



MARITIME REVIEW

A PUBLICATION OF THE MARITIME LEAGUE

Issue No. 18-1

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MAINTAINING FREEDOM OF NAVIGATION

- ▶ **Transforming Coron**
- ▶ **Challenge and Opportunity:
PAX ASIA-PACIFICA**
- ▶ **Separation of PCG from PN**
- ▶ **Dream World Cruise Ship
Sets Sail to PH**



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✉ PNSLAI Compound
Bonifacio Naval Station (BNS)
Fort Bonifacio, Taguig City

🌐 www.maritimeleague.com

✉ marrev@maritimeleague.com

☎ +63 (2) 844-6918

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About the Cover: Sunset over Rough Waters at the West Philippine Sea

Maintaining Freedom of Navigation

by VAdm Emilio C Marayag Jr AFP(Ret)

Many security challenges beset the nation as it welcomes 2018. At the domestic front, the continuing violent activities of the terrorists and other lawless armed groups in Mindanao and **Sulu Sea** necessitate extension of martial rule and increased deployment of security forces. Apart from armed conflict the detrimental effects of ecological imbalance brought about and expected to induce calamities and disasters. These require huge outlay of government funds for peace-building, humanitarian assistance and disaster response. At the external front, the lingering crisis in the Korean peninsula and the incessant build-up and strengthening of military structures in the South China Sea, particularly in the **Spratly** and **Paracel Island Groups**, keep various countries busy calibrating their foreign policy and revisiting their contingency plans.

The nuclear threat of North Korea has both worldwide and regional repercussions. This will not directly impact on **freedom of navigation** in the country's waterways. But the excessive maritime claims in the South China Sea and the numerous piracy incidents in **Sulu Sea** put the **freedom of navigation** of the **ASEAN** member-states and the Philippines at risk. The South China Sea carries trade goods worth US\$4-5 trillion annually, and many littoral countries lay partial claim of ownership.

Already two superpowers, China and U.S., have increased their presence in the South China Sea. China constructed and upgraded 3 military bases in the **Spratlys** in the past 5 years and declared maritime zones around those installations, in contravention of certain **UNCLOS** provisions.

Consequently, the US Navy conducted several **freedom of navigation operations (FONOPS)** to challenge excessive maritime claims that could curtail freedom of the seas. In 2017, **ASEAN** defense leaders agreed to craft a Code of Conduct in this vital waterway to avoid unwarranted incidents therein. The Philippine case in the **Permanent Court of Arbitration** brought to fore the importance of the **UNCLOS** in maintaining **freedom of navigation** particularly in the South China Sea.

On the other hand, the **Sulu Sea** has become a pirates' haven and regarded as the fastest growing piracy hotspot that pose danger to commercial shipping and seafarers. The Sea connects Brunei, Indonesia, Malaysia and the Philippines, known as the **East Asia Growth Area**. Ships from other countries also pass through **Sulu Sea**. Traditional pirates aim for financial gain for themselves but some abduct ships to generate funds for dissident groups. In March to

November 2016, there were 9 piracy incidents in **Sulu Sea** involving 44 kidnapped victims, some of whom were killed.

The gravity of the situation led to the formation of the **Trilateral (Indonesia, Malaysia and Philippines) Border Patrol Arrangement** for monitoring and response and established 3 contact points: Zamboanga City, Bongao (Tawi-tawi) and Lahad Datu (Sabah). This multinational creation prevented escalation of piracy cases in **Sulu Sea** in the past year. Only consistent, unannounced border patrols and close coordination among the 3 countries' maritime forces will assure **freedom of navigation in Sulu Sea**.

The Chinese military presence in South China reflects a changed maritime strategy along the lines advanced by U.S. naval strategist

Mahan: establishment of bases to support the battle fleet and protect the sea lines of communications (SLOC) for the merchant fleet to continue unhampered access to the sea. The Chinese also appear to have learned the US strategy to "follow the oil" as the South China Sea is known to hold considerable deposits of fossil fuel and natural gas enough to support China's energy requirements.

The current actions of China vis-à-vis South China Sea are the result of a long and deliberate planning by the Chinese leaders starting with Deng Xiaoping. A former Chinese ambassador to the Philippines, when asked about China's intention in South China Sea, said in 1999 that the Chinese people would leave the decision to their future leaders.

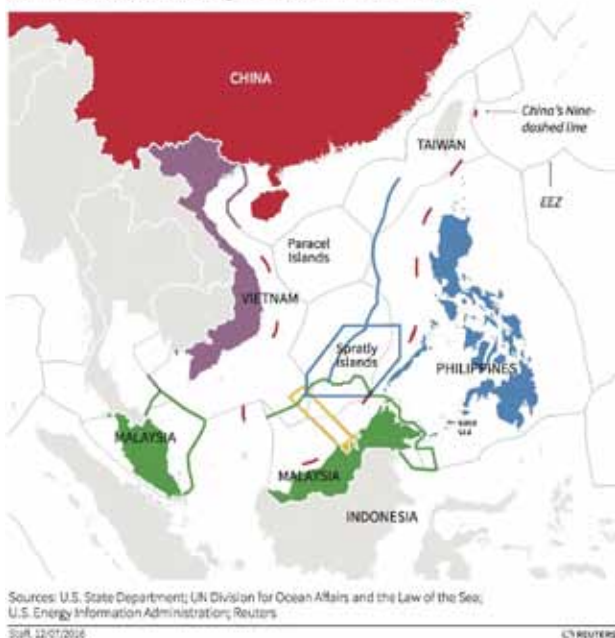
China, a signatory to **UNCLOS**, however appears to violate the fundamental law of the sea and threatens not only **freedom of navigation** but also the **marine environment**. Despite assurances by its present leaders that the military bases would not interfere with merchant shipping passage, only time can tell.

Meantime, the mostly affected nations may as well enhance their capability to protect their own merchant vessels, adopt a flexible foreign policy towards the key players in South China Sea, and request the **UN** to encourage its members to observe the **UNCLOS** provisions that ensure **freedom of navigation**. While the US Navy **FONOPS** provide actual ground observation, those operations are dangerous and they deserve recognition for testing "uncharted waters" for the benefit of the world maritime community.

Freedom of navigation guarantees wealth generation for all nations. Let's keep it for the sake of peace, prosperity, and stability in our continually challenging maritime environment. ⚓

Overlapping claims in the South China Sea

Six nations contest all or parts of the South China Sea, which has led to a series of confrontations between China and some of its neighbours over the potentially oil-and-gas rich area. Here is a look at how each claim compares with the official exclusive economic zones (EEZ), the waters extending 200 nautical miles from the coast.



Transforming Coron

by Commo. Carlos L. Agustin AFP (Ret)



Coron is a beautiful protected island on the southeast coast of **Busuanga**. But when we speak of **Coron**, we usually refer to the town called Coron across the island, which is located on **Busuanga** Island itself. That area has become a tourist destination.

In the late '60s and early '70s just before the declaration of Martial Law, I spent much of my Navy patrol days all over **Palawan**, and indeed had circumnavigated the islands at that period. A considerable amount of sea time was spent there from the MINSUPALA tour, shifting Task Forces (even at one time following the jurisdictional change of then TF31 from ZAMBASUL to Western Visayas/Palawan).

I've told my friends about how seemingly unspoiled **Balabac**, **Boracay**, and Northern **Palawan** islands were. Today, in the populated areas, such is not the case, as it is never the case anywhere else in the Philippines and the world, except that some countries know how to deal with it better, and most are learning.

In 2012, I spent a few days exploring the tourist spots most often visited by local and foreign tourists in **Busuanga**, which had become a popular destination. What I found were great places to behold and enjoy for what they have naturally but I thought that the municipality itself, as was the case with the smaller town of **El Nido** on the mainland in the late '60s, could fare better if a big developer offered the residents a price they could not refuse, develop a nice relocation area for them and redevelop the town to a modern coastal town. SMDC, ALI, Robinsons Land and a few other players were not that big in those days.

In the closing days of 2017, I paralleled the 2012 visit in an unplanned way: my children secretly coordinated among themselves, partially in collusion with my wife, a program designed as a surprise birthday party for me combined with a trip as Christmas gift for their parents so I found myself retracing the family 2012 **Busuanga** program. While on the trip, I mentally assessed the progress, thinking that much should have developed, considering what I had heard or read in a few media reports. What I observed was disappointing although there is an increase in daily air flights compatible with the increased number of tourist (both local and foreign) arrivals, and some improvement in the airport, but very little positive development overall.

Robert C Thomas, in analyzing Asia's "demographic demons" last December stated, "If demography is indeed destiny, the future of Asia looks troubled." While **Thomas** discussed political implications of demographic issues as they affect countries recently highlighted due to inherent security concerns, he overlooked the effects of population growth with respect to development of the poorer countries, something quite apparent in most Philippine tourist spots.

