



29th ASIA-PACIFIC ROUNDTABLE

Southeast Asia: Naval Capabilities and Regional Cooperative Mechanisms

Vijay Sakhuja

**THE APR SERIES
E-Monograph**

Southeast Asia: Naval Capabilities and Regional Cooperative Mechanisms

Vijay Sakhuja

The APR Series
E-Monograph



**INSTITUTE OF STRATEGIC AND
INTERNATIONAL STUDIES (ISIS) MALAYSIA**

Published by
Institute of Strategic and International Studies (ISIS) Malaysia
1 Persiaran Sultan Salahuddin
PO Box 12424
50778 Kuala Lumpur
Malaysia
www.isis.org.my

© ISIS Malaysia 2016

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher.

The views and opinions expressed in this book are those of the author and may not necessarily reflect those of ISIS Malaysia.

Southeast Asia: Naval Capabilities and Regional Cooperative Mechanisms

In Southeast Asia, maritime security forces are witnessing major transformation. The navies are building capabilities to respond to traditional and non-traditional threats and challenges at sea. The regional countries are also investing in coast guards and maritime enforcement agencies for a number of tasks such as maintaining order at sea, protecting Exclusive Economic Zones (EEZs), and securing offshore resources. There is also technological transformation underway to enhance maritime domain awareness through systems and processes. Further, a web of maritime related institutions has mushroomed in the region and these have found favour among the regional and extra-regional countries that have chosen to actively participate in the related activities, dialogues and discussions. In the above context, this paper attempts to highlight the drivers and trends in regional naval acquisitions. It also showcases the Association of Southeast Asian Nations (ASEAN) led agreements and arrangements for enhancing regional security.

Drivers for naval acquisition

There are at least six important reasons for Southeast Asian navies to develop robust naval capabilities. First, the constants of geography mandate that Southeast Asian countries build naval power to defend sovereignty and safeguard territory, and uphold national interests. The second reason is that the navy is the primary force for anti-access duties to preclude intervention from the sea as also for projection of naval power. The necessity to exercise control and jurisdiction over territorial waters, EEZs and continental shelf is the third reason. Fourth, the navies are most suitable to respond to humanitarian assistance and disaster relief (HADR) missions and counter asymmetric and low intensity threats and challenges. The ripple effect of the ongoing naval transformation

among other Asia Pacific countries is the fifth reason. The sixth reason is the forward presence of extra-regional naval forces in the region deployed in cooperative and competitive formats.

Regional naval trends

There is significant interest among Southeast Asian navies to acquire advance naval platforms, technologies and weapon systems. Delivery of major naval vessels in the region has witnessed a steady increase in the last two decades and over 100 combatants were acquired by the regional navies and several more are under construction and consideration.

Defence spending

Perhaps what merits attention is that the naval acquisitions have continued unabated despite the financial crises in 1997 and 2007; further, the current economic growth has ensured that naval modernisation remains a high priority in the national agenda and the acquisition plans appear to be as per the requirements and perspective plans. The Stockholm International Peace Research Institute (SIPRI) report notes that the collective defence spending by Southeast Asian countries witnessed an increase from US \$14.4 billion in 2004 to US \$35.5 billion in 2013, which is about 147 per cent increase during the period 2000–2010.¹ Further, regional military expenditures increased during 2012–2013 by nearly 10 per cent and is projected to exceed US \$40 billion in 2016.² Significantly, the defence spending hovered around 2 to 4 per cent of gross domestic product (GDP) and the collective average for ASEAN in 2013 was about 2.11 per cent. Among these, Myanmar was at 4.5 per cent of GDP; Singapore was at 3.4 per cent of GDP; Vietnam at 2.3 per cent of GDP is noteworthy; and Indonesia was low at 0.9 per cent of GDP.

Warship building

There are not many shipbuilding yards in Southeast Asia that can

construct warships. The lack of this capacity can be attributed to a number of reasons such as poorly developed military industrial complexes, low technological capability to build ships, high cost of construction, preference for imported warships, non-instance on joint development and transfer of technology from foreign sources, and preference for import substitutions. As a result, nearly 90 per cent of all naval platform demands of the Southeast Asia navies are met through imports and built by foreign companies.

