



Fostering Cooperation in East Asia via Maritime Domain Awareness

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Abstract

This paper shows how the development of maritime domain awareness capabilities would foster maritime regime building in East Asia. Starting with an analysis of present vulnerabilities and maritime security issues in the region to which in the near future very likely hybrid challenges need to be added it is argued that building multilateral maritime domain awareness capabilities would promote prosperity and security in the region.

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Analysis

1. Vulnerable Region

In the East Asia region different developments such as geostrategic rivalries, the region's dependence on food and energy imports, demographic trends, domestic instabilities, and the likely consequences of climate change are threatening the dynamism of the region. Most of what is newsworthy along its maritime frontier has to do with impressive new submarines or disputes over where one state's exclusive economic zone ends and another's begins.

During the Cold War and the post-Cold War years, maritime order in East Asia had been maintained by U.S. hegemony. However, in-between the regional maritime order has become increasingly unstable. At the centre of the structural shift lies a rising China that has developed towards a major maritime power. Uncertainty about the ways in which a more capable China would project its power has alarmed not only its neighbours, but in particular the U.S. China has made it crystal clear that – in island and maritime disputes – it will not yield or compromise when it comes to territorial sovereignty. China's navy appears to be rapidly better prepared to go beyond its traditional role of coastal defence and engage even at distance in major maritime operations to protect its economic and strategic interests.

China's renewed assertiveness has given the U.S. an incentive to reassert itself in Asia.¹ In the wake of the escalating feud between China and Japan over the Senkaku/Diaoyu Islands the U.S. has reaffirmed that the disputed islands fall under a treaty that enables the superpower to protect Japan's security interests. And also Vietnam has been supported by the U.S. as China makes its territorial claims in the South China Sea.

East Asia's maritime issues have evolved within a number of political, economical and juristical contexts. The particular issues are intertwined to include territorial sovereignty, resource development, delimitation of maritime boundaries, and protection of the environment. The risks of conflict at sea have become increasingly noticeable.²

In the East China Sea and the South China Sea, it is clear that none of the claimant states will compromise their national interest and find an easy solution to the existing territorial and maritime disputes. It has become urgent for all countries to make their domestic legislation on maritime law enforcement more transparent and to increase the collective knowledge of each other's domestic laws and regulations.

The new rivalry between the U.S. and China over the Seas of East Asia is directly linked to the controversy concerning international law and the military activities of third parties in the Exclusive Economic Zone (EEZ) of a coastal state. Depending from the Chinese government's responses to respective U.S. military activities could well drive the two major powers towards confrontation. To this end it has become urgent to foster maritime regime building in East Asia.

2. Security in the Maritime Domain

East Asian maritime disputes have been inextricably inter-related with the issue of boundary delimitation concerning territorial waters, exclusive economic zones (EEZ), and continental shelves stipulated in the United

¹ Min Gyo Koo. Between a Rock and a Hard Place: The Future of the East Asian Maritime Order. 27 December 2010. EAI Issue Briefing No. MASI 2010-08. Pg. 1. http://www.eai.or.kr/data/bbs/kor_report/2010122814485790.pdf (accessed: 17 May 2015)

² Min Gyo Koo. Seoul National University. East Asian Maritime Disputes and South Korea's Middle Power Diplomacy. November 2014. East Asia Institute. Pg. 1



Nations Convention on the Law of the Sea (UNCLOS) – a regime constituting a set of implicit and explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge. From a comparative regional perspective, East Asia has the most pronounced 'institutional gap' in maritime issue areas.

Clearly, the issues of territorial sovereignty, maritime boundaries, and resource development should be tackled multilaterally rather than bilaterally. In maritime East Asia, no regime-based resolutions can be established without the cooperation and concessions of all the parties concerned. South Korea might wish to draw many players in the region and beyond into regime based multilateralism. As nations have a substantial interest in assuring unrestricted access to manoeuvrability within, and use of the global commons this will lead to the development of anti-access and area denial strategies. With regard to military operations, investments in anti-access and area denial capabilities make it increasingly difficult to project power into zones of strategic interests.

