

To What Extent can Singapore's Maritime Security Outlook be considered as Exceptional within Southeast Asia?

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Abstract:

The author has divided his essay into three parts where he discusses why Singapore's Maritime Security (MARSEC) is exceptional in the Southeast Asian region. Firstly, he starts by defining and explaining what MARSEC is exactly. The author then compares the outlook of MARSEC in various countries in the Southeast Asian region, namely Brunei, Indonesia, Malaysia and Thailand. Finally, the author ends with Singapore's MARSEC outlook which consists of several groups, like the National Maritime Crisis Centre, and how they are important for the defence of Singapore.

Keywords: Maritime Security; Widening; Deepening; Illegal; Co-operation

"Everything can be found at sea, according to the spirit of your quest."

- Joseph Conrad¹

INTRODUCTION

The essay is divided into three parts. In this first part, the essay begins by examining what Maritime Security (MARSEC) is—and how it has conceptually 'widened' and 'deepened' alongside developments in Strategic Studies. I will then scope MARSEC by examining what constitutes maritime threats in praxis. I will suggest how a country's MARSEC outlook can be discerned through the extent in which it is able to comprehensively conduct MARSEC operations.

In the second part, I will then tabulate the key MARSEC agencies of all eleven Southeast Asian states in a 'MARSEC Agencies Matrix', and examine countries that have established MARSEC institutions or agencies for the express purpose of collectively and comprehensively conducting MARSEC operations.

The final part of the essay then examples Singapore's development of the Maritime Security Task Force (MSTF), National Maritime Security System (NMSS) and Information Fusion Centre (IFC) and juxtaposes Singapore's MARSEC outlook with the fore-mentioned countries examined. I will then demonstrate how Singapore's MRRSEC outlook is exceptional in Southeast Asia.

PART I: CONCEPTUALISING MARSEC

The 'Widening' And 'Deepening' Of MARSEC

The term MARSEC gained prominence in security vernacular after the catastrophic events of 11th September, 2001. The fear of terrorists crashing aircrafts into population centres and key installations was transposed onto the maritime domain, and expedited the ubiquity of the term 'MARSEC' in maritime nations all over. I will posit that the term MARSEC has evolved alongside the 'widening' and 'deepening' of thought in Security Studies.²

The end of the Cold War precipitated the re-theorisation of the concept of security. Accelerated by the influence of globalisation and the advent of new communications and transportation technology, contemporary conceptualisations of security have ‘widened’ and ‘deepened’. The concept of security has been ‘widened’ to include threats or concerns beyond its previous narrow military domain to include the political, economic, ecological and societal.³ In the ‘deepening’ of security beyond the state as its main or only referent, it has extended ‘upwards’ to the biosphere of supranational bodies, and ‘downwards’ to groups and individuals.⁴

MARSEC, I would suggest, has ‘widened’ in terms of navies having to contend with issues beyond war-fighting to include matters relating to customs, fishery, piracy, etc. Naval Principal Warfare Officers (PWO) honed to fight conventionally with guns, torpedoes and missiles have had to re-orientate themselves to a familiar yet operationally different environment. Navies have had to jointly enforce the law, collect evidence, learn about fishery protection and even restrain themselves from shooting at nebulous adversaries.

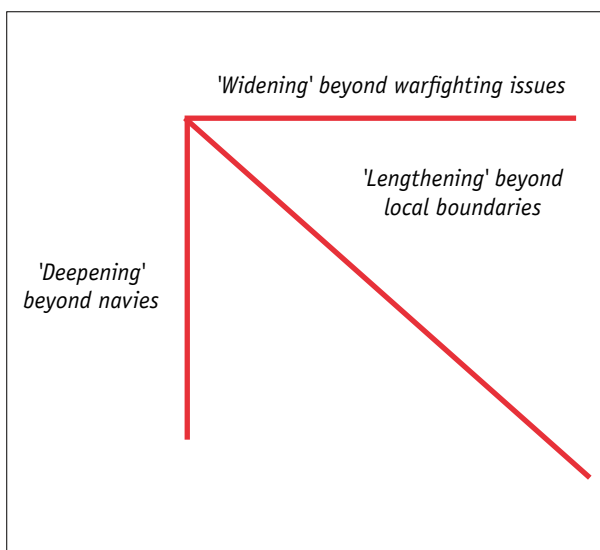


Diagram 1: A Comprehensive Approach to MARSEC

MARSEC has also ‘deepened’ in terms of navies as its sole referent, to now include other MARSEC stakeholders as key players or partners in collaborative efforts with the navy. Vessels and personnel from the Coast Guards, Police, Customs and Fishery departments now operate, and inter-operate with their naval counterparts further and prominently from their shores. Interestingly, the traditional referent for military operations at sea reflects the change beyond semantics, from the previous Mahanian notion of ‘Navy’-only operations at sea to the Corbettian concept of joint ‘maritime’ operations.

I suggest that MARSEC is ‘post-Joint’ (beyond armed services operating jointly together) and ‘post-Combined’ (beyond armed services from other countries operating together). MARSEC entails militaries collaborating beyond one’s own shores with military and non-military enforcement agencies. MARSEC has thus conceptually ‘lengthened’ from the local, to the regional and the global arenas. Taking the forementioned three dimensions together, MARSEC in its praxis has ‘widened’, ‘deepened’ and ‘lengthened’ so that a multi-agential, trans-national or comprehensive approach is required for effective MARSEC operations. (See *Diagram 1*).

Delimiting the Boundaries of MARSEC

Security is “inherently a matter of dispute because no neutral definition is possible.”