We do not lack interest and concern, as one would readily see upon checking on the various organizations and government agencies' plans of Coron LGU, provincial government, Palawan Council for Sustainable Development (**PCSD**), whose motto is "Towards preserving the cultural heritage vis-à-vis the valuable ecological resource," and other NGOs. There seems to be too many conferences, seminars and workshops, studies, recommendations, and even projects (e.g., **The Coron Initiative**) but what are obviously lacking — focus, organizational

actions, and enforcement. Of these, the absence of law enforcement agencies is startling. Believe it or not, we never saw a single policeman in uniform in the 6 days we were there. One good aspect — unarmed uniformed PCG personnel were there to oversee tourist boat order and safety, and assist LGU staff.

PCSD says it all, "... institutionalization of the PA's management board is still blurred. Various bodies have been organized to focus on special areas within the island, but most are short-lived. Although the Protected Area Office headed by Protected Area Superintendent (PASU) was set up in 1997, PAMB has not been organized considering the unresolved conflict between DENR and the Tagbanuas. Present protection activities undertaken include: Patrolling and Law Enforcement, Research and Monitoring, Information Campaigns, Coordination, and Networking."

I saw the negatives in this conclusion but none of the positives of law enforcement. The following are my own assessments:

- ♦ On the positive side, coral growth seems apparent, beaches have not been spoiled and tourist sites are still interesting and attractive. People are friendly, and perhaps reflective of the absence of uniformed policemen, peace and order is good. Food, water, electric power and consumer merchandise are available.



Malcapuya Beach

- ♦ There seems to be no town planning and development program in Coron town. What we saw 5 years ago changed very little — narrow, congested streets, poorly lit roads, and lack of more modern establishments for tourists and locals to avail of. The coastal park that was already there prior to 2012 has not been improved (not even planted with trees).

- ♦ There are many facilities begging to be developed, including (1) the hot spring property, which if given to the right party can be a tourist generator with hotel, restaurants and residences; (2) Tagbanua-managed beaches, which if handled with correct development investment in mind, can be great assets for the area, and enrich the

IP's resources; and (3) many outlying islands, such as Malcapuya, with its nearly kilometer long white beach, as well as other sites, can be world-class destinations.

Almost every week, I come across offers for properties indicating hundreds of development projects in the expanded Metro-Manila area. The private sector obviously has a handle on development in these environs. But do we just go on developing what JICA calls the Greater Capital Region, and forgetting other areas? I can imagine what great development, the kind of investment put in one block of property in the BGC, Ortigas Center, or the MBD, can bring about to **Busuanga**. To be fair, **JICA** is a longtime proponent of developing the Sandoval International Airport between **El Nido** and **Puerto Princesa**.

As I've said many times before, we need to take advantage of our unique environment and coastal resources for tourism to generate funds for further development, and serve as the nation's engine of growth. By development and good governance, the protection and preservation of the natural environment can be better assured rather than leaving it to chance when we allow human nature to take its course, which spawns greed and corruption, due to lack of systematic management. 📌



Challenge and Opportunity: PAX ASIA-PACIFICA

by Former President Fidel V Ramos

Part I

"Terrorism Dominates ASEAN Talks: World Leaders Expressed Concern About Extremist Attacks — Duterte..."

— Manila Bulletin headline, 16 November 2017

"By all indications and in many respects, the Philippine chairmanship of the Association of Southeast Asian Nations (ASEAN), capped by this week's 31st ASEAN Summit and Related Summits, was an unqualified success. The agreements reached — on the protection of migrant workers, the launch of negotiations on a sea code of conduct, and new trade deals, among them— belie Western characterizations of ASEAN as a mere talk shop..."

— The Manila Times editorial, 15 November 2017

As mandated by the ASEAN Leaders in Kuala Lumpur, the **Eminent Persons Group (EPG)** submitted its Report and Recommendations on an ASEAN Charter way back on 10 December 2006. The Report and Recommendations were forged *"with best efforts"* — after 8 EPG meetings around Southeast Asia over 12 months and numerous consultations with high officials, parliamentarians, civil society, and other advocacy groups — in accordance with the ASEAN Leaders' guidance for the EPG to be *"bold, innovative, and visionary."*

The Heads of State/Government (HOS/G) scheduled to assemble in Cebu during the first week of January 2007 would then approve, disapprove, or modify the broad guidelines, principles and objectives recommended by the EPG. In turn, a high-level *"Task Force on the ASEAN Charter (TFAC)"*, with a representative from each Member-State, would write the final draft Charter. The Philippine representative to TFAC was Ambassador Nena Manalo who also served as deputy to FVR,

our man in the EPG.

That Cebu ASEAN Summit chaired by President GMA some 11 years ago, was clearly a landmark event, 39 years after ASEAN's creation by virtue of the *"Bangkok Declaration"* of 8-August-1967. It was also one of FVR's most fulfilling assignments in his post-presidency period, and in which he devoted his total effort. At that critical turning point in 2006, it was time to formulate a charter that would change ASEAN into an effective, equal partner in the regional/global arenas. ASEAN also needed to maintain its relevance in the coming decades and remain a driving force for global security, particularly against the universal threats of poverty, climate change, and mindless terrorism.

Strong political will and people's resolve. As it does require today, strong political will was essential for ASEAN's continued success and influence. All member-states needed to exert extraordinary efforts to promote their solidarity and synergy, and build up their peoples' collective resolve to develop a common culture of excellence and competitiveness.

The principles enshrined in ASEAN's founding 50 years ago and during its formative years had served our peoples well and were integral to ASEAN's future viability and integrity. At the same time, the Charter needed to align ASEAN's goals with the realities of the 21st century for maximum clout and resilience. Accordingly, our EPG recommended that ASEAN's basic principles and strategic objectives be reflected in the proposed Charter in these broad areas, thus:

(1) Promoting ASEAN's peace and stability through the strengthening of democratic values, the rule of law, good governance, respect for human rights, and other fundamental freedoms; (2) Insuring ASEAN's sustainable development and prosperity — through

economic integration by way of a unified market and production base — broader technical connectivity and narrowing the development gap within and among nations; (3) Fostering ASEAN's rich cultural heritage by greater investment in learning, empowerment of people and communities, and engagement with civil society; (4) Resolving to actualize, first, *"one vision, one identity, one community"* and, ultimately, *"one union"* within ASEAN.

ASEAN's consensus style of decision-making had served ASEAN well. However, consensus should aid, but not impede, ASEAN's cohesion and effectiveness.

More effective decision-making. As its range of activities increased, ASEAN should adapt stronger and more flexible decision-making mechanisms. Towards this end, the EPG in 2006 recommended:

1. A legal personality be conferred upon ASEAN to enable it to engage in inter-regional/global proceedings as a juridical entity;
2. Decision-making by consultation (*"musyawarah"*) and consensus (*"mufakat"*) should be retained for the most sensitive and important issues. However, if consensus could not be achieved, decisions could be made through voting (where the *"majority rules"*);
3. In exceptional circumstances, the traditional policy of non-intervention could be adjusted and sanctions imposed for non-compliance as the ASEAN Leaders' Summit may decide; and
4. Flexible formulas such as *"ASEAN minus X"* or *"2 plus X"* could be applied, subject to the discretion of the ASEAN Leaders.

To improve the efficiency of its multiple undertakings, the streamlining of ASEAN's annual calendar should be effected, particularly to reduce the frequency of meetings at various levels.

Taking obligations seriously. ASEAN's problem was not one of lack of vision, initiatives, or action plans, but of ensuring compliance and effective implementation of its decisions. Thus, the EPG in 2006 recommended a culture of commitment to honor and implement decisions, agreements, and timelines that embodied:

1. Dispute settlement mechanisms (DMSs) be established in all fields of ASEAN cooperation, including compliance-monitoring, advisory, consultation, and enforcement mechanisms;
2. ASEAN exercise of the power to enforce measures to redress cases of serious breach of ASEAN's objectives, principles, and commitments regarding important agreements.

Failure to comply would be referred to the leaders' summit, which could impose such measures as suspension of any of the rights and privileges of membership.

Regional integration; narrowing the development gap. ASEAN's ambition of deeper and broader cooperation entailed greater political commitment from the leaders and their willingness to be more flexible in their decision-making for the common good. To the EPG in 2006, the key to ASEAN's future clout lay in being more competitive, increasing the size of the ASEAN economic pie, and exploiting various opportunities for win-win agreements with ASEAN's dialogue and development partners. Effective resource mobilization and the creation of a single market and production base with the free movement of capital, goods, technology, talents, and labor, along with efforts to harmonize regional economic policies were extremely crucial. To ensure that ASEAN could grow and benefit collectively, the development gap had to be narrowed following the Asian tradition of *"prosper thy neighbor."*

The EPG in 2006 recommended that ASEAN:

1. Continue to uphold the principle of equal contribution in line with the principle of equal treatment accorded to Member-States;
2. Establish a Special Fund for narrowing the *"Development Gap,"* with voluntary contributions from Member-States; and (3) Mobilize more funds and support from ASEAN'S private business sectors and multilateral institutions.

Other sustainable ways of raising funds and building up assets could be implemented so that ASEAN could rely more on its own resources.