Globalization has reduced barriers particularly for transnational criminal and terrorist activities. Transnational forces and irregular, hybrid challenges are likely to be the primary threat in the maritime domain. Issues of jurisdiction of merchant vessels using Flags of Convenience but crewed by nationals of many different states further complicate the security tapestry. Consequently, ensuring security in the maritime domain will become an ever-challenging task involving many entities from international, public and private sectors aiming at

- preserving the freedom of the seas,
- facilitating and defending commerce, and
- maintaining good governance at sea.³

Adequate measures need to aim at both, law enforcement as a civilian and military requirement and defence operations as a military naval requirement.

Civilian first responders, law enforcement and military personnel need to cooperate with a comprehensive understanding of enhancements to security in the maritime domain and the unique circumstances and operational conditions that prevail therein in order to better perform their duties and responsibilities in the port, maritime, and intermodal context. Unfortunately, up to now there is a lack overarching frameworks to bring nations' civilian and military elements together in order to address threats to maritime security efficiently, coherently and collectively.

This leads me to the issue of hybrid challenges. Clausewitz reminds us that war is a chameleon. Hybrid war fully justifies this choice of words. It is a potent, complex variation of warfare. What is making it so dangerous is the rapidity with which one can escalate a conflict in the digital world.

When ISIS made its way across western Iraq, observers described it as "*hybrid warfare*." The same happened, when Ukrainian rebels seized control of Crimea and various cities throughout south-eastern Ukraine. Former NATO Secretary General, Anders Fogh Rasmussen sees Russia clearly engaged in a hybrid war and has warned that "*Russia has adopted this approach and it is a mix of very well-known conventional warfare, and new, more sophisticated propaganda and disinformation campaigns including efforts to influence public opinion through financial links with political parties within NATO and engagement in NGO's...*"⁴

³ Vice Admirals Fernando del Pozo, Anthony Dymock, Lutz Feldt, Patrick Hebrard, Ferdinando Sanfelice di Monteforte. Maritime Surveillance in Support of CSDP. The Wise Pen Team Final Report to EDA Steering Board. 26 April 2010. http://www.realinstitutoelcano.org/wps/wcm/connect/44d0718042982ce1bb66bb24ab1546e8/The_wise_pen_team_final_report_april_2010.pdf?MOD=AJPERES&CACHEID=44d0718042982ce1bb66bb24ab1546e8 (Accessed: 17.May 2015)

⁴ Damien Sharkov. „Russia Engaging in 'Hybrid War' With Europe, Says Former Nato Chief“. Newsweek. April 15, 2015 8:01 AM



In the past months in Europe there has been a split on which kind of hybrid challenges to focus on. Within NATO and the European Union, Northern members such as the Baltic States, Poland and Germany think with view to hybrid warfare immediately of the "Russian" model. Whereas Italians, French, Greeks or Spanish see the "ISIS" model at least as threatening. I am convinced there is also an "Asian" model.

Hybrid warfare has been defined as a combination of conventional, irregular, and asymmetric means, including the persistent manipulation of political and ideological conflict, and can include the combination of special operations and conventional military forces; intelligence agents; political provocateurs; media representatives; economic intimidation; cyber attacks; and proxies and surrogates, para-militaries, terrorist, and criminal elements. Hybrid war involves multi-layered efforts designed to destabilise a functioning state and polarize its society. From an aggressors perspective the maritime domain in East Asia could be considered a particular well-suited theatre to engage in hybrid operations.

Stephan De Spiegeleire and Eline Chivot have described in their study about the assertiveness of Russia and China⁵ – assertiveness, defined broadly as either a rhetorical or behavioural increase in the way a country asserts its power in the international system – that both powers have displayed increasing assertiveness over the past decade, with Chinese assertiveness increasingly more noticeable than Russian. The study highlights a rising Chinese power that is increasingly asserting its military muscle. Over the past decade, China appears to have increased its rhetorical and its factual assertiveness significantly more than Russia has. A second serious finding of the study is that in both countries factual assertiveness has increased more than rhetorical assertiveness.