– W. B. Gallie⁵

It is germane at this juncture to scope the ‘boundaries’ of MARSEC before determining a country’s MARSEC outlook. Admiral Robert F. Willard in his then capacity as Commander, United States Pacific Fleet (COMPACFLT), once described maritime security as an obligation that maritime stakeholders need to bear to protect the sea lanes from ‘nefarious purposes’.⁶

Given the lack of a commonly used or legal definition of MARSEC, I will scope the boundaries of what MARSEC encompasses by examining what navies and other maritime security practitioners deem as 'nefarious' or 'threats' *in praxis*. I will thus attempt to harmonise what two actively engaged MARSEC agencies – Australia's Border Protection Command (BPC) and Singapore's IFC, deem as 'maritime threats'.⁷ *Annex A* juxtaposes the IFC and BPC's eight stated 'maritime threats' / 'maritime concerns'. While threats may be the 'same', 'similar' or 'specific' between the two agencies, it should be noted that both the BPC and IFC exclude 'maritime boundaries' or sovereignty-related issues outside the scope of MARSEC.

MARSEC operations are therefore actions undertaken by militaries and other stakeholders nationally and beyond, to counter maritime threats prejudicial to the safe use and utilisation of the sea and its resources for national and transnational maritime interests.

Boundary-related disputes can greatly influence national, regional and even global politics.⁸ The recent violent protests in Vietnam and the PLA's Lieutenant General Wang Guanzhong's response to Japanese Prime Minister Shinzo Abe and United States (US) Secretary of Defence Hagel's comments during the 2014 Shangri La Dialogue clearly attest to that.⁹ I argue, however, that sovereignty-related issues are not MARSEC 'threats' *per se*. They can however become serious impediments to MARSEC co-operation. A case in point, is the stymied willingness to co-operate in MARSEC between Peru and Chile against drug-smuggling—a common evil along the western coast of South America.¹⁰

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A country's MARSEC outlook, I would suggest, is the extent in which a country can comprehensively conduct effective MARSEC operations i.e. the extent in which MARSEC operations have 'widened', 'deepened' and 'lengthened'.

PART II: THE MARSEC OUTLOOK OF COUNTRIES IN SOUTHEAST ASIA

Having scoped MARSEC operations and what constitutes a country's MARSEC outlook, I will now proceed to examine the MARSEC outlook of Southeast Asian countries. Determining a country's MARSEC outlook would necessitate examining its MARSEC stakeholders and the extent they have 'widened', 'deepened' and 'lengthened' in *praxis* i.e. become more comprehensive in conducting MARSEC operations; For example, the extension of their navy's role to encompass traditional 'Coast Guard' duties; Marine Police and Customs being at the forefront of piracy; greater regional co-operation by MARSEC agencies with their regional counterparts, etc. (In so doing, I will focus on the operational level of MARSEC *praxis*, and to some extent, a country's grand strategy of apportioning scarce resources in MARSEC.)

The 'MARSEC Agencies Matrix' in *Annex B* tabulates the key MARSEC agencies, such as the Navy, Coast Guard, Marine Police, Customs and Fisheries, of all 11 Southeast Asian states. Given the scope of this essay, I will not be able to examine the respective agencies of each country in detail, but will instead examine in greater detail, countries that have established MARSEC institutions or agencies for the express purpose of collectively and comprehensively conducting MARSEC operations. (These existing

National or Regional MARSEC agencies are stated under the first two columns in the Matrix.) The countries to be examined are: Brunei, Indonesia, Malaysia, Thailand and Singapore.

The MARSEC Outlook in Brunei Darussalam

Brunei Darussalam has over 200 offshore oil and gas platforms within its Economic Exclusive Zone (EEZ). The need to continuously monitor and protect these key installations from maritime terrorism or acts of sabotage has posed a great challenge for its security and enforcement agencies. Brunei's other main maritime threats include: man-made disasters, e.g. collisions that result in massive oil spills and transnational crime 'smuggling and Illegal, Unregulated and Unreported (IUU) Fishing'.¹²



KDB Darulaman at the Royal Australian Navy International Fleet Review 2013.

The Royal Brunei Navy's (RBN) small but relatively new fleet continues to grow in its conventional capacities. Its Offshore Patrol Vessels (OPV) are participating for the first time in the 24th US Pacific Fleet-hosted Rim of the Pacific (RIMPAC) exercise around the Hawaiian Islands.¹³ The RBN's roles have 'widened' in the protection of offshore resources, but remain focused on developing its conventional warfighting capabilities, in which it has made some strides from its participation of its OPVs in RIMPAC.

Brunei established a National Maritime Co-ordination Centre (NMCC) in February 2010.

Reporting directly to its Prime Minister Office, it seeks to create Maritime Domain Awareness and enable effective co-ordination for inter-agencies to respond to maritime threats.¹⁴ The NMCC remains nascent however. Still in the works, is the establishment of a National Coastal Surveillance System (NCSS) for pervasive surveillance through the use of radars and remotely controlled cameras.¹⁵ Information-sharing is conducted mainly with Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) and the IFC, and while Brunei espouses the need for a 'whole of government approach', little inter-agency coordination has been observed. In terms of 'deepening' maritime operations, the RBN remains the main and in most arenas, the sole player. Brunei's maritime institutions remain independent agencies in praxis. Regional co-operation is also limited largely to participation in the Association of Southeast Asian Nations (ASEAN)-based forums such as the ASEAN Regional Forum but is expected to 'lengthen' at least at the navy-level given its growing confidence and competency in operating technologically sophisticated fleet.

