegis that has scope to be optimised well in the maritime realm.

The transnational concerns and issues of energy, SLOCs, exploitation of the resources in the EEZ, combating and containing of transnational threats of piracy, maritime-based terrorism, interdiction and containment of the spread of WMD technologies can provide the basis for cooperation. In the naval realm, basis for cooperation include Search and Rescue (SAR), Prevention of Incidents in High Sea (INCSEA), combat of narcotics and interdiction, and the maritime initiatives in counter proliferation. There are two issues that attract serious attention in the realm of Cooperative Maritime Security, which is the interdiction of WMD technologies in maritime transit and the combat of maritime-low intensity conflicts.

Joint Naval Exercises

The emerging maritime cooperative trend has been the joint naval exercises that have been institutionalised on bilateral and multilateral aegis. Joint naval exercises provide the cooperative naval engagements in interoperability and exercise of capabilities that provides the basis for future contingency operations. Joint naval exercises in the region have enhanced cooperative engagements.

Joint Patrols of the Straits

A contentious yet vital aspect of cooperative maritime engagement has been the patrolling of narrow sea gates like the Straits of Hormuz and the Straits of Malacca. Contestations have emerged in terms of sovereignty controls and archipelagic disputes persist. The trilateral MALSINDO patrols of the Straits of Malacca are an emergent trend in joint patrols in the region. Joint patrols have also been in the form of engagement of regional coastguards that have more salience in counter-terror and counter-piracy operations than navies. Naval deployments are viewed more in terms of offensive power projection and coast guards in defensive formations.

Maritime Intelligence Sharing

Transnational threats and the imperatives to maintain maritime stability have endeavoured the countries of the region towards institutionalising mechanisms for intelligence collection and sharing on a real-time basis.

Maritime Capacity Building

Regional maritime initiatives have gained significance with emphasis on (a) better situational awareness fostered through sensors networks, coordinated patrols with overlaps; (b) effective interagency coordination and the dedicated agencies that has effective lateral linkages for coordinated interdiction and containment of asymmetric challenges at sea; (c) joint coast guard exercises.

Conclusion

The maritime strategic trends in the Asia-Pacific portray a chequered picture of intense competitive rivalries with strands of cooperative maritime partnerships that have emerged in recent years. The competitive-cooperative maritime strategies are the dichotomous outcome of the evolving balance of power in the region that features a rising China and the emergence of Japan as a “normal” power. The region’s adaptation to a Rising China is considered to be a crucial challenge even as China expands its military prowess especially its naval prowess commensurate to its economic capabilities and strength. The balancing role of India’s navy in the Indian Ocean in response to the emergent Chinese naval posture would be crucial even as the Asia-Pacific contends with the expanding PLAN fleets from the second island to the third island chain

capabilities and for a evolving blue-water capability that would radiate beyond the Straits of Malacca into the Indian Ocean in the west.

The US continues as the dominant hegemonic power that provides the crucial stabilisation influence in the region that has several potential territorial contestations and asymmetric challenges.

The maritime balance of power in the region would be driven significantly by the process of naval transformation derived from defence transformation.

Naval transformation would be determined by the emergent strategic milieu that conditions the balance of power in the region. The accents would be in the nature of a multipolar structure that would evolve with economic growth and strategic capabilities that would be in the form of competitive-cooperative relationships. The United States would emerge as the offshore balancer that would provide the stabilising influence in the region.

Naval transformation would be determined by the evolving maritime doctrines that provide the basis for seamless integration of operational roles and emergent technology and maritime capabilities of the powers. Maritime/naval doctrines would determine the process of transformation and the strategic milieu of the powers in the region.

Naval transformation would be crucially determined by technology that would be in the accents of *jointness*. *Jointness* of the armed forces would be the future paradigm even as the conduct of operations would be tailored to suit the requirements of the architecture of the armed forces. The navies would be the enablers in the process of jointness. Jointness would be enhanced in effectiveness by the net-centric capabilities of the naval forces. Net-centric capabilities would be the ultimate platforms that would integrate the “sensors” and “shooters”.

In summation, the maritime strategic trends in the Asia-Pacific portray strong evidence towards a technology centric naval transformation process that is increasingly in the competitive-cooperative dichotomy of interests that would under grid the evolving balance of power in the region.

Notes

1. Paul Dibb, “Towards an Asian Balance of Power”, *Adelphi Paper* 295, 1995.
2. Paul J. Bracken, *Fire in the East: The Rise of Asian Military Power and the Second Nuclear Age* (New York: Harper Collins, 1999).
3. Geoffrey Till, *Seapower: A Guide for the Twenty-First Century* (London: Frank Cass, 2004).