With China's steep rise in the share of total Asian defence spending in the last five years, and other countries investing largely in maritime and aerial capabilities, it is little wonder that strategists and governments alike have begun thinking seriously about how this might play out amidst the region's "growing militarization". Particularly the Japanese have concerns about 'grey-zone' contingencies with the Senkaku/Diaoyu Islands as one concern.⁶

Of course, North Korea should be mentioned. What could North Korea learn from the Russian hybrid warfare model? Is there perhaps Russian interest in developing North Korean hybrid capabilities? Is it possible that North Korea will become a close ally of Russia, perhaps even playing China and Russia against each other? As Moscow loses traction with the international community, it aims to antagonise the U.S. as payback for what it sees as its meddling in Russia's backyard over Ukraine. North Korea and Russia have already announced they will be holding joint military drills later in 2015. Their growing closeness is a likely scenario. As Russia and North Korea grow closer, the U.S. and South Korea will certainly do the same. This comes on top of South Korea's growing need to cope with a series of emerging hybrid national security challenges⁷ such as networked terrorism, accelerating cyber attacks, securing long-term energy supplies, and deepening maritime competition in the Indo-Pacific oceans. The prospects for increased hybrid challenges in the region are considerable.⁸

In sum, the growing hybrid shape of security challenges has further complicated the security situation on a

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<http://www.newsweek.com/2015/04/24/former-nato-chief-says-europe-hybrid-war-putin-322293.html> (Accessed: 17.May 2015)

⁵ The Hague Centre for Strategic Studies. Assessing Assertions of Assertiveness: The Chinese and Russian Cases. June 2014.

<http://www.hcss.nl/reports/assessing-assertions-of-assertiveness-the-chinese-and-russian-cases/145/> (Accessed: 17.May 2015)

⁶ Prashanth Parameswaran. „Are We Prepared for 'Hybrid Warfare'? The Diplomat, February 13, 2015.

<http://thediplomat.com/2015/02/are-we-prepared-for-hybrid-warfare/> (Accessed: 17.May 2015)

⁷ Lee Chung Min. South Korea's Strategic Thinking on North Korea and Beyond. The ASAN Forum. Special Forum October. 07, 2013. <http://www.theasanforum.org/south-koreas-strategic-thinking-on-north-korea-and-beyond/> (Accessed: 17.May 2015)

⁸ The Hague Centre for Strategic Studies. Assessing Assertions of Assertiveness: The Chinese and Russian Cases. June 2014.



global scale to include East Asia.⁹ Hybrid warfare will likely become a defining feature of the future security environment. This should widen our perspective and our interest to cooperate.

3. Maritime Domain Awareness

Maritime Domain Awareness (MDA) addresses the collection, fusion and dissemination of enormous quantities of data, information and knowledge drawn from military forces, government agencies, international coalition partners and forces, and commercial entities. Eventually, the depth of information collected from these various sources will be weaved together to enrich a comprehensive common operational picture that is envisioned to be shared among many users. Consequently, this concept offers attractive components to building a regime based multilateralism.

Three key components support MDA: data, information and knowledge. Once integrated these components create a substantive, layered presentation of the global maritime environment. Particularly the timely fusing of maritime information is an initial priority. Obviously, there are many sources of information, from open source white shipping such as AIS10, commercially available databases such as Lloyds, to comprehensive Intelligence fused pictures, representing national, and coalition interests. Incremental gains in data, information and knowledge sharing allow for growing transparency, trust and operational co-operation as mutual confidence builds.

The purpose of MDA is to generate actionable knowledge. Sharing Knowledge is absolutely essential if this growing network is to effectively detect, identify and track the most dangerous threats, including terrorists, WMD, narcotics, piracy, mass migrations, and arms traffickers. It is also very beneficial with view to a plenitude of business, logistical and administrative tasks. Awareness generated through knowledge sharing and networking will enhance understanding of the global maritime environment, including adjacent ungoverned areas in which terrorists operate or hybrid warfare takes place. The challenge will be to effectively integrate and fuse the various inputs to achieve the synergies offered by a comprehensive Maritime Domain Awareness picture, while being responsive to the information needs of participating agencies.