The ASEAN Secretariat. The Secretary-General and the Secretariat (last restructured in the early 1990s) play a pivotal role in carrying out ASEAN's goals. Recognizing that the Secretariat should enhance its research, analysis, planning, and monitoring capabilities, the EPG in 2006 recommends that:

1. Full-time Permanent Representatives of Member-States (Ambassadors), be based in Jakarta. Dialogue Partners also should accredit Ambassadors to ASEAN;
2. An ASEAN Institute be established to support the Secretary-General in research, policy analysis, strategic planning, and outreach programs as well as collaborate with *"Track III"* organizations.

The Secretary-General should be supported by 4, instead of the current 2, deputy Secretaries-General (DSGs) to assist him in overseeing economic, socio-cultural, political-security cooperation, external relations, and administrative and budgetary affairs.

Towards a people-centered ASEAN. ASEAN needed to shed its image of being an *"elitist"* organization consisting exclusively of diplomats, high officials and bureaucrats. More had to be done to broaden people-to-people ties among member-states, and develop new channels for consultation among institutions — parliamentarians (organized as the ASEAN inter-parliamentary assembly, or AIPA) and various sector groups or NGOs within civil society. Towards this goal, the EPG recommended to nurture ASEAN as a people-centered organization, and strengthen the sense of ownership and belonging among stakeholders, particularly parliamentarians, representatives of civil society, the private sector, human rights groups, academic institutions, inter-faith advocates, environmental conservationists, consumer-protection associations, cooperatives and veterans.

All of the above factors constituted tremendous new challenges to ASEAN's leaders and peoples that demanded not only their *"best, but total"* efforts. Nevertheless, the rewards in terms of first achieving *"one vision, one identity, one community,"* and ultimately *"one union"* for an enduring ASEAN are well worth the energy, intellect, creativity, and even sacrifice invested.

Were ASEAN leaders in 2006-2007 up to it? No, because they did not adopt the *"Majority Rule."* (Ask Ambassador Nena Manalo. (She's retired but not tired).

2030: A better future for all. By way of highlighting the U.N.'s 70th anniversary last September 2015, the 193-member general assembly (UNGA) adopted a new agenda for 2030 to end suffering in all its forms — consisting of 17 goals and 169 targets to wipe out poverty, tackle climate change, and ensure peace with justice for all within the next 15 years. This is how the world of 2030 should be — to become a more harmonious family of global partnerships! ASEAN's deeper integration by year 2015 could well become the prime mover for our larger dream of a *"United Nations 2030"* through the fulfillment of the 17 Sustainable Development Goals!

Part II

"China and the Philippines have agreed to avoid force to resolve their differences over the South China Sea, according to a joint statement issued on Thursday by China at the end of a visit to Manila by Chinese Premier Li Keqiang."

— *Manila Bulletin/Reuters/Xinhua, 18-November-2017*

China and the Philippines have long sparred over the South China Sea, although their relations have improved considerably under President Duterte. Malaysia, Taiwan, Brunei, Vietnam, and the Philippines claim some of the South China Sea and its myriad shoals, reefs, and islands, while China claims most of the waterway and has been aggressively building and militarizing artificial islands. Hence, the "shadow-fighting" and heightened tensions continue.

The above-quoted joint statement said China and the Philippines reaffirmed the importance of peace in the South China Sea and of freedom of navigation and over-flight. There should be no violence or threats of violence and the dispute should be resolved via talks between the "relevant sovereign countries," it added. Given the recent developments in both China and India, a new wave of growth is rising in Asia. And this new wave of growth holds tremendous opportunities for all in the Asia-Pacific. Such forthcoming regional progress also poses a challenge and opportunity for ASEAN countries —and that is, for us to preserve the umbrella of peace and stability that has enabled virtually the whole of East Asia to develop at the world's fastest rate during these last 30 years.

China's centrality. This challenge will not be easy to resolve —since Asia does not lack flashpoints of potential conflict. In its drive for great power status, China will continue to restore its historical centrality in East Asia by way of its reclamation and military reinforcement of certain reefs and islets of the South China Sea. The U.N. Arbitral Ruling of 12-July-2016 in favor of the Philippines on the so-called 9-dash line of imperial Chinas has been truly welcomed by most in ASEAN —except those now aligned with China— but for the moment, this is not enforceable... so, that's another story.

Then there are the potential flash points over energy resources, in rising Islamic militancy in the Philippines, Indonesia and other SEA countries and, most worrying of all, the unstable, newly nuclearized Pyongyang regime on the Korean Peninsula. A major component of the equation, of course, the U.S. which has regarded itself —since the 1890s— as an Asia-Pacific power, and which is expected to continue to assert its economic, political, and security interests in our region.

Improved Philippine-China relations? Last week, **SND Delfin Lorenzana** said the multilateral decision not to further bolster military buildups in the region is based on the commitment of ASEAN member-nations to respect sovereignty and dialogue in settling territorial disputes. He said, *"There's no need for a Philippine military buildup in the Spratlys Archipelago as the security environment in the*

region is seen to have greatly improved under President Duterte ..." (*Philippine Star*, 18-November-2017).

Beijing, which claims almost the entire South China Sea and whose island building activities have sparked tensions in the region, has agreed on the need for a Code of Conduct to avert miscalculation in disputed waters. The cessation of military buildups in the West Philippine Sea and South China Sea would also pave the way for the unhampered development of civilian/military facilities on Pagasa Island and other outposts in the Kalayaan Island Group.

Our government is building a port on Pagasa Island to allow Navy cargo vessels to unload construction materials for the improvement of facilities therein, including concreting of an airfield good for heavy transport aircraft.

China as growth engine for ASEAN. In the face of potential conflicts, the smaller Southeast Asian States should intensify their long-avowed commitments at economic, political, and socio-cultural consolidation by way of a new ASEAN charter ratified last November 2007 during the tenure of President GMA. As ASEAN plus China expands to incor-

porate Japan, the Republic of Korea, India, Australia and New Zealand, all of Asia should be able to sustain economic growth from within itself — because of its increasingly wealthy home-market and its large savings pool.

Not coincidentally, economic cooperation has generated political side-benefits. For instance, an informal agreement has enabled China and the Philippines (later joined by Vietnam) to set aside the sovereignty issue in their conflicting claims on the Spratlys, thus, enabling their national oil corporations to explore jointly for hydrocarbon resources. Nevertheless, the ASEAN States share Japanese apprehensions that, as China's power increases, the latter might start to dictate the rules for regional transactions whether in trade, investment, environment, or even security.

Regional Integration as the Global Norm. Over the foreseeable future, an East Asian economic grouping —even if it takes off— is unlikely to develop

beyond a free-trade area, to match earlier integration movements in Europe and in the two American continents. Right now, the Asians are still a long way from reducing the trade barriers among themselves and creating a single home-market that can rival China's in the eyes of foreign investors. Given the stalemate in the World Trade Organization's (WTO) in further liberalizing global trade, regional aggregations to create economic scale will likely become the building blocks of global trade and investment over these coming decades. Certainly, all the ASEAN leaders live with the apprehension that the alternative to regional unity is to become marginalized in global economic competition. Among these regional groupings, Southeast Asia could become the greatest since it would have vigorous growth engines —China, Japan and India— plus upcoming ones like South Korea.

From Pax Americana to Pax Asia-Pacific. Over the next 10-15 years, the task for our statesmen would be to replace the American peace (Pax Americana) that has enforced stability in the Asia-Pacific region with a Pax Asia-Pacific. Unlike the American peace — which

The Asia-Pacific Peace will be a cooperative security system based not on the "balance of power" but on the "balance of mutual benefit." Clearly, this concept will involve burden-sharing by all nations in the Asia-Pacific in contributing forces to insure the region's peace and security. It must be built on a collaborative agreement among the most affluent, and most powerful, countries in our part of the world...



Photo taken during the 50th Foreign Ministers' Meeting Gala Dinner, 7-August-2017, Manila, Philippines.

at bottom is exclusively based on American's military might— an Asia-Pacific peace would be the *"peace of virtual equals."* A shift from *Pax Americana* (or peace and security guaranteed by the power of American arms) to a *Pax Asia-Pacifica* in our region could well be the answer in which the major countries and sub-regional blocs adhere to the concept of SOLAS (Safety of Life at Sea). SOLAS is the primary mission of the Philippine Coast Guard, which consists of the two components of maritime law-enforcement, and calamity prevention and mitigation.

As regional neighbors and partners, we now should exploit the convergence of interests that the U.S., Japan, China, India, Russia, ASEAN, Canada, Pakistan, Australia-New Zealand, a unified nuclear-free Korean Peninsula, and others share in a peaceful and stable Asia-Pacific — just as the western Europeans exploited the Cold War stalemate between the U.S. and the U.S.S.R. to consolidate and expand the European Union.