The MARSEC Outlook in Indonesia

Indonesia faces significant challenges in strengthening its MARSEC given its geographical expanse of 17,500 islands and about 5.8 million square km of territorial waters.¹⁶ Indonesia had, until recently, high rates of piracy in its waters, and together with IUU Fishing, Smuggling and Maritime Terrorism, are key Indonesian concerns in MARSEC.¹⁷ Efforts to improve MARSEC in Indonesia through external intervention are often avoided in the fear that they may undermine Indonesia's territorial and political integrity.¹⁸ Indonesia suffers also from the lack of a unified approach with 13 separate agencies claiming jurisdiction over the sea, including the navy and the marine police. To complicate matters further, local authorities also have MARSEC responsibilities

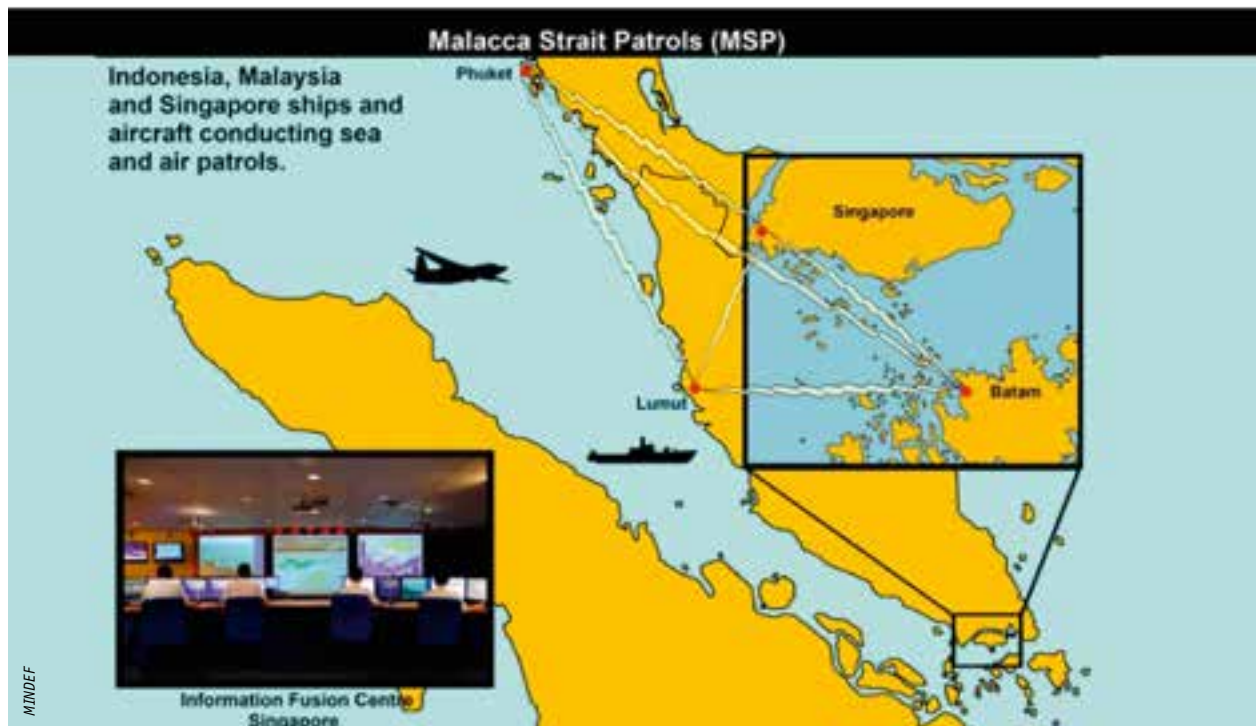
with provinces exercising jurisdiction up to 12 nautical miles (nm) and regencies up to 3 nm.¹⁹

Indonesia's BAKORKAMLA was institutionalised in 2005 to establish a combined maritime agency for co-ordinating operations among stakeholders and agencies in maritime security, safety and maritime law enforcement operations in Indonesian waters.²⁰ The BAKORKAMLA is the pre-cursor to the establishment of an independent Coast Guard, which will be formed for the express purpose of allowing its navy, the Indonesian Navy (TNI-AL) to focus on 'defence activities' and 'not to catch fishermen'.²¹ It can be argued that Indonesia is pursuing a different trajectory in MARSEC, with the TNI-AL not 'widening' its operations, but 'narrowing' instead, the spectrum of operations that the TNI-AL currently undertakes. The future Coast Guard will come to the fore and thus 'deepen' MARSEC in Indonesia as an independent service, not unlike the United States Coast Guard, capable of conducting and leading MARSEC operations with other MARSEC stakeholders.²²

In terms of 'lengthening' MARSEC operations, regional co-operation is often hampered by sovereignty-related concerns. Indonesia for instance declined to join the US-led Proliferation Security Initiative (PSI) as it might potentially involve the interdiction by foreign navies of vessels passing through Indonesian Territorial Waters.²³ Indonesia has however pragmatically accepted help from external powers, i.e. US and Japan, in maritime capacity with the proviso that the Indonesia's sovereignty is respected.²⁴

The MARSEC Outlook in Malaysia

East and West Malaysia are geographically separated by the South China Sea by a distance of about 600km at its closest point. A maritime state, Malaysia has over 4,600 km of coastline.²⁵ Malaysia's MARSEC landscape is further complicated by piracy in the Strait of Malacca, boundary disputes and illegal migrants with Indonesia and the Philippines. Terrorist-related activity in the form of kidnappings, such as the recent three kidnappings in three months since



Infographic on the Malacca Strait Patrols.