In recent times, some shipyards in Southeast Asia have chosen to assemble 'knocked down kits', joint ventures for constructing warships, and absorb best practices for quality control. These initiatives have begun to transform the regional warship building market, which is taking full advantage of the low labour costs, partnership with domestic companies and, in some cases, the government have provided fiscal and technological support. PT PAL in Indonesia, SB Marine Pte Ltd and Singapore Technologies Marine Ltd (ST Marine) in Singapore, and Boustead Naval Shipyard Sdn Bhd in Lumut, Malaysia, are important regional warship building yards. Myanmar has developed some capability to build warships and the performance of the Naval Dockyard in Yangon is noteworthy. In Vietnam, Hong Ha Shipbuilding Company successfully built a warship using state-of-the-art technology indigenously for the Vietnam Navy.³ The ship is based on the Russian Svetlyak OPV design and built with Russian assistance.

Submarines

Among the naval platforms, the submarines appear to be popular among the Southeast Asian navies. These serve a number of purposes such as force deterrent, anti-access platforms, force multipliers, and, in some cases, these are for enhancing naval prestige. It is believed that the 'Asia-Pacific region could operate more than 130 diesel-electric submarines (SSKs) by 2020'.⁴ The acquisition of six submarines by the Vietnam Navy under a single contract makes it one of the biggest among the Southeast

Asian navies in terms of submarine purchases. Singapore (four units) and Indonesia Navy (two units) also operate submarines and another pair each is expected to join soon. Malaysia also has two submarines and Myanmar and Thailand are considering acquisition. However, it has been observed that in case submarine operations remain unregulated, an underwater incident could be a reality.⁵

Expeditionary and amphibious platforms

Southeast Asian navies' interest in building or acquiring expeditionary / amphibious capabilities is gaining momentum. These platforms serve a number of purposes: respond to natural phenomena and disasters such as cyclones, typhoons, storm surges and Tsunamis; however, there are fears that in some cases these go far beyond the HADR purposes.⁶ The Singapore Navy operates the Endurance-class multipurpose amphibious landing platform dock ships (LPDMs) capable of carrying two Super Puma helicopters on deck and 18 main battle tanks.⁷ Singapore also has plans to acquire a Joint Multi-Mission Ship (JMMS) capable of hosting a number of helicopters. The Malaysian government announced plans in 2010 to acquire three Multi-Role Support Ships (MRSS) for HADR.⁸ Indonesia acquired a landing platform dock (LPD) vessel from South Korea and this was followed by four Makassar-class LPDs.⁹ Similarly, the Thai Navy operates the HTMS Ang Thong, 7,600-ton Endurance-class LPD ship, built by the Singapore Technologies Marine Ltd (ST Marine).¹⁰ Myanmar is in advanced negotiations with the Indonesian shipbuilders PT PAL to acquire Makassar-class LPDs.¹¹ Similarly, the Philippines in partnership with PT PAL has plans to build two Strategic Support Vessel (SSV), which is a modified version of the Makassar-class LPDs.¹²

Naval aviation

According to data listed by IHS Jane's Fighting Ships, Southeast Asian navies operate a variety of helicopters and maritime patrol aircraft from ships and shore bases. Force multipliers such as unmanned aerial vehicles

(UAVs) and mid-air refueling are also being considered. Indonesia plans to acquire US-2 amphibious aircraft built by ShinMaywa Industries Ltd Japan,¹³ and it fits well into the Indonesian Navy's strategy, which is sharply focused on maritime control of the archipelago.