The Asia-Pacific Peace will be a cooperative security system based not on the *"balance of power"* but on the *"balance of mutual benefit."* Clearly, this concept will involve burden-sharing by all nations in the Asia-Pacific in contributing forces to insure the region's peace and security. It must be built on a collaborative agreement among the most affluent, and most powerful, countries in our part of the world — the United States, Japan, India and China. Indeed, a constructive Chinese role in helping to organize the Asia-Pacific peace would demonstrate China's commitment to becoming the *"responsible stakeholder"* that Washington has challenged Beijing to become.

Therefore, the weapons of mass destruction (WMD), such as nuclear missiles, aircraft carriers, fighter-bombers will be replaced by more educational assets, hospital ships and recovery helicopters to fight poverty, hunger, diseases, climate change and development gaps — which are now the universal enemies of mankind. Our multilateral shift from mutually assured destruction (MAD) to SOLAS would surely prolong man's bountiful survival.

The Nuclear Threat: Cooperation or Competition? The top U.S. Nuclear Commander was quoted by the international media as saying last week he would resist President Donald Trump if he ordered an *"illegal"* launch of nuclear weapons. CBS News reported Air Force **Gen. John Hyten**, Commander of the U.S. Strategic Command (**STRATCOM**), said these words to an audience at the Halifax International Security Forum in Nova Scotia, Canada. That's good enough to trump President Trump. In the end, of course, relations among the great Asia-Pacific powers will always be an inter-play of competition and cooperation.

The strategic challenge will be for all our countries, leaders and organizations devoted to regional cooperation to ensure that the spirit of cooperation is always stronger than the competitive impulse. Only if we are able to optimize our caring, sharing, and daring for each other and for the younger ones after us will we be able to ride this coming wave of sustained peace and prosperity for the benefit of all our peoples.

KAYA NATIN ITO!



Please send any comments to fvr@rpdev.org. Copies of articles are available at www.rpdev.org.

SMM Maritime Industry Report: Sector Sees Light at the End of the tunnel

by SMM



For the first time in its history, **Hamburg Messe und Congress GmbH (HMC)** has conducted a large-scale study asking exhibitors and visitors of the leading global trade fair for the maritime industry to give their assessment of the sector's economic and technological development. The **SMM Maritime Industry Report (SMM MIR)** shows that the industry is looking to the future with confidence, and reveals the key issues.

Reflecting views of over 2,500 participants from 69 countries, many holding senior positions in the maritime industry, the **SMM MIR**, prepared jointly by HMC as the organizer of SMM, and the market research institute Mindline, presents a good impression of the prevailing sentiments in the industry. "Our first comprehensive industry survey is a great source of inspiration as we prepare for the next SMM in September 2018," says President and CEO **Bernd Aufderheide, HMC**.

Although the maritime industry has gone through difficult times, it is ready to tackle the future with a can-do spirit. "The results of the **SMM MIR** are a very valuable source of information for us in aligning the SMM itself and the accompanying conferences with the needs of the industry," 10 months before it opens its doors, SMM is almost fully booked. "This underscores the role of SMM as the world's leading industry fair, and it shows how much value companies assign to personal interaction, expert input and tangible technological progress, especially in turbulent times," says **Aufderheide**.

Big response and top-flight participants. "We asked the exhibitors and visitors of SMM about the top items on their agendas, and how they gauge their economic perspectives," says **Claus Ulrich Selbach**, Business Unit Director, Maritime and Technology Fairs & Exhibitions, **HMC**. Respondents included representatives of ship-owning

companies, shipbuilders and suppliers from around the world. In addition to the economic and technological development the survey also addressed planned investments. "I haven't heard of any other study covering the industry in such breadth," said **Hauke Schlegel**, Managing Director, Marine Equipment and Systems working group, at the German engineering industry association, **VDMA**.

The participation profile is a representative cross-section of the entire industry: (1) Roughly 3/4 (74%) of respondents were SMM visitors, and one fourth (24%) were exhibitors; (2) Nearly 1/5 of respondents (19%) work at a ship-owning company, 13% are employed by a shipyard, and the majority (67%) work at a supplier; and (3) 72% of respondents hold a senior position at their company, and approximately 2/3 (65%) make investment decisions, either alone or in a team.

Ship-owning companies plan to invest. For the first time a "Maritime Industry Score" was computed based on the outcome of the survey. This score reflects the business expectations of ship-owning companies, shipyards and suppliers. "We want to hold regular business climate surveys in future to find out more about the mood in the industry," says **Claus Ulrich Selbach**.

In the wake of an economic lull that has lasted 9 years, the results of the current survey betray a certain basic optimism across the maritime sector, in spite of expectations of a continuing consolidation process. The overall Maritime Industry Score was 54.6 points, with the shipping segment's 33.2 points lagging behind shipbuilding (47.1 points) and supply industry (61.9 points). These figures represent the ratio of positive versus negative growth expectations. The positive outcome proves that the industry is beginning to see light at the end of the tunnel.



Maritime Events Calendar

There are signs of hope even among ship-owners. Some of the players clearly view the growth prospects as positive, indicating an increasing willingness to invest, as one particular survey result reveals: 20% of responding decision-makers consider it as 'very likely', and an additional 12% as 'likely' that they will order new ships within the next 12 months. "This is especially surprising considering the fact that this value is far above the typical fleet rejuvenation rate," comments Dr. **Max Johns**, Managing Director, German Ship-owners Association, VDR.


Strong interest in LNG. There is one particular field in the shipbuilding segment where the need to act is felt especially urgently: Following the entry into force of the Ballast Water Convention of the **International Maritime Organization (IMO)** in early September 2017, 54% of responding ship-owner CEOs intend to retrofit their ships accordingly.

Stricter environmental regulations are stirring up the ship propulsion segment. The industry is homing in on LNG as an alternative to conventional ship fuels. 44% of respondents said LNG is their first choice when contemplating ship new building orders. But hybrid solutions based on marine diesel are also popular. "There is no way around the energy transition in the maritime sector. Increasing numbers in new building orders and retrofits show LNG is gaining ground. The future of low-emission shipping has long begun," says Dr **Reinhard Lüken**, General Manager, German Naval Architecture & Ocean Engineering Association, **VSM**. The supply industry agrees with 49% of respondents that consider LNG as the champion alternative fuel.

High up on the agenda is Autonomous Shipping: 36% of ship-owner executives believe it to be the future of merchant shipping. 90% of those in support believe that the use of unmanned ships will be routine in as little as 20 years. "We have seen an enormous shift in public opinion here," says **Max Johns**. The two-decade horizon is not a far-fetched prospect, considering the average service life of a ship, he adds.

Study lends fresh impetus to SMM. The maritime sector is already showing great interest in remote monitoring and ways to protect ships against cybercrime. "The opportunities and challenges of digitalization are on everybody's mind in this industry. Therefore this topic will play a key role at SMM 2018, for example during the Maritime Future Summit," says Business Unit Director, **HMC Selbach**. New technologies that can be helpful in optimizing processes and increasing efficiency are in demand. 66% of respondents from supply companies see a "high" or "very high" sales potential for their products in the market. Three out of four (74%) have observed that customers are welcoming innovative technology. The responding suppliers believe that the German, Chinese, and US markets have the highest growth potential.

Overall, nearly 70,000 global contacts were utilized in the online survey for the **SMM MIR**. More than 2500 respondents answered every single question. "This is a better response than what many comparable surveys have been able to achieve," says Project Lead, **Jörg Kunath, Mindline**. HMC plans to conduct the SMM MIR every 2 years to draw a continuous picture of the maritime industry mood.

The leading international maritime trade fair takes place in **Hamburg** every two years. More than 2,200 exhibitors and roughly 50,000 visitors are expected to attend the trade fair in the famous port city during **4-7-September-2018**. SMM covers all segments of the maritime value chain, bringing together the decision-makers, and highlighting innovative technology. 

JANUARY '18

- 19 **MARITIME BREAKFAST FORUM #129**
(DEPARTMENT OF FOREIGN AFFAIRS(DFA), 2330 ROXAS BLVD., PASAY CITY)
- 23-24 MEGA CARGO SHOW 2018 (HALL NO. V, BOMBAY EXHIBITION CENTRE, MUMBAI, IN)
- 24 VIETSHIP 2018 (VIETNAM NATIONAL CONVENTION CENTER, HANOI, VN)
- 30 LNG BUNKERING SUMMIT 2018 (NOVOTEL HOTEL, AMSTERDAM, NL)
- 30 MARITIME RECONNAISSANCE AND SURVEILLANCE TECHNOLOGY (CROWN PLAZA ROME, ROME, IT)

FEBRUARY '18

- 7-8 18TH BALLAST WATER MANAGEMENT CONFERENCE (SINGAPORE, SG)
- 8 **MARITIME BREAKFAST FORUM #130**
(CEBU PORTS AUTHORITY (CPA), NORTH RECLAMATION AREA, CEBU CITY, CEBU)
- 21-22 12TH ARTIC SHIPPING SUMMIT (MONTREAL, CA)
- 27 2ND LNG USA SUMMIT (HOUSTON, TX, USA)
- 28 9TH MAREFORUM INDONESIA 2018 (JAKARTA, IN)