April 2014 in Sabah, has also emphasised the need for better MARSEC to the Malaysian government.²⁶

The Malaysian Maritime Enforcement Agency (MMEA) was established in 2006 by amalgamating five existing agencies into one. A sizeable fleet of patrol vessels was formed with the Royal Malaysian Navy contributing patrol crafts to form its fleet.²⁷ The MMEA was formed after a study in April 1999 by the Malaysian government showed that maritime related enforcement was inefficient due to the involvement of multiple agencies. The MMEA has 11 key functions, including the enforcement of law and order in 'Malaysia Maritime Zone' and the suppression of piracy, the illicit traffic of narcotic drugs and the controlling and prevention of pollution.²⁸

Malaysia is similar to Indonesia in its policy of retaining its navy for defence purposes, and there is little 'widening' in the operational scope of the Royal Malaysian Navy. In the formation of a Coast Guard, the MMEA is substantively ahead and short of a name-change, is in praxis the Malaysia's functioning Coast Guard. This is very impressive given its inauguration a mere eight years ago. The MMEA is at the forefront of MARSEC operations—a clear 'deepening' in the MARSEC landscape as a strong 'parallel' maritime agency vis-à-vis its navy. The MMEA has also 'deepened' collaboration with its Marine Police.²⁹ Regionally, the MMEA has 'lengthened' co-operative mechanisms, including a forum for stakeholders of the Malacca Strait (including states, shipping industries, and other users) to collectively protect the maritime environment and promote the safety of navigation.

The MARSEC Outlook in Thailand

Bordering Thailand is the Andaman Sea to the west, and the Gulf of Thailand to the east. Thailand is also surrounded by the waters of

several neighbouring countries, such as Vietnam, the Philippines and Malaysia. Thailand's economy is highly dependent on natural resources from the sea such as petroleum, minerals and marine living resources. The Gulf of Thailand abounds with fishing and more than 200 platforms for natural gas and crude petroleum exploitation.³⁰ The Andaman Sea and the Gulf of Thailand are also important Sea Lines Of Communications (SLOCs) for commerce, with up to 90% of all import and export activities conducted via the sea.³¹ Maritime threats under Thailand's maritime jurisdiction include inter alia, IUU Fishing (including those undertaken by neighbouring countries); Drug Smuggling, trafficked via the Andaman Sea from its source in Myanmar; and Maritime Terrorism where terror groups in the south of Thailand have been known to (albeit rarely) attack maritime targets.³²

Thailand's Maritime Enforcement Coordination Centre (THAI-MECC) was established in 1997 to serve as the national focal point to co-ordinate efforts among relevant Thai agencies in protecting Thailand's national interests and conducting operations in Thailand's maritime waters. The THAI-MECC reports directly to the National Security Council. The Royal Thai Navy (RTN) as the focal authority co-ordinates the operations of the four other main agencies, namely, the Marine Police, the Marine Department, the Customs Department and the Fisheries Department.³³

The RTN has a dual role in defence and in the protection of Thailand's national maritime interests. With regards to the latter, the RTN has clearly 'widened' its scope, and is expected to perform duties such as law enforcement at sea, protection of maritime resources, hydrographic surveying, search and rescue etc.³⁴ In terms of 'deepening', the other four agencies co-ordinating under the ambit of the

THAI-MECC have certainly come to the fore. While they contribute their respective domain expertise in ‘widening’ the RTN’s plethora of MARSEC operations, they are seemingly subordinate to the RTN and are not overt in undertaking MARSEC operations at sea. Their roles and responsibilities also need to be better delineated for more efficient and effective collaboration between the various agencies engaged in MARSEC.³⁵ Thailand has clearly ‘lengthened’ co-operation bilaterally, regionally and beyond. Thailand currently conducts co-ordinated patrols bilaterally with Malaysia and Vietnam along their maritime boundaries, both in the Gulf of Thailand and the Andaman Sea. The joint patrol operations are aimed, inter alia, at controlling fishery activities, protecting natural resources from violation by ‘third countries’, in accordance with internationally accepted principles of the law of the sea.³⁶ Regionally, Thailand became the fourth country to join the Malacca Strait Patrols (MSP) in September 2008, together with Indonesia, Malaysia and Singapore to enhance MARSEC in the Strait of Malacca and Singapore.³⁷ Beyond the region, Thailand has worked with the US in the Personal Identification Secure Comparison and Evaluation System (PISCES) and participates in the Container Security Initiative (CSI).³⁸

PART III: THE MARSEC OUTLOOK IN SINGAPORE

Singapore occupies a key strategic location at the southern entrance of the Malacca Strait. One of the world’s busiest ports, approximately 1,000 vessels anchor or transit in its port waters at any one time, and hundreds more ply the busy and narrow Singapore Strait. The port of Singapore is the third busiest petrochemical refinery in the world and a major container transshipment hub, in the intricate just-in-time global manufacturing system upon which global

commerce depends.³⁹ A maritime terrorist strike on its port facilities would have severe regional and global repercussions, and seriously affect Singapore given its dependence on external trade. In addition to its vulnerabilities, Singapore is also a prime target for radical Islamist terrorists on account of serving host to thousands of Western multinational companies, and its close security links to the US and Israel. Islamist terror groups, such as the Jemaah Islamiyah (JI) planned to attack US military personnel and naval vessels in Singapore as part of its bomb plots in Singapore post-9/11 in 2001.⁴⁰ Maritime threats for Singapore are narrow, and principally centre on Maritime Terrorism and SLOC security.