C4ISR

Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) is at the heart of modern day warfare and is a major constituent of the Revolution in Naval Affairs (RNA). The Southeast Asian navies are not immune to RNA and some of them have developed network centric warfare capability. The Singapore Navy has taken the lead to transform and has successfully undertaken system integration of the ship and airborne systems and other information sources to obtain an intelligent tactical picture.¹⁴ The Malaysian Navy is part of the Malaysian Armed Forces VMAF 21 (Versatile of the 21st Century) programme, which envisages joint-service operations, force projections, and new combat capabilities. Indonesia's Minimum Essential Force (MEF) build up strategy encourages integration of conventional and cyber capabilities. The Brunei Navy benefits from the Joint Operations Centre command and control capability for the Royal Brunei Armed Forces (RBAF), including provision for training and technical support.

Regional cooperative mechanisms

The ASEAN Regional Forum (ARF) can be dubbed as the first attempt by the Southeast Asian countries to address regional maritime security issues multilaterally. It emerged in 1994 in the backdrop of the end of the Cold War and, in the last two decades, it has found resonance among the partners who have addressed contentious and non-contentious security issues that span the spectrum of hard security to non-traditional security, including Confidence building measures (CBMs) and preventive diplomacy.

In the maritime domain, the ARF established a number of dialogue mechanisms for maritime and naval CBMs. In 1999, the ARF held the first Meeting of Specialist Officials on Maritime Issues and, since then, a number of meetings, dialogues and workshops have been organised by the ARF. These include the 2003 ARF Workshop on Maritime Security Challenges; 2004 Regional Maritime Security; 2005 Regional Cooperation in Maritime Security; 2005 Training for the Cooperative Maritime Security; 2005 Capacity Building of Maritime Security; 2006 Maritime Security Shore Exercise Planning Conference; 2007 ARF Maritime Security Shore Exercise; 2007 Round Table Discussion on Stocktaking of Maritime Security Issues; 2008 Training Programme on Maritime Security; 2008 Advanced Maritime Security Training Programme for ARF Member States; and the 2009 Measures to Enhance Maritime Security. Since 2009, the ARF has hosted the Inter-Sessional Meeting on Maritime Security (ISM on MS), which has now emerged as an annual feature.¹⁵

Another important constituent of the ASEAN led maritime security initiatives is the annual ASEAN Defence Ministers' Meeting (ADMM) established in 2006.¹⁶ At the operational level, at the 23rd ASEAN Summit in Brunei, the ASEAN leaders announced that they were looking forward to "developing the ideas of establishing hotlines of communication to further enhance trust, confidence, and to respond to emergency situations at sea".

The ADMM Plus (which includes China, India, Japan, South Korea, Australia, New Zealand, Russia and the United States as members) has identified five priority areas for cooperation: (i) maritime security; (ii) counter-terrorism; (iii) disaster management; (iv) peacekeeping operations; and (v) military medicine. These issues are addressed through Experts' Working Groups (EWGs), which work towards practical cooperation. Although the stated aim of the ADMM Plus is to address non-traditional security issues, apparently there is an implicit component to address other regional security issues such as tensions in the Korean peninsula, competing claims in South China Sea, and even China-US

relations that turn acrimonious on a regular basis and could undermine regional security. Similarly, in 2011, the ASEAN countries decided to expand the ASEAN Maritime Forum (AMF) as Expanded ASEAN Maritime Forum (EAMF) to include other partners from Asia.

The 21 member Council for Security Cooperation in the Asia Pacific (CSCAP) is a Track Two initiative and has set up a number of Study Groups and Experts Groups¹⁷ to discuss maritime issues: (a) Facilitating maritime security cooperation in the Asia Pacific; (b) Naval enhancement in the Asia Pacific; (c) Capacity building for maritime security cooperation in the Asia Pacific; and (d) Principle for Good Order at Sea. In 2015, it established a study group on Harmonising Air and Sea Search and Rescue.