Situational awareness is the prerequisite of maritime domain security. And it offers the implementation and further development of technologies that serve the prosperity of the region well, i.e. platform, sensor, communication, collaboration and evaluation technologies. Today technological developments such as space based systems, over the horizon radar, and near shore and harbour acoustics can be incorporated into a layered approach to increase security. Integral to enhancing MDA are screening technologies used for verification of shipments and people prior to their departure from foreign ports.

To identify and address growth potential, industry and academia have been discussing already ways in which technology, based on advanced modelling and simulation tools can be used to identify threats and determine potential impacts. Technological advances may offer some solutions to difficult challenges encountered in the MDA development effort. Areas where technology can directly contribute to enhancing MDA are in the improved detection and tracking of vessels and crafts, the ability to monitor the movement of people and cargo, and enabling appropriate access to the myriad databases and information sources which can make valuable contributions in detection and prevention.

<http://www.hcss.nl/reports/assessing-assertions-of-assertiveness-the-chinese-and-russian-cases/145/> (Accessed: 17.May 2015)

⁹ Hoffman, Frank G., „Hybrid Warfare and Challenges“, Joint Force Quarterly, Issue 52, 1st Quarter 2009 / JFQ 34 – 39



4. Recommendations

How can a maritime regime be built to common security challenges in the absence of a resolution to competing territorial claims, to promote coordinated efforts in tackling transnational crimes such as piracy and the smuggling of people and goods as well as threats to the maritime environment such as overfishing and oil spills?

Regional maritime regime building has been successful in Europe as seen in reasonably successful and comprehensive multilateral institutions for the Baltic, the North, and the Mediterranean Sea. In East Asia such a solution would require multilateral regionalism, a collaborative diplomatic process aiming to resolve the various territorial disputes without coercion. In sharp contrast, no comprehensive, multilateral maritime regime has been initiated in East Asian Seas. Here the delimitation of maritime space has evolved as a bilateral bargaining game since the adoption of UNCLOS in 1982.

China for example has insisted on bilateral negotiations to resolve these disputes. It has used all available channels to assert its position, although unilateral or bilateral efforts clearly don't make sense with view to the interwoven character of maritime issues in East Asia. Establishing an effective regional maritime order would require the full engagement of all parties involved to include the U.S., China, Japan, South Korea, and ASEAN.

At the Symposium on New Maritime Security Architecture in East Asia held in Tokyo on January 30, 2015, Ken SATO, President of the Institute for International Policy Studies, proposed the idea of an "*Asian Maritime Organization for Security and Cooperation*" (AMOSC), pointing out that there is no regional organization with maritime domain awareness, while such an organization is most urgently required for tackling the given challenges.¹⁰ Obviously the concept of maritime domain awareness bears potential. And this potential should be explored. The smooth exchange of information related to maritime incidents, for example, could facilitate emergency cooperation as in the case of the tragic loss of Malaysia Airlines flight MH370 in 2014.

How can collaborative situation awareness be achieved? To this end it is of interest to look at a relevant development in Europe. In October 2009, the European Commission set guiding principles on how to achieve integration of maritime surveillance – a '*Common Information Sharing Environment for the surveillance of the European Union domain*' ('CISE')¹¹. It aims at creating a political, cultural, legal and technical environment to enable sharing between existing and future surveillance systems and networks. Such interoperability will be established in a decentralized way using modern technologies. It will give all concerned authorities access to the information they need for their missions at sea based on the 'need-to-know' and 'responsibility-to-share' principle.

With CISE Maritime surveillance professionals will have access to more relevant information within their existing systems and on their existing screens if maritime surveillance systems will be connected across sectors and borders at national and EU level. The idea is that information and knowledge will be exchanged near real time wherever possible and necessary. What is needed in particular is that civil and military authorities – to include coast guards and navies – will share relevant information with each other. Exactly this will be one of the main priority areas for further work. The European approach to maritime domain awareness could well serve as reference how to approach the complex issue in East Asia.¹²

¹⁰ IIPS. Symposium on New Maritime Security Architecture in East Asia.