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The Maritime Security Task Force: ‘Widening’ Singapore’s MARSEC

The MSTF was established in 2009 as part of Singapore’s ‘Whole-of-Government’ (WOG) approach to MARSEC. It was formed in recognition that would-be perpetrators may exploit inter-agency gaps in the independent silos that maritime agencies often operate in. Formed with ships and personnel from the Republic of Singapore Navy’s (RSN) Coastal Command (COSCOM), the MSTF is a standing Singapore Armed Forces (SAF)-level that is able to marshal forces from the SAF to form an integrated task force to

execute security operations, in co-ordination with other national maritime agencies. The MSTF is also responsible for developing and maintaining maritime domain awareness and collaborating with other national maritime agencies.⁴¹

The RSN has clearly 'widened' its reach with the formation of the MSTF and MARSEC Command.⁴² Singapore's waters are monitored 24/7 with integrated RSN, Maritime and Port Authority of Singapore (MPA) and Police Coast Guard (PCG) radars and cameras that are assessed via C4I systems with powerful algorithms that flag up anomalies. Ships are threat-evaluated with pre-arrival information from the MPA before they enter Singapore's port waters. RSN Patrol Vessels, PCG boats and Accompanying Sea Security Team (ASSET) (comprising mixed teams of RSN and PCG boarding personnel) are then accordingly cued to deter and prevent potential belligerents.

It is necessary for Singapore and the rest of Southeast Asia to rise above historical interstate rivalries and mutual suspicions that have hitherto limited a cohesive regional response to regional security challenges.

Quite evidently, the MARSEC has also 'deepened' with MARSEC stakeholders collaborating with the RSN. MARSEC-stakeholders, such as the MPA and the Immigration and Checkpoint Authority (ICA) have also implemented a range of regulatory measures, including the re-routing of shipping routes and the use of the Harbour Craft Transponder System (HARTS). The key players in MARSEC are clearly not just from Singapore's Navy.

The National Maritime Security System: 'Deepening' Singapore's MARSEC

The establishment of the National Maritime Security System (NMSS) was the next concrete step in forging a WOG approach and in demonstrating the extent in which MARSEC has 'deepened' in Singapore. The NMSS consists of two entities or 'groups', the National Maritime Sense-making Group (NMSG) and the National Maritime Operations Group (NMOG) operating in tandem at the National Maritime Co-ordination Centre (NMCC), which is co-located with MSTF HQ and the Port Operations Control Centre (POCC) at the Changi Command and Control Centre.

The NMSG and NMOG comprise personnel seconded from Singapore's key maritime stakeholder agencies, namely, the RSN, Singapore Police Force (SPF), the ICA, and Singapore Customs (SC). On a daily basis, the NMSG collates information from the respective agencies' and 'open' sources, 'sense-makes' the disparate information through their professional expertise, and in 'joining the dots', generate actionable information to cue the NMOG and their various parent agencies. In a similar fashion, NMOG members collaboratively generate operation plans based on the information cues provided by NMOG as well as in anticipation of upcoming events that may require the co-ordination of enhanced maritime security operations. Both the NMSG and the NMOG serve also to build capacity in terms of developing sense-making, and Command and Control (C2) communication systems. In a maritime crisis, NMSG and NMOG serve to support the nationally designated Incident Managers in co-ordinating a collective response to the exigencies at sea.

The Information Fusion Centre: 'Lengthening' Singapore's MARSEC

The IFC was inaugurated in 2009 to foster MARSEC co-operation in the region and beyond, and manifestly



Details of the MH370 Search and Locate operation being shared among various International Liaison Officers at the Information Fusion Centre.

sets Singapore apart in how it has 'lengthened' operationally. Comprising RSN and International Liaison Officers (ILOs) across the globe from different parent agencies like Customs, Immigration, Defence, etc., the ILOs serve as conduits between the IFC and their respective nation-parent agencies.⁴³ The IFC operates as a maritime information hub with extensive links to 64 agencies in 34 countries.⁴⁴ It has a common maritime picture collated from various information sources, both through its partners as well as through new technologies such as the satellite-based Automatic Information System (AIS) and Long Range Identification Tracking System (LRIT). Information sharing portals, such as the Regional Maritime Information Exchange (ReMix) and the Malacca Straits Patrol Information System (MSP IS) can be tailored to allow relevant information in the form of a common maritime picture, reports and pictures to be exchanged

and enable real-time collaboration through 'chat'. The IFC also organises MARSEC workshops and hosts the Shared Awareness Meeting, where members of the shipping community gather and share MARSEC-related concerns. The IFC also organises information-sharing exercises, such as the bi-annual Maritime Information Sharing Exercise (MARISX). A total of 72 International Liaison Offices and 38 Operation Centres from 30 countries participated in the scenario-driven shore-based MARISX 2013.⁴⁵

CONCLUSION

I have posited that a country's MARSEC outlook is the extent in which a country can comprehensively conduct effective MARSEC operations. One can argue that Singapore's MARSEC outlook is exceptional in Southeast Asia, by the extent in which it has 'widened', 'deepened' and 'lengthened' its ability to conduct MARSEC operations.

In 'widening' the RSN, Singapore has capitalised on its navy through the MSTF, in a region that is unlikely to see conventional conflict. This is due in no small part to the RSN's ability to achieve and maintain competency in conventional, three-dimensional and joint warfare competencies. While Brunei's navy will foreseeably join the ranks of its neighbours with a strong and competent navy, Brunei can be expected in the meantime, to prioritise its scarce human resources into strengthening the RBN, and apportion less time and energy to the development of its NMCC.