It is noteworthy that the above maritime and naval web of relationships is also backed by operational initiatives. In 2012, the Southeast Asian navies decided to set up an ASEAN Information-Sharing Portal (AIP) as a “regional maritime information hub, to enhance maritime situation awareness and provide early warning triggers and actionable information to cue timely regional responses”.¹⁸ The Singapore Navy and the Indonesian Navy have institutionalised Submarine Rescue Support and Cooperation arrangement, which establishes a framework of submarine rescue support and cooperation.¹⁹ Malaysia has proposed setting up a Joint ASEAN Peacekeeping Force.²⁰

The Southeast Asian countries have also harnessed the defence industry, which is performing the dual role of facilitating marketing products as also enhancing maritime security that goes beyond military sales. There are some very good examples of such initiatives by the industry: Langkawi International Maritime and Aerospace Exhibition (LIMA) in Langkawi, Malaysia, and the International Maritime Security Exhibition (IMDEX) in Singapore.

Conclusion

The ASEAN led maritime structures and arrangements have over the years matured and are performing well at the functional and operational levels. The regional navies are an important component of the evolving Asia Pacific security architecture and have received active support from other regional powers that have encouraged the ASEAN to lead the cooperative discourse across the wider Asia Pacific region. The regional navies have been in the forefront to build confidence among themselves and other regional countries, which has contributed to peace and stability.



Notes

¹ Cited in "Military Expenditures in Southeast Asia", <http://www.indopacificreview.com/military-expenditures-southeast-asia/#sthash.1ja6Qdqg.dpbs> (accessed 30 November 2014). Also, see Richard A Bitzinger, "IMDEX Asia: Southeast Asian naval expansion and defence spending", <http://www.rsis.edu.sg/wp-content/uploads/2015/05/CO15120.pdf> (accessed 23 May 2015).

² See "Military Expenditures in Southeast Asia".

³ "Vietnam Emerges as a Warship Builder", http://www.bairdmaritime.com/index.php?option=com_content&view=article&id=12118:vietnam-emerges-as-a-warship-builder&catid=113:ports-and-shipping&Itemid=208 (accessed 31 March 2015).

⁴ Ridzwan Rahmat, "IMDEX 2015: RSN warns of risks in submarine proliferation in Asia, proposes operational framework", *IHS Jane's Navy International*, 20 May 2015.

⁵ "Singapore, Malaysia and Indonesia Could Extend Joint Patrols in South China Sea", <http://www.channelnewsasia.com/news/singapore/singapore-malaysia-and/1838338.html> (accessed 13 May 2015).

⁶ Koh Swee Lean Collin, "Southeast Asia's Emerging Amphibious Forces", *The Diplomat*, 17 October 2014.

⁷ *IHS Jane's Fighting Ships 2014–2015*, p. 756.

⁸ "Armed Forces to Get 3 Support Ships Worth RM 2.2bil (USD 650mio)", <http://defense-studies.blogspot.in/2010/06/armed-forces-to-get-3-support-ships.html> (accessed on 22 December 2014).

⁹ *IHS Jane's Fighting Ships 2014–2015*, p. 368.

¹⁰ "Thailand's Endurance Class LPD", <http://www.defenseindustrydaily.com/Singapores-ST-to-Build-LPD-LST-Landing-Craft-for-Regional-Navy-05152/> (accessed 3 March 2015).

¹¹ Jon Grevatt, "Myanmar Navy and Indonesia's PT PAL in LPD talks", *IHS Jane's Defence Industry*, 22 July 2014.

¹² Ridzwan Rahmat, "PT PAL Cuts Steel on First Philippine Navy Sealift Vessel", *IHS Jane's Navy International*, 26 January 2015.

¹³ "Indonesia Mulls Buying Japan's US-2 Amphibious Aircraft, Defence Chief Says", *The Japan Times*, 6 April 2015.

¹⁴ Gordon Arthur, "Network-Centric Warfare in Asia", <http://www.isn.ethz.ch/Digital-Library/Articles/Detail/?id=167921> (accessed 16 December 2014).

¹⁵ For details of ARF Track I activities, see <http://aseanregionalforum.asean.org/library/arf-activities/list-of-arf-track-i-activities-by-inter-sessional-year.html> (accessed 31 March 2015).