MARCH '18

- 14-16 ASIA PACIFIC MARITIME 2018 (MARINA BAY SAND, SINGAPORE, SINGAPORE)
- 21-22 22ND MARITIME HR & CREW MANAGEMENT SUMMIT (SINGAPORE, SG)
- 21-23 SHIPPING 2030 EUROPE (RADISSON BLU SCANDINAVIA HOTEL, COPENHAGEN, DK)
- 21-23 GREEN SHIP TECHNOLOGY EUROPE (RADISSON BLU SCANDINAVIA HOTEL, COPENHAGEN, DK)

- 20 **MARITIME BREAKFAST FORUM #131**
(MARITIME ACADEMY OF ASIA AND THE PACIFIC (MAAP), KAMAYA POINT, MARIVELES, BATAAN)

APRIL '18

- 28 SEA JAPAN (TOKYO BIG SIGHT EXHIBITION CENTER, TOKYO, JP)
- 24 LNG SHIPPING & CLEAN ENERGY FORUM (MARINA BAY SANDS, SINGAPORE, SG)
- 25 SEATRADE MARITIME AWARDS ASIA (SANDS EXPO AND CONVENTION CENTER, SINGAPORE, SG)
- 27 **MARITIME BREAKFAST FORUM #132**

Separation of the PCG from the Navy

by Former Philippine President Fidel V Ramos



After the **ASEAN Leaders' Summit** decision in November 2017 to go, finally, for a Code of Conduct involving the 10 **ASEAN** member-nations and their Dialogue Partners, particularly the People's Republic of China, the value of **FVR's** strategic decision made 25 years ago to pursue the separation of the **Philippine Coast Guard** – from being one of the operating units of the Philippine Navy, AFP under the Department of National Defense (**DND**) into its rebirth as one of the major agencies under the former Department of Transportation and Communications (**DOTC**, renamed **DOTr** upon the creation of **DICT**) – can now be better appreciated.

From DND to DOTC. Let's focus our attention on the recollections of former **Philippine Coast Guard** Commandant retired Rear Admiral **William M. Melad**. Thus:

*"The idea of separating the **Philippine Coast Guard (PCG)** from the **Philippine Navy (PN)** was orchestrated by Commodore **Carlos 'Chuck' Agustin**, then **PCG** Commandant (1990-1993), but it would never have been realized without the tremendous support of then President **FVR**. It was **FVR** who thought of the route this transition could take based on the Administrative Code of 1987."*

In late July 1992, barely a month after **FVR** assumed the Presidency, in a private audience at Malacañang, **Agustin** told **FVR**, "Mr. President, I believe that the **Coast Guard** should be separated from the **Navy**."

The President thought a bit, and asked, "What makes you think you can do it when a Decree signed by President **Marcos** failed to effect their separation?" Ramos was referring to Presidential Decree 601 dated 9 December 1975 that revised RA 5173 and placed the **PCG** directly under the Secretary of National Defense. "What is your plan?"

Agustin: "Simple, sir. Convince the **Navy** first."

The President immediately understood not only the failure of PD 601 but also the repercussions of alienating affected crucial players by not involving them in decision-making from his long years dealing with organizations and bureaucrats. After all, **FVR** had been known as "Mr. CSW" in the entire government in reference to many returned studies asking the Cabinet members to do "Completed Staff Work."

We were ready within a week, whereupon **Agustin** requested the Flag Officer-in-Command (**FOIC**) Vice **Admiral Mariano J. Dumancas**

Jr for a command conference on the subject at Navy Headquarters in September 1992.

Command Conference at PNHQ. The Command Conference had all the top guns of the **Navy** attending: the Major and Special Unit Commanders, the Naval District Commanders, and the **Naval** staff.

Commodore **Agustin** recalls: "We emphasized that the primary maritime functions of the Merchant Marine Administration, safety of navigation, marine environmental protection, and maritime safety administration were primarily not germane to naval defense."

Commodore **Agustin** harped on the easily understood comparison that would eventually help win congress in

amending RA 5173: "That the **Navy** exists to kill and destroy the enemy; and the **Coast Guard** exists to save lives and property at sea and to protect the marine environment."

Vice Admiral **Dumancas** knew he was contending with a **naval** public that was highly resistive to losing a major organization. He knew that any decision to separate the **PCG** from the **Navy** could weaken the **Navy's** strength and somehow reduce its influence and power.

But the burden on whether the **Navy** should agree rested more on **Dumancas**, who was a highly trained professional sea dog. The **FOIC PN's** final remark included the statement we were hoping for: "Let's go for this. The **Navy** will agree," said Vice Admiral **Dumancas**.

"With the support from the **Navy Chief**," the **PCG** Commandant told his **Coast Guard** staff, "everything else will be downhill, since the President himself supports this idea of a separate **PCG**." He further added that in seeking support from all sectors, we were no longer to be considered as subverting the **Navy** leadership.

Vice Admiral **Dumancas** stood pat on his commitment to the end. During the ensuing GHQ Command Conference, he fully endorsed the position which was subsequently adopted by the AFP Chief of Staff, General **Lisandro C. Abadia** who said in his final statement: *"If the two of you agree, who am I to oppose?"*

Dumancas and **Abadia** were likewise together in the next tip, which was quite easy as the Secretary of Defense **Renato de Villa** was already apprised of the idea that the **Coast Guard** would eventually be separated from the AFP.

The FOIC, PN. Dumancas truly delivered on his commitment. He also gave the nod to allow the **PCG** to retain ownership of all weapons, equipment, and vessels in its possession. Toward this end, he issued a transition plan to smoothen all processes.

There were other players who helped in doing the staff work for the **PCG** organizational goal at the **DOTC** and Malacañang: Undersecretaries **Primitivo Cal** and **Arturo Valdez** who were directly given instructions by Secretary **Jesus Garcia** to support the separation project and liaise with the Office of the President.

Here, certain officers of the **PCG** were useful: Commodore **Agustin's** former Flag Secretary, Lt. Commander **Maximo Mejia Jr.** (who later graduated from and eventually became a Professor of the **World Maritime University** in Malmo, Sweden) and Commander **Joel S. Garcia** (now Commodore, **PCG**) who is the current OIC, **PCG**.

The **Philippine Coast Guard** was eventually transferred by virtue of Executive Order Nos. 475 and 477 dated 30-March-1998 and 15-April-1998, a two-stage transfer authorized under EO 292, the Administrative Code of 1987, an



idea that came from President FVR himself. Commodore **Manuel de Leon** (AFP) was to become the first Commandant of the **PCG**.

Transfer ceremonies were held at the Headquarters **Philippine Navy** on 15-April-1998 with President FVR and DND Secretary **Fortunato U. Abat** in attendance.

Commodore **Agustin**, who had already retired and then serving as the General Manager of the **Philippine Ports Authority (PPA)**, was acknowledged by President FVR in that ceremony as "the man responsible for the success of this idea" and calling it "a historic step in our campaign to modernize **Philippine Maritime Administration**."

Enhancing our maritime sector. Rear Admiral **Melad** recalls that turnover event in April 1998 that "clinched the deal" for the **PCG**. We would never look back again.

We owe it primarily to an understanding, progressive, maritime oriented and decisive Commander-in-Chief who put this project in his development agenda, and the statesmanship and professionalism of the **PN** Flag Officer-in-Command (**FOIC**), Vice Admiral **Dumancas**.

"We emphasized that the primary maritime functions of the Merchant Marine Administration, safety of navigation, marine environmental protection, and maritime safety administration were primarily not germane to naval defense."

As the experience of the **Bajo de Masinloc** (Scarborough Shoal) standoff in 2012 showed, **FVR's** decision to pursue the existence of a separate 'white ship' agency proved to be well-conceived and timely in the light of the critical developments in the **West Philippine Sea** and current trends in maritime safety administration.

On the third week of November 2017, the **PCG** hosted and chaired the **ASEAN Chiefs of Coast Guards Forum** at Misibis, Albay. Clearly, the **ASEAN** and regional players have seen it necessary to establish a common link in accomplishing law enforcement, search-and-rescue, marine environmental protection, as well as patrolling each country's EEZ. The **Coast Guard** organization has become a common caring, sharing, and daring institution among countries in East Asia.

Japan has renamed it Maritime Safety Agency (**JMSA**) as the Japan Coast Guard (**JCG**); the Vietnam Coast Guard (**VCG**) has metamorphosed similarly from a Maritime Police in 2006; and Indonesia has reorganized its Directorate General for Sea Communication (**DGSC**) and created its Indonesian Sea and Coast Guard, albeit contending with 'turf war issues.' Malaysia's Maritime Enforcement Agency (**MMEA**) is being slowly transformed to Malaysian Coast Guard. The **PCG**, looked upon as one of the more mature **Coast Guards** that had carried that name as a government bureau since 1901, has been cited as a good example among Asian countries.