In 'deepening' Singapore's MARSEC, the island-city state has bridged its silos by bringing together stakeholders in the maritime domain. In so doing, Singapore has effectively fostered a truly WOG approach to MARSEC through the MSTF and the NMSS with its crew of seconded personnel from key MARSEC stakeholders. While Indonesia and Malaysia's formation of the BAKORKAMLA and MMEA respectively, have and will, continue to improve operational co-ordination, it is a Coast Guard that they eventually will establish. Depending on whether BARKORKAMLA will continue to co-ordinate operations among MARSEC stakeholders, there is foreseeably a need for both countries to create a separate body to bring together their respective navies and MARSEC stakeholders, including non-military/enforcement type agencies. While the Thai-MECC has been established for 17 years, the rest of the other MARSEC-related agencies need to step up to plate, and clarify their roles and responsibilities to enhance collaboration between the various agencies engaged in MARSEC.

In terms of 'lengthening' MARSEC, Singapore's IFC remains the only information-sharing agency of its type with ILOs from the region operating together as a maritime information-sharing hub with extensive linkages all over the world. Noteworthy as well, are the IFC's numerous engagements with the shipping industry. Singapore is also relatively unencumbered by issues of sovereignty unlike Indonesia and Malaysia. Not unlike Thailand, it is a strong supporter of extra-regional initiatives in enhancing MARSEC, especially US-led initiatives like the Container Security Initiative to screen containers and cargo bound for US ports, and the US Coast Guard-led IPSP, under which the USCG can inspect Singapore's port facilities and verify its implementation of the ISPS Code.⁴⁶

Singapore, in its quest to survive its vulnerabilities and remain strategically relevant as a maritime nation, has effectively and efficiently planned and calibrated its resources, technology and infrastructure to comprehensively conduct MARSEC operations. While Singapore may be exceptional thus far, its fate does not remain wholly in its hands, and just as maritime threats are trans-agency, they are trans-boundary. It is necessary for Singapore and the rest of Southeast Asia to rise above historical interstate rivalries and mutual suspicions that have hitherto limited a cohesive regional response to regional security challenges.⁴⁷ 🌐

ANNEX A : COMPARISON OF MARITIME THREATS BETWEEN THE IFC AND BPC

Threat Category (T)	INFORMATION FUSION CENTRE ⁴⁸	BORDER PROTECTION COMMAND ⁴⁹
1	Smuggling/ Trafficking/ Contraband	Prohibited Imports / Exports
2	Irregular Human Migration	Irregular Maritime Arrivals
3	Illegal Fishing	Illegal Exploitation of Natural Resources
4	Maritime Incidents ⁵⁰	Marine Pollution
5	Natural Events	Compromise to Bio-Security
6	Piracy/ Sea Robbery/ Sea Theft	Piracy, Robbery or Violence at Sea
7	Possession of Illegal Weapons	Illegal Activity in Protected Areas
8	Maritime Terrorism	Maritime Terrorism

Both agencies have Threats that are clearly the 'same', such as Smuggling (T1), Piracy/Sea Robbery (T6) and Maritime Terrorism (T8). They have 'similar' Threats as well (T2, T3 and T4), although each agency may have a broader understanding of what that threat category encompasses. The BPC's concern for 'Illegal Exploitation of Natural Resources' (T3) for instance, extends beyond fish stocks to include oil and gas.

There are also Threats that are 'specific' to each agency as well, such as the 'Possession of Illegal Weapons' (T7) for the IFC and the 'Compromise to Bio-security' for the BPC. While Threats may be the 'same', 'similar' or 'specific' (3 'S') between two or more agencies, it should be noted that both the BPC and IFC exclude 'maritime boundaries' or sovereignty-related issues outside the scope of MARSEC.

ANNEX B: MARSEC AGENCIES MATRIX (SOUTHEAST ASIA)

S/N	SEA COUNTRY	Regional MARSEC Agency	National MARSEC Agency	Navy	COAST GUARD	MARINE POLICE	CUSTOMS	FISHERIES	COASTAL RESOURCES
1	Brunei	–	National Maritime Coordination Centre (NMCC)	Royal Bruneian Navy (RBN)	–	Marine Police	Royal Customs and Excise Dept	Dept of Fisheries	–
2	Cambodia	–	–	Royal Cambodian Navy	–	–	Royal Customs and Excise Dept	Ministry of Agriculture, Forestry and Fisheries	–
3	East Timor	–	–	F-FTDL (Naval Component) / East Timor Navy	–	Marine Police (PNTL)	Dept of Customs	Ministry of Agriculture, Forestry and Fisheries	–

S/N	SEA COUNTRY	Regional MARSEC Agency	National MARSEC Agency	Navy	COAST GUARD	MARINE POLICE	CUSTOMS	FISHERIES	COASTAL RESOURCES
4	Indonesia	–	BAKORKAMLA	TNI-AL	–	POLRI	Dept of Customs	Dept of Fisheries	Dept of Energy and Mineral Resources
5	Laos	–	–	Lao People's Navy (LPN)	–	–	Dept of Customs	Dept of Livestock & Fisheries (DOLF)	Dept of Marine and Coastal Resources
6	Malaysia	–	–	Royal Malaysian Navy (RMN)	Malaysian Maritime Enforcement Agency (MMEA)	Marine Police	Royal Malaysian Customs Dept	Dept of Fisheries	–
7	Myanmar	–	–	Mynamar Navy	Coast Guard wing in Navy for Fisheries Dept	Myanmar Marine Police (MPF)	Dept of Customs	Dept of Fisheries	–
8	The Philippines	–	National Coast Watch System (Policy-level)	Philippine Navy	Philippine Coast Guard	Maritime Command (MARICOM)	Bureau of Customs	Bureau of Fisheries and Aquatic Resources	–
9	Singapore	Information Fusion Centre	National Maritime Crisis Centre (NMCC)	Republic of Singapore Navy (RSN)	–	Singapore Police Coast Guard (PCG)	Singapore Customs; Immigration & Customs	Agri-Food & Veterinary Authority (AVA) - Marine Fisheries Research Dept	–
	–	–	Maritime Security Task Force (MSTF)		Authority (ICA)	–	–	–	–
10	Thailand	Maritime Information Sharing Centre (MISC)	Thai-Maritime Enforcement Coordinating Centre	Royal Thai Navy (RTN)	–	Royal Thai Marine Police	Dept of Customs	Dept of Fisheries	Dept of Marine & Coastal Resources
11	Vietnam	–	–	Vietnamese People Navy	Vietnam Coast Guard	Vietnam Marine Police	General Dept of Vietnam Customs	Ministry of Agriculture and Rural Development (MARD); Vietnam Fisheries Resources Surveillance Dept	–