<http://www.iips.org/en/publications/2015/02/04142531.html> (Accessed: 17 May 2015)

¹¹ European Defence Agency, European Environment Agency, European Fisheries Control Agency, European Maritime Safety Agency, European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union and European Law Enforcement Agency

¹² See also the G7 Foreign Ministers' Declaration on Maritime Security in Lübeck, 15 April 2015. <http://www.auswaertiges->



The answer is multifaceted and needs to consider the needs of the entire operational domain – geographically and inter-organizationally. For an interagency approach to work maritime domain awareness must draw together the strengths of the relevant organisations involved in addressing maritime security. In better use of limited resources to address the omnipresent, multinational security challenges in the maritime domain the output would be most valuable for governments, international organisations and the commercial sector as well. Great progress can be made toward improving Maritime Domain Awareness through efforts to enable and enhance information sharing among governmental agencies and by incentivizing private industry participation. For the Maritime Global Commons Domain, the main actors at the national level are civilian authorities, commercial actors and military forces. At the international level, the main actors are global and regional inter-governmental organizations (IGO), commercial interest organizations as well as non-governmental organizations (NGO).

At a tactical level there is a need to build local real time situational awareness via inputs from local sensors: radar, visual, electro optical and AIS data, enriched with regional information on the inbound tracks. This includes information about contacts of interest in order to generate alerts when they enter a respective area of responsibility. The role of regional and national/international situational awareness centres would be to fuse the pictures provided by local centres. This would enable specialists to monitor vessels, people, cargo and designated missions, areas of interest within the maritime domain, to access relevant databases, and collect, analyse and disseminate relevant data, information and knowledge.

Ross Swinnerton and Desmond Ball have already suggested in their 1994 analysis¹³ a maritime surveillance, safety and information regime addressing lower profile security issues in East Asia such as to

- help safeguard the peaceful merchant shipping of the region;
- create a secure context for the sustained exploitation of the resources of the sea;
- contribute to the preservation of the marine environment;
- develop a framework of cooperation that could provide the basis for dealing with higher order contingencies that might arise in this rapidly developing region.

In addition, Maritime Domain Awareness helps advance mutual understanding with regard to different underwater activities that bear the potential for serious bilateral misunderstandings.

The Ross Swinnerton and Desmond Ball analysis remains an important consideration. As they suggest, modest steps dealing with non-controversial matters could best establish such a regime. In fact, broad multilateral security cooperation does exist – which is the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP). South Korea, along with China, India, Japan, and Australia among others has been participating in the regime.

Despite the many sources of friction in these waters, its mission to enhance regional co-operation through information sharing, capacity building and cooperative arrangements in combatting piracy and armed robbery

amt.de/DE/Infoservice/Presse/Meldungen/2015/150415_G7_Maritime_Security.html

(Accessed: 17 May 2015)

¹³ Their think piece has just been made available again on the world wide web. Ross Swinnerton and Desmond Ball A Regional Regime for Maritime Surveillance, Safety and Information Exchanges, *Maritime Studies*, September-October 1994,

<http://www.tandfonline.com/doi/abs/10.1080/07266472.1994.10878394#.V5a3P6almRg>

(Accessed: 17 May 2015)



against ships has now been impressively performed since its foundation in 2004.¹⁴ While its success doesn't often find its way into the news, the commercial shipping industry knows it well. ReCAAP could be well adapted to the challenges in East Asia. Why shouldn't nations – perhaps with a South Korean lead – build here such an information hub to support maritime domain awareness in East Asia. The three principal pillars – information sharing, capacity building and co-operative arrangements would fit perfectly well.

Remarks: Opinions expressed in this contribution are those of the author.

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¹⁴ Ankit Panda. ReCAAPing Asia's Fight Against Pirates. 2 November 2013. The Diplomat. <http://thediplomat.com/2013/11/recaaping-asias-fight-against-pirates/> (Accessed: 17 May 2015)