Coast Guard organizations around the world. These **Coast Guard** organizations belong to various groupings in addition to the **ASEAN Chiefs of Coast Guards Forum**. They bond together during meetings of the International Maritime Organization (IMO) in London, as well as during regional sectors organized under the many maritime conventions of **IMO** – regional meetings and exercises under the search and rescue (**MSAR**) convention, port state control, prevention of marine pollution (**MARPOL**), and the 20-nation Regional Cooperation Agreement on combating piracy and armed robbery against ships in Asia (**RECAAP**). It is certain the **Coast Guard** organization is here to stay. The **PCG** will forever be grateful to FVR, concludes Rear Admiral **Melad**.

Note: Rear Admiral **Melad** originally wrote about these details in the article *"Remembering Vice Admiral Mariano J. Dumancas"* [*The Maritime Review*, 24 May 2016]. The **PCG** finally became a separate service thru RA 9993 [**Coast Guard Law of 2009**] approved on 12-February-2010, eleven years after President **FVR** took the unprecedented bold move of 'cutting it clean' from the **Navy**. The position of **PCG** Commandant now carries the grade of Admiral.

Final Note: **FVR**, who was born and grew up beside the Lingayen Gulf (WPS), is an experienced long-distance swimmer, deep-sea scuba diver and photographer. He claims to have seawater and red wine in his veins.)



Please send any comments to fvrr@rpdev.org. Copies of articles are available at www.rpdev.org.



Russia May Enact Cabotage Law for Arctic Oil and Gas

by The Maritime Executive

17-November-2017. Russian President Vladimir Putin gathered a group of top-level shipping executives at the Kremlin to encourage them to fly the Russian flag and direct their business to a Russian shipyard. Attendees included top-level leaders from **Rosneft**, **Gazprom**, **Novatek** and the **United Shipbuilding Corporation**.

Putin has previously asked Russian shipowners to commit to ordering newbuilds at the new Zvezda shipyard in the Russian Far East. "As we have already said, for the successful operation of [Zvezda] it is necessary to ensure the effective loading of its capacities, to form a stable, long-term demand for the products. I know that the prospective plan for [orders] until 2035 has been approved," he reminded them. "And this plan, of course, must be strictly followed, not only by **Rosneft**, but also by other customers."

He asked for news of how the firms' orders at Zvezda are progressing and whether they are giving the yard the technical requirements for their ships in a timely manner. **Putin** also called on shipyards (in general) to give "distinct financial guarantees" for the quality of their product.

Rosneft already has vessels under construction at Zvezda, but **Putin** emphasized that "this is not only the task of Rosneft, it is the task of the entire Russian industry." He framed it as a "common responsibility" beyond the bounds of a specific firm or sector – a "national task" aimed at creating jobs and economic development in the Russian Far East.

In addition, **Putin** let the attendees know that the Russian State **Duma** may pass a law requiring oil and gas vessels to fly the Russian flag if they wish to trade at ports along Russia's Northern Sea Route. The bill would exclude the busy petroleum ports of Murmansk and **Arkhangelsk**, but it would likely include the port of **Sabetta** on the Kara Sea, **Novatek's** terminal for Yamal LNG.

If Yamal LNG were covered, the new cabotage restrictions could affect future vessels of the Christophe de Margerie class of icebreaking LNG carriers. Foreign shipowners — **Teekay**, **Mitsui OSK Lines**, and **Dynagas** — have agreed to purchase these vessels and charter them out to Sovcomflot; however, Kommersant notes that it is unknown whether international investors would buy more of these ships for **Novatek's** next project if the vessels would have to be flagged in Russia. ⚓

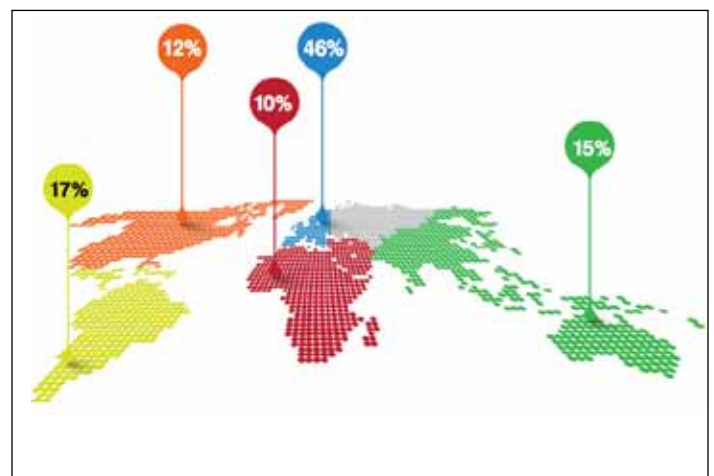
Surface Warships Global Market Report 2018

by Defence IQ

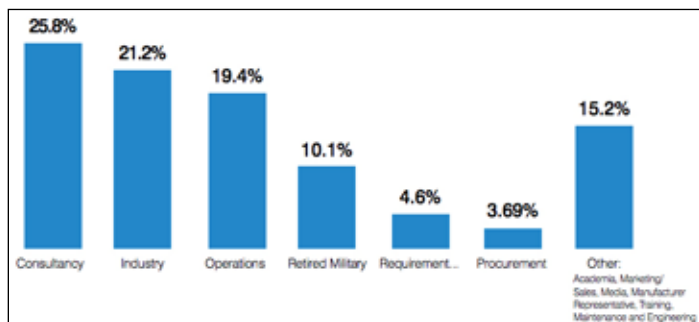


Global naval defence budgets are more and more constrained, putting pressure on navies around the world to build up their capabilities and fleets to remain powerful on the seven seas. The resurgence of adversaries and their increasing capabilities is forcing allied nations to re-assess their current state and to think about procurement decisions in upcoming years. In a recent survey conducted by **Defence IQ**, more than 500 respondents from all around the world and to enlighten us on their key priorities in terms of procurement, the biggest threat they are facing and predicted trends for the coming years. The industry represented in the pool of respondents, also gives us exclusive insight into how they perceive the key requirements of the end-users.

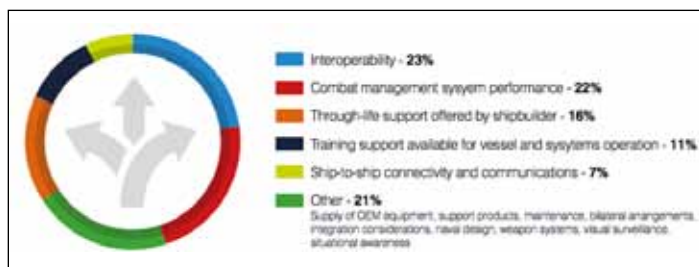
The Respondents. In which region are you based? Respondents from all around the world answered our survey, with the majority from Europe (46%), Latin America (17%), Asia Pacific (15%), North America (12%) and Africa/Middle East (10%).



Which of the following describes your role best?

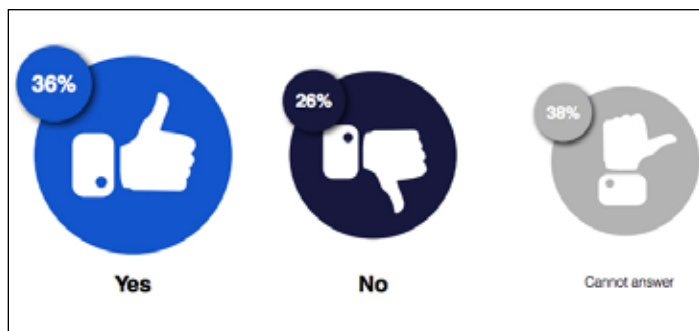


Which of these capabilities is currently a priority and has the greatest impact on your service's procurement decisions?



Interoperability remains a key theme in procurement decisions, as believed by 23% of all respondents; the capability to operate efficiently in joint operations could shift the dominance on the battlefield from one side to the other and is therefore non-negligible. Combat management systems are close second, accounting for 22%; their performance is essential for crew members to operate successfully and safely in the naval environment. The 21% account for the supply of OEM equipment and support products, maintenance, considerations in integration, naval design, weapon systems, visual surveillance and situational awareness. Through-life support offered by the shipbuilder is fourth in this list (16%), reflecting the need for the navies to reduce costs as much as they can, while maximizing their assets' life-span and the return on investment on a procurement. Finally, all the best systems in the world are worth nothing if the crew members do not have the necessary skills to operate them; training support available for vessel and system operation comes last, with 11% of respondents choosing it as a priority.

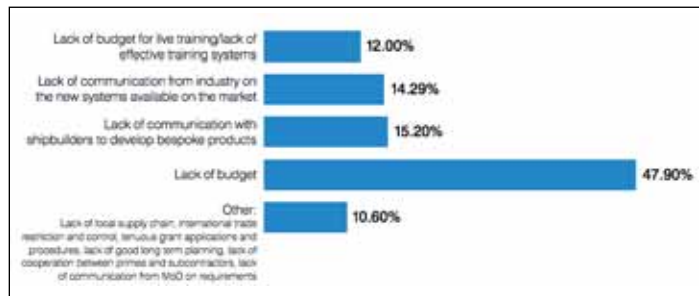
Are you currently experiencing challenges that are hindering your procurement process?