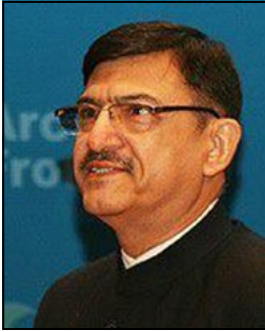
¹⁶ For more details on the ADMM, see "ASEAN Defence Ministers Meeting (ADMM)", <http://www.asean.org/communities/asean-political-security-community/category/asean-defence-ministers-meeting-admm> (accessed 31 March 2015).

¹⁷ "Study Groups", <http://www.cscap.org/index.php?page=study-groups> (accessed 15 April 2015).

¹⁸ RADM Chew Men Leong, "The Information Fusion Centre: Challenges and perspectives", *Pointer*, p. 2, http://www.mindef.gov.sg/imindef/publications/pointer/supplements/IFC/_jcr_content/imindefPars/0006/file.res/MINDEF_Pointer%20IFC%20Supplement%20FINAL.pdf (accessed 24 December 2014).

¹⁹ "Arrangement between the Republic of Singapore Navy and the Indonesian Navy Concerning Submarine Rescue Support and Cooperation", http://www.mindef.gov.sg/imindef/press_room/official_releases/nr/2012/jul/09jul12_nr/09jul12_fs2.html#.V5jPT2C6Zjo (accessed 31 March 2015).

²⁰ Amy Chang, Ben FitzGerald, and Van Jackson, "Shades of Gray: Technology, strategic competition, and stability in maritime Asia", *Maritime Strategy Series*, March 2015, p. 5.

**Dr Vijay Sakhuja**

Director,
National Maritime Foundation, India

Vijay Sakhuja is Director of National Maritime Foundation, New Delhi. He is also Visiting Senior Research Fellow at the Institute of Southeast Asian Studies (ISEAS), Singapore. He was previously Director of Research at the Indian Council of World Affairs (ICWA) (2009–2014). A former navy officer, Sakhuja received his PhD and MPhil degrees from the Jawaharlal Nehru University in New Delhi. He is author of *Asian Maritime Power in the 21st Century: Strategic Transactions — China, India, Southeast Asia* (ISEAS, 2011), and co-author of *Climate Change and the Bay of Bengal: Evolving Geographies of Fear and Hope* (ISEAS, 2015). Sakhuja is editor of *Maritime Affairs* and serves on the international editorial board of *Journal of Indian Ocean Region*.



**INSTITUTE OF STRATEGIC AND
INTERNATIONAL STUDIES (ISIS) MALAYSIA**

The Institute of Strategic and International Studies (ISIS) Malaysia was established on 8 April 1983 as an autonomous, not-for-profit research organisation. ISIS Malaysia has a diverse research focus which includes economics, foreign policy, security studies, nation-building, social policy, technology, innovation and environmental studies. It also undertakes research collaboration with national and international organisations in important areas such as national development and international affairs.

ISIS Malaysia engages actively in Track Two diplomacy, and promotes the exchange of views and opinions at both the national and international levels. The Institute has also played a role in fostering closer regional integration and international cooperation through forums such as the Asia-Pacific Roundtable, the ASEAN Institutes of Strategic and International Studies (ASEAN-ISIS), the Pacific Economic Cooperation Council (PECC) and the Network of East Asian Think-Tanks (NEAT). ISIS Malaysia is a founding member of the Council for Security Cooperation in the Asia-Pacific (CSCAP) and manages the Council's Secretariat.

As the country's premier think-tank, ISIS Malaysia has been at the forefront of some of the most significant nation-building initiatives in the nation's history. It was a contributor to the Vision 2020 concept and was consultant to the Knowledge-Based Economy Master Plan initiative.

INSTITUTE OF STRATEGIC AND INTERNATIONAL STUDIES (ISIS) MALAYSIA

No. 1, Persiaran Sultan Salahuddin,
P. O. Box 12424, 50778 Kuala Lumpur, MALAYSIA

Tel : +603 2693 9366

Fax : +603 2691 5435
+603 2691 3210

Email : info@isis.org.my
Web : www.isis.org.my



Institute of Strategic and
International Studies (ISIS) Malaysia



ISIS_MY