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ENDNOTES

1. Joseph Conrad, "A Personal Record", 1912.
2. Steve Smith, "The Contested Concept of Security" in *IDSS Commentaries Paper*, n. 23, 2002.
3. Barry Buzan, *Ibid*.
4. *Ibid*.
5. W. B. Gallie, "Essentially Contested Concepts", *Proceedings of the Aristotelian Society*, Vol.56, (1956), p. 167–198.
6. Joshua Ho, ed., *Realising Safe and Secure Seas for All: International Maritime Security Conference 2009* (Singapore: *Select Publishing*, 2009), 76.
7. The IFC is also veritably a trans-national/ regional agency, in addition to being multi-agency. The IFC will be further elaborated.
8. It is necessary in scoping "MARSEC" to briefly address the deliberate exclusion of sovereignty-related issues given their significance in Southeast Asia and the South China Sea in recent years.

9. Kate Hodal, "At least 21 dead in Vietnam anti-China protests over oil rig", *The Guardian*, 2015, <http://www.theguardian.com/world/2014/may/15/vietnam-anti-china-protests-oil-rig-dead-injured>.

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10. Shared by the IFC's Peruvian ILO during the Regional MARSEC Practitioner Course 2014, held in the Changi C2 Centre, Singapore from 2 to 6 June 2014.

In contrast, Singapore and Malaysia placed aside their territorial disputes during the "SOMS Terror Alert" to deter and avert the oil tanker terror alert in March 2010.
11. I have adapted my definition of MARSEC operations from the Royal Navy. It defines it as "actions performed by military units in partnership with other government departments, agencies and international partners in the maritime environment to counter illegal activity and support freedom of the seas, in order to protect national and international interests". *Till Seapower: A Guide for the Twenty-first Century* (New York: Routledge, 2013), 283.
12. Based on Director of NMCC, COL Nooradin Yaakob's presentation during the 10th ARF ISM on Counter-terrorism and Transnational Crime in Hoi An, Vietnam, held from 16 to 17 Mar 2012.
13. Comprising fast patrol boats, the IJIHTIHAD Class Inshore Patrol vessel and the DARUSSALAM Class, Offshore Patrol Vessels (PVs).

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14. Ibid.
15. *Defence Market Intelligence*, http://dmilt.com/index.php?option=com_content&view=article&id=6507:brunei-mod-issues-rfi-for-coastal-surveillance-layout&catid=3:asia&Itemid=56.

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16. Andrew T. H. Tan *Security Strategies in the Asia-Pacific* (New York: Palgrave, Macmillan, 2011), 101; CIA, The World Fact Book, <https://www.cia.gov/library/publications/the-world-factbook/geos/id.html>.
17. The crisis of governance after the fall of the Suharto regime in 1998 was marked by political and social instability and a severe economic crisis. Ethnic and religious conflict broke out throughout the Indonesian archipelago (e.g Aceh, Kalimantan, West Papua, Maluku) and raised fears of the possible fragmentation of the Indonesian state. It was from within this crucible of territorial and political strife that the radical Islamist group, the Jemaah Islamiyah (JI) emerged. Andrew T. H. Tan (2011) *Security Strategies in the Asia-Pacific* (New York: Palgrave, Macmillan, 2011), 101.
18. It is important to note that Indonesia's perspective on MARSEC is conditioned by geography and its defense doctrine of *Wawasan nusantara* i.e. to maintain its far-flung archipelago in one unitary state.
19. Andrew T. H. Tan, *Security Strategies in the Asia-Pacific* (New York: Palgrave, Macmillan, 2011), 102.
20. These 12 stakeholders include: the Ministry of Defense, Ministry of Justice and Human Rights, Heads of State Police, Heads of State Intelligence etc. MARSEC Agencies not reflected in the MARSEC Agencies Matrix in Annex A, include "Sea Transportation" and "National Education".
21. Andrew T. H. Tan *Security Strategies in the Asia-Pacific* (New York: Palgrave, Macmillan, 2011), 102.

The Jakarta Post, 2010. <http://www.thejakartapost.com/news/2010/06/25/indonesia-plans-establish-independent-coast-guard-soon.html>
22. Ibid.
23. Andrew T. H. Tan, *Security Strategies in the Asia-Pacific* (New York: Palgrave, Macmillan, 2011), 104.
24. The US has helped establish an integrated maritime surveillance system in the SOMS with 12 coastal surveillance stations equipped with radar, ship-identification systems, long-range cameras and communication systems. Japan has also provided training and equipment in the areas of immigration control, customs cooperation and measures against