Almost half of the respondents (47.9%) believe that the lack of budget altogether remains the dominant challenge in the procurements process. Surface combatants take considerable

time to design and build and are among the most expensive military assets to procure. In Europe, SIPRI recorded an increase of defence spending of 2.6% for Western Europe and 2.4% for Central Europe. However, surface warships are not necessarily a priority, as governments are favoring their submarines fleet instead.

What challenges currently have the biggest impact on the procurement process?



Almost half of the respondents (47.9%) believe that the lack of budget altogether remains the dominant challenge in the procurements process. Surface combatants take considerable time to design and build and are among the most expensive military assets to procure. In Europe, SIPRI recorded an increase of defence spending of 2.6% for Western Europe and 2.4% for Central Europe. However, surface warships are not necessarily a priority, as governments are favoring their **submarines fleet** instead.

In **North America**, defence budget has increased, amounting to US\$639bn – over 5% of what was authorized the previous year – under President Trump who called for a 350-strong naval fleet during his pre-election campaign. In reality, the 2011 Budget Control Act imposes financial constraints and remains an important limiting factor to the President's will. The use of OCO funding offers some monetary relief, but the American Defence budget is unlikely to expand as quickly as wanted.

Further North, the **Canadian** defence policy published in June that spending had to be increased to meet existing defence requirements, but is nonetheless making progress with its long-term plans to reinvigorate its surface warships fleet with the order of 15 Canadian Surface Combatants.

Further South, **Latin America's** defence budget fell by circa 8% in 2016 and Brazil – accounting for a third of the area's military spending – has seen its spending under pressure, due to the economic and political crisis and the wider regional impact of weak commodity prices. A vast bulk of expenditure tends to be allocated to personnel and maintenance, but very little funding is devoted to new acquisitions.

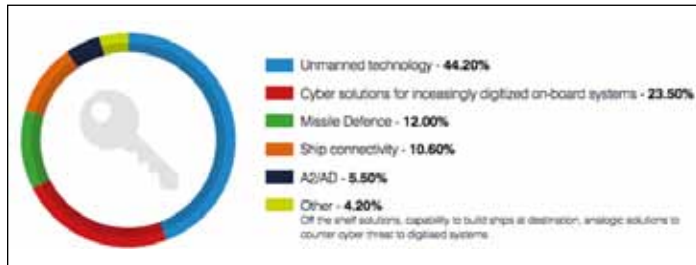
In the **Middle East**, defence spending remains a high priority, due to the ongoing conflict and tension happening in the region. It also contains three of the world's top military spending nations: Saudi Arabia, the United Arab Emirates and Israel. However, historic and political factors usually mean that only a small proportion of this spending is allocated to naval procurement. Without counting one or two major exceptions, domestic shipbuilding remains limited, meaning that most major warship acquisitions need to be imported.

The lack of communication also remains a key challenge, with 15.2% of respondents not being able to procure bespoke products due to the lack of information from the industry. They appear to be uninformed on the new systems available on the market (14.3%) as well as the lack of training system information (12%).

The 10.6% forming the "other" section encompass the lack of

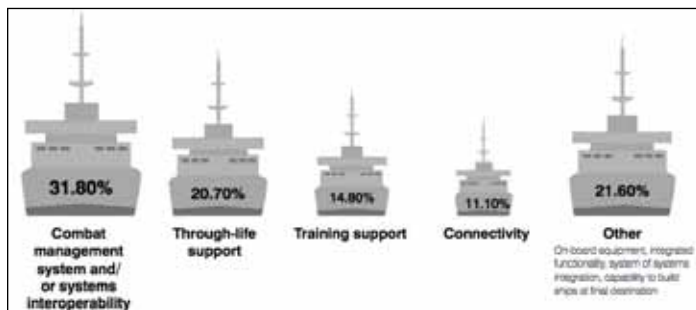
knowledge of some nations to build new capability, international trade restriction and control, tenuous grant applications and procedures, the lack of a suitable long-term planning, the lack of cooperation between primes and subcontractors and finally the lack of communication from governments on requirements.

What do you believe will be the key trend in procurement in upcoming years?



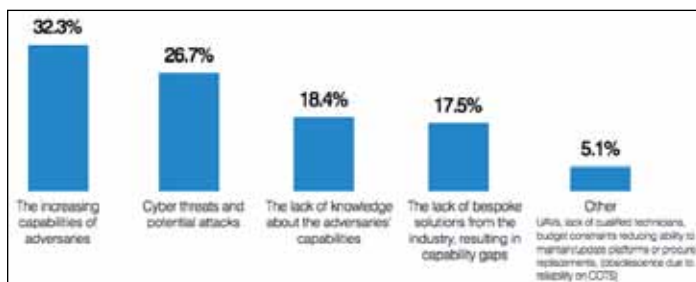
Unmanned technology is the key trend in upcoming years, as 44.2% of respondents believe. Systems digitization comes second (23.5%), followed by missile defence (12%), ship connectivity (10.6%) and A2/AD capability (5.5%).

If you are from the industry, what part of your solution (a) differentiates your product most effectively, and (b) features most heavily in your marketing and engagement strategy?



The industry's focus in terms of marketing best solutions seem to match the military's procurement priorities, but their communication does not seem to be effective enough, as in total 29.5% of respondents in the previous question viewed the lack of communication with the industry as a key challenge. The industry seems to focus on marketing combat management systems and/or systems interoperability first (31.8%), then 21.6% representing on-board equipment, integrated functionality, systems integration and capability to build ships at the final destination. Through-life support comes third (20.7%), training support (14.8%), and lastly, connectivity (11.1%). The industry seems to have a deficiency in their communication and marketing strategy with the military, a problem that could be partly resolved by the hiring of retired military to join consultancies and help companies grow their business.

What is the current biggest threat to surface fleets?



Taking Russia's military resurgence as an example, and the potentiality of the next conflict taking place with conventional warfare, navies from around the world feel increasingly threatened by their adversaries' capabilities (32.3%). Russia for example has seen a strong growth in its military funding, reaching a peak recently. Three major elements arise from the construction of major surface vessels: Project 22350, Project 11356 and Project 22380. On the other side of the world, North Korea has demonstrated recently its land forces and is estimated to own circa 630 combat vessels. The digitization of systems increases the fear of cyber threats and potential attacks (26.7%) and recent major global cyber attacks can only accentuate this. The lack of knowledge on an opponent's capabilities is considered as the third-ranked threat (18.4%), closely followed by capability gaps due to the lack of bespoke solutions from the industry (17.5%) and other threats (5.1%), such as UAVs, the lack of proper training and the lack of budget to maintain an operational fleet.



Surface Warships Conference: 29th January - 1st February 2018, London, UK. The 8th annual edition of this successful conference will focus on the modernization of naval forces, interoperability by design and the integration of one another in the global naval community. Key themes include:

- ◆ The impact of a resurgent Russian Navy and an increasingly capable Chinese Navy on strategic priorities and platform design/ procurement, and how this will affect your business or organization;
- ◆ The quantity vs. quality debate: High-cost, high-capability vessels vs. larger numbers of lower-tech platforms, both as adversaries and as internal procurement options, and what this will mean for the future composition of your navy – or the requirements of your customers;
- ◆ In-depth analysis on how the modernization and development of advanced Naval Combat Systems is further increasing the capability of existing and planned platforms and how this could enable you to modernize and upgrade existing platforms more expediently;
- ◆ Examination of concerns relating to ship design, in particular the need for area and near-peer denial vs. humanitarian considerations/ disaster relief, and what this means for future platforms. We will examine the increasing need for a modular approach to ship design, in order to guarantee that your high-cost platform is also high capability; and
- ◆ Ensuring interoperability between high-end vessels in order to improve coordination and fighting ability, specifically focusing on NATO nations' modernization and procurement efforts, in order to reduce the cost-burden to individual navies and ensure that allied vessels form a seamlessly integrated fighting force.



Focus on Regional Fisheries - A Broad Characteristic Under ASEAN Vision 2025

by Alberto A. Encomienda, Peter Flewwelling and Stuart Green, balikBALANGAY

Introduction: State of World Fisheries. A wake-up call for the regional seas of ASEAN and the Central Indo-Pacific. Exploitation of the global marine commons has led to the depletion of most major fish stocks, and to a growing recognition of the need to take global and regional collective action to manage fisheries resources. Freedom to Fish, among the five customary freedoms of the high seas, is no longer an absolute right, and has been qualified under UNCLOS Part VII, Article 127. This is to take into account a balancing of interests between coastal States and other fishing States, with direct implications on conservation and resource exploitation. Overfishing has become a household word. The obvious remedy, fisheries management, has hardly resounded at home.

Fisheries – The Last Hunted Resource. Fish are the last hunted resource on the

planet in a large commercial scale. All other hunted resources have been significantly depleted. Fish are a renewable natural resource. They will renew, but a minimum amount needs to be left for resource renewal. Unfortunately, fish stocks are not given a fair chance to renew globally. Regionally and close to home, in the South China Sea (SCS) maritime region, the depletion of fish stocks has been further aggravated by the sovereignty/sovereign rights maritime disputes that have prevented a collective and cooperative management of the resources.

Fisheries Commodity. For fish has driver of efforts.

– A Global Rising demand has been a major increased fishing Spurred by the globalization of markets for seafood, 37% of global fish production flows into

international trade, making fish one of the most traded “agricultural” commodities, or 13% of global agricultural trade. For the ASEAN region, the **ASEAN Report to the World Summit on Sustainable Development** held in Johannesburg, South Africa in 2002, states, “Pressure on marine fishery resources is increasing due to high domestic and export demand. Over-exploitation has resulted in a decline in productivity of a large number of species. A number of local stocks of small coastal pelagic fish are nearing full exploitation.” Growing overexploitation have reduced the benefits of increasing globalization in fish trade, as ineffective management of fisheries has allowed depletion of fish stocks, which are not allowed to renew. The natural capital or fish wealth has not been allowed to observe a “minimum maintaining balance.” This is an alarming scenario considering that 75%-80% of Earth’s surface is ocean, the very reason it is called “**Ocean Planet.**”

The key problem for Fisheries. The systems in which fisheries are placed have led to unbridled competition among fishers. The very concept of an Exclusive Economic Zone (EEZ) in UNCLOS, which was introduced by Latin American countries and originally called the **patrimonial sea**, is a socio-economic self-defense mechanism to establish national control over fisheries resources offshore of sovereign jurisdictions. This maritime jurisdiction is now labeled as sovereign rights. Overfishing is a symptom of the same underlying management problem —no defined property or user rights. But re-assigning property and user rights to a communal resource is not without its problems. It has become very difficult

or impossible in some countries where communities rely on the sea as their Social Security System/safety net to which they can turn to when nothing else can provide. In the case of coastal communities in the Philippines and the ASEAN and Central Indo-Pacific countries, the reverse is however true.

The Evolution Of Fisheries Management. In South Pacific countries, the “*tambu*” area has long been a practice, where communities stop fishing for a certain period of time to enable fish to become less fearful of fishers and easier to catch. Any solution must be an **integrated** approach.

to be

For fisheries management successful, it should involve all levels of governance, from Local



Government Units (LGUs) to Regional Development Council (RDC) and National Government levels, and involved industries. An integrated approach must be multi-disciplined, involving science, anthropology, economics, social science and many others. But at the heart of it all, there must be a focus on having fishers involved in the beginning.

Modern Regional Fisheries Management. Regional cooperation among States forms the base for management of renewable oceanic and marine resources under UNCLOS Part IX, implemented and supported in national legislations and regulations. In the international scale are the Food and Agriculture Organization (FAO) Compliance Agreement, United Nations Fish Stocks Agreement (UNFSA) and Port State Measures Agreement (PMSA). To preserve both the fish stocks and the ecosystems is the Convention on Biological Diversity (CBD). The global tuna community has formed 5 tuna Regional Fisheries Management Organizations (RFMOs) to collectively manage the global tuna resources (WCPFC, IATTC, ICCAT, CCSBT, IOTC). Regional fisheries management organizations have been formed with 2 RFMOs: (1) North Pacific Fisheries Commission, and (2) Commission for the South Pacific Regional Fisheries Management Organization. These Commissions focus on non-tuna, deep water demersal, and small pelagic fisheries species. National and Regional Plans of Action for conservation of threatened species, best practices for ecosystem management, and action plans to stop illegal, unreported and unregulated (IUU) fishing, would help significantly. This is the ocean governance concept behind UNCLOS Part IX. But there is no regional fisheries organization to manage fisheries in the ASEAN and the Central Indo-Pacific seas.

State of regional fisheries in the ASEAN and the Central Indo-Pacific seas. The state of regional fisheries in these seas assumes the same scenario as world fisheries. Fisheries depletion in these seas while in large part attributable to indifference among the regional countries despite a rules-based exhortation embodied in UNCLOS Part IX Article 123, is due to sovereignty/sovereign rights political conflict situation in the SCS. It is not intended to revisit the political events of contemporary history in the region, but rather to look to the future and the positive opportunities that are presenting themselves for the Philippines to assume a rightful regional leadership role under ASEAN Vision 2025 in the areas of regional and global non-traditional maritime security interests in the SCS: (1) Sustainability, conservation and protection of the renewable marine resources in the SCS to secure the appropriate benefits to the regional coastal States; (2) Establishing maritime peace, security and good order for all legal activities; those for global and regional sea trade through the waters of the SCS to safeguard core regional interest of AEC 2015 integration and consolidation, and in the Central Indo-Pacific; (3) Joint scientific research and policy formulation for the national and collective interests of the coastal SCS States, utilizing and enhancing the existing marine/maritime infrastructure; and (4) Discourse leading towards an appropriate regional Agreement for the management, exploration and harvesting of non-renewable resources in the SCS seabed areas.

The collective regional/global maritime interests and concerns are to be comprehensively and cooperatively addressed under UNCLOS Part IX as part of the AEC 2015 integration and consolidation.

Noting the uniqueness of this proposed regional oceans

management organization for the ASEAN and the Central Indo-Pacific seas, with a wider focus on all maritime issues from seabed to surface resources and all ocean sector activities including shipping, it may be more appropriate to consider a model wider in scope in its mandate. A suitable model would be the **Arctic Council** with its mandate to address all components of management of resources and operations that may impact on the maritime region.

The Concept of a Regional Oceans Management Commission for the seas of the ASEAN and the Central Indo-Pacific, with an initial focus on the SCS. The SCS is of paramount importance to the ASEAN for geo-economic and geo-political reasons that impact on regional maritime peace, good order and security essential to AEC 2015 integration and connectivity, as well as on the renewable and non-renewable marine and seabed resources found therein that contribute to the surrounding coastal States' socio-economic and food security requirements. The following facts taken from the **ASEAN Report to the World Summit on Sustainable Development** would be a wake-up call for a regional joint cooperation for comprehensive ocean governance under a durable legal and scientific framework and system for the seas of the ASEAN, extrapolated to the Central Indo-Pacific, starting with the SCS.

The concept and framework agreements for comprehensive ocean governance including fisheries cooperation for the ASEAN and the Central Indo-Pacific seas, centered on the SCS, already exists under UNCLOS Part IX. This is a normative exhortation for cooperation by all interested States specifically the stakeholder riparian States of the SCS and Central Indo-Pacific seas as interconnected seas. Most riparian States in the ASEAN and the Central Indo-Pacific seas are signatories to the UNCLOS, thus all Parties inclusive to a joint cooperation arrangement for fisheries resources and overall ocean governance in the ASEAN and Central Indo-Pacific seas are already familiar with the structure for cooperation under UNCLOS. With overlapping and unsolvable jurisdictional maritime disputes in the SCS, fisheries resources should be treated as a regional "*common heritage of mankind*" and given the appropriate attention.

Ocean governance on marine environment and fisheries is a collective **core interest** among countries bordering it i.e., the ASEAN countries and China, which are Parties to the Declaration on the Conduct of Parties in the SCS (ASEAN-China DOC-SCS). Joint Cooperation in ocean governance in the SCS must be ASEAN-China implementing the ASEAN-China DOC-SCS, but must be initiated by the ASEAN to establish centrality. On the other hand, certain maritime countries, extra-regional States with Dialogue Partnership with the ASEAN, have declared that the SCS is an area of interest in regard to freedom of navigation. These separate interests need not clash, they are not incompatible. The win-win solution already enshrined in UNCLOS Part IX Article 123(d), is for all States, whether enclosed/semi-enclosed sea bordering States, to come together and construct cooperative arrangements for ocean governance and shared maritime interests. The bottom line is that all shipping activity must be regulated, and shipping routes/SLOCs must be established taking into account accommodations in jurisdictional regimes but better still "*shelving*" them altogether for the wider benefit of all countries concerned.



The legal and scientific regional fisheries cooperation framework from which implementation can be built upon exists. These are compelled under the overall cooperation framework provided under UNCLOS Part IX. It is also provided in the ASEAN-China DOC-SCS that can serve as a platform for ASEAN centrality. There is also a suitable implementing model for organizational and institutional structure, in the newly established **Arctic Council**.

A science-based regional marine resources and biodiversity management, conservation, and environmental protection scheme, must be instituted. Agreed approaches to implementing safety, security and freedom of navigation for good ocean governance, must be formulated. This is essential considering the recurrent incidents where vessels continue to run aground in the **Great Barrier Reef** and the **Torres Straits** where shipping activity is relatively sparse compared to the SCS and archipelagic waters of Southeast Asia. Marine environmental and safety of navigation incidents continue to hound the Straits of Malacca and Singapore despite being accurately charted with an adequate maritime governance scheme in place. The SCS, including the vulnerable archipelagic waters adjacent to it, are grave maritime accidents waiting to happen. This is a compelling reason why agreement for a regional ocean governance joint cooperation is urgent and necessary. Circumstances around the ASEAN and the Central Indo-Pacific seas call for a special governance regime, and point to a motive for the establishment of the