4. United States Government, Department of Defense, "A Framework for Strategic Thinking: Building Top Level Capabilities", *FOUO Working Papers*, 19 August 2004.
5. Admiral Vern Clark, "Sea Power 21: Projecting Decisive Joint Capabilities", *Proceedings*, October 2002.
6. United Kingdom, Ministry of Defence, *Delivering Security in a Changing World (Defence White Paper)* (London: UK MoD, 2003).
7. "Five-nation regional defence pact to expand to counter terrorist threat", *Agence France Presse*, Singapore, 7 June 2004.
8. "Navy: France", *Jane's Sentinel Security Assessment — Western Europe*, 15 November 2004. Available at: <http://www.jni.janes.com>
9. See the detailed analysis by Christopher W. Hughes, "Japan's Re-emergence as a 'Normal' Military Power", *Adelphi Paper 368-9*, 2004.
10. *Ibid.*
11. "Navy Russian Federation", *Jane's Sentinel Security Assessment — Russia and the CIS*, 3 June 2003. Available at: <http://www.jni.janes.com>
12. "Navy Australia", *Jane's Sentinel Security Assessment — Oceania*, 2 February 2004. Available at: <http://www.jni.janes.com>
13. Ji Guoxing, "SLOC Security in the Asia-Pacific", *Asia-Pacific Center for Security Studies Occasional Paper*, Available at: <http://www.apcss.org/Publications/Ocasional%20Papers/OPSloc.htm>
14. Stanley B. Weeks, "Sea Lines of Communication Security and Access", in Sam Bateman & Stephen Bates (eds), *Shipping and Regional Security*, Canberra Papers on Strategy and Defence No. 129 (Canberra: Strategic and Defence Studies Centre, Australian National University, 1998).
15. Marco Rosini, "The Navigational Rights of Nuclear Ships", *Leiden Journal of International Law*, Vol. 15, No. 1, March 2002, pp. 251-265.
16. See the analysis of Rohan K. Gunaratna (2001), "Transnational Threats in the Post-Cold War Era", *Jane's Intelligence Review*, 1 January 2001. Available at: <http://www.jir.janes.com>. Also see Rohan K. Gunaratna, "The Asymmetric Threat from Maritime terrorism", *Jane's Navy International*, October 2001, p. 28. Available at: <http://www.jni.janes.com>
17. John Garvar, "The Future of the Sino-Pakistani Entente 'Cordiale'", in Michael R. Chambers (ed), *South Asia in 2020: Future Strategic Balances and Alliances* (Carlisle: Strategic Studies Institute, U.S. Army War College, November 2002).
18. Toshiki Sakurai, "The Straits of Malacca Challenges Ahead: Japan's Perspective", *Paper presented at the International Conference on the Straits of Malacca*, Kuala Lumpur, October 2004.
19. Tsutomu Toichi, "Energy Security in Asia and Japanese Policy", *Asia-Pacific Review*, Vol. 10, No. 1, 2003, pp. 44-51.

20. Tamara Renee Shie, "The Nexus between Counterterrorism, Counterproliferation and Maritime Security in South East Asia", *Issues & Insights*, Pacific Forum, CSIS, Vol. 4, No. 4, July 2004.
21. "Five-nation regional defence pact to expand to counter terrorist threat", *Agence France Presse*, Singapore, 7 June 2004.
22. Richard D. Fisher Jr., "Foreign Military Acquisitions and PLA Modernization", Testimony of Richard D. Fisher, Jr., Center for Security Policy, Before the U.S.–China Economic and Security Review Commission, Washington D.C., 6 February 2004.
23. "France and China: Cozying Up for Mutual Gain", *STRATFOR*, 11 October 2004. Available at: <http://www.stratfor.com>
24. Several analyses that highlight the various issues of the US Navy transformation have been made. See Ronald O'Rourke, "Transform and roll out: the USN's approach to change", *Jane's Navy International*, 4 March 2004; Scott C. Truver, "Sea Basing; more than the sum of its parts?", *Jane's Navy International*, 5 February 2004; Andrew Koch, "US Navy outlines vision for Sea Power 21 Concept", *Jane's Defence Weekly*, 11 December 2002; "Navy: United States", *Jane's Sentinel Security Assessment — North America*, 11 November 2004. Available at: <http://www.janes.com>
25. "Japan's New Defence Posture: Towards Power Projection", *Strategic Comments*, Vol. 10, No. 8, October 2004.
26. "Navy: China", *Jane's Sentinel Security Assessment — China and Northeast Asia*, 27 May 2004. Available at: <http://www.jass.janes.com>
27. Integrated Headquarters, Indian Navy, Ministry of Defence, Indian Navy, *Indian Maritime Doctrine*, INBR 8 (New Delhi: Indian Ministry of Defence, 2004).
28. Vijay Sakhuja, Naval Diplomacy: Indian Initiatives, *Bharat Rakshak Monitor*, Volume 6, Issue 1, July–August 2003.
29. Vijay Sakhuja, "Change But Continuity: The Indian Navy Marches Ahead", *IPCS Article 1457*, 10 August 2004. Available at: <http://www.ipcs.org>