- terrorism financing. Andrew T. H. Tan, *Security Strategies in the Asia-Pacific* (New York: Palgrave, Macmillan, 2011), 103-104.
25. Ibid. 104-105.
26. "Gunmen Kidnap Fish-farm Workers in Malaysia", *Wall Street Journal*, 2014, <http://online.wsj.com/articles/gunmen-kidnap-fish-farm-workers-in-malaysia-1402903288>.
27. Andrew T. H. Tan *Security Strategies in the Asia-Pacific* (New York: Palgrave, Macmillan, 2011), 105. The Navy contributed some 70 patrol crafts, with the MMEA purchasing an additional 38 Rigid Hull Inflatable Boats (RHIBs) to augment its fleet.
28. Tim Lynch, "MMEA: A Modern Coast Guard", *FrontLine Security*, v. 7, n. 1, 23-24.
29. Ibid. In 2013, the Marine Police transferred 61 boats, some marine bases and personnel to the MMEA.
30. Captain Suriya Pornsuriya, Royal Thai Navy, "Maritime Terrorism: Thailand's Perspective" in a paper represented at the Workshop on Maritime CounterTerrorism, 2004, New Delhi, India, organized by the Observer Research Foundation. <http://www.observerindia.com/cms/sites/orfonline/modules/report/ReportDetail.html?cmaid=1310&mmacmaid=1285>.
31. CDR Yodyooth Wongwanich & LCDR Ekgarat Narkmee, Royal Thai Navy, "The Enhancement of Thailand's Maritime Security Cooperation" in "The Information Fusion Centre: Challenges and Perspectives", *POINTER*, 2011, 43.
32. Ibid.
33. Ibid.
34. Captain Suriya Pornsuriya, Royal Thai Navy, "Maritime Terrorism: Thailand's Perspective" in a paper represented at the Workshop on Maritime CounterTerrorism, 2004, New Delhi, India, organized by the Observer Research Foundation. <http://www.observerindia.com/cms/sites/orfonline/modules/report/ReportDetail.html?cmaid=1310&mmacmaid=1285>.
35. CDR Yodyooth Wongwanich & LCDR Ekgarat Narkmee, Royal Thai Navy, "The Enhancement of Thailand's Maritime Security Cooperation" in "The Information Fusion Centre: Challenges and Perspectives", *POINTER*, 2011, 47.
36. Captain Suriya Pornsuriya, Royal Thai Navy, "Maritime Terrorism: Thailand's Perspective" in a paper represented at the Workshop on Maritime CounterTerrorism, 2004, New Delhi, India, organized by the Observer Research Foundation.
37. The MSP comprising the Malacca Strait Sea Patrol (MSSP), the "Eyes-in-the-Sky" air patrols as well as the Intelligence Exchange Group (IEG), is a set of practical measures undertaken to ensure the security of the SOMS.
38. Captain Suriya Pornsuriya, Royal Thai Navy, "Maritime Terrorism: Thailand's Perspective" in a paper represented at the Workshop on Maritime CounterTerrorism, 2004, New Delhi, India, organized by the Observer Research Foundation.
39. Andrew T. H. Tan, *Security Strategies in the Asia-Pacific* (New York: Palgrave, Macmillan, 2011), 108.
40. The Republic of Singapore Navy's Changi Naval Base welcomed its first US aircraft carrier, USS Kitty Hawk in March 2001, and remains a key stopover for US warships and nuclear-powered air-craft carriers today. Michael Richardson, "Singapore welcomes US aircraft carrier", (*International Herald Tribune*, 2001). <http://www.singapore-window.org/sw01/010322ih.htm>.
41. The MSTF's concept of operations comprises three prongs: (1) To establish Comprehensive Maritime Awareness; (2) To effect Calibrated and Flexible Operations; and (3) To coordinate with other SAF units and national maritime agencies, and to collaborate with international partners and the shipping community. Rear Admiral Tan Wee Beng, RSN, "Enhancing Maritime Security through Singapore's Maritime Security Task Force (MSTF) in Joshua Ho, ed., *Realising Safe and Secure Seas for All: International Maritime Security Conference 2009* (Singapore: Select Publishing, 2009), 187-188.

42. MARSEC Command is the navy formation under which subordinate naval squadrons (e.g the Patrol Vessel Squadron) Raise, Train and Sustain (RTS) units to undertake MSTF and other naval operations. Commander MSTF is also concurrently Commander MARSEC.
43. "The Information Fusion Centre: Challenges and Perspectives", *Pointer*, 2011, 6.
44. MINDEF website: IFC Fact Sheet.
http://www.mindef.gov.sg/imindef/press_room/official_releases/nr/2014/apr/04apr14_nr/04apr14_fs.html#.U6aTu42Sx38.
45. MINDEF website: Maritime Information-sharing Exercise Fact Sheet.
http://www.mindef.gov.sg/imindef/press_room/official_releases/nr/2013/may/14may13_nr/14may13_fs.html#.U6aVE42Sx38.
46. Andrew T. H. Tan, *Security Strategies in the Asia-Pacific* (New York: Palgrave, Macmillan, 2011), 111.
47. *Ibid*, 95.
48. *Ibid*, 4. These IFC "key concerns" were tabulated based on presentations by Southeast Asian nations at the RSIS "Maritime Risk Conference" held in 2010. They were not explicitly categorised into the stated eight concerns, and are by no means necessarily static. Maritime boundaries are for instance, not expressed as a key concern for the Philippines when the monograph was promulgated. These eight 'key concerns' have however remained largely constant over the years and reflect the collective areas of expressed interest by the International Liaison Officers attached at the IFC. These 'maritime threat' categories scope the IFC's areas of information sharing and research. Incidents that fall under these eight categories are also reported in the IFC's Daily Ops Brief reports which are made available to their home countries and parent agencies.
49. Australian Government. Department of Immigration and Border Protection. <http://www.bpc.gov.au/site/page5777.asp>.
50. Usually pollution and environmental-related incidents, as well as any other incident that does not fall under any of the other seven categories (e.g. "insider" siphoning of marine fuel), or an incident still under investigation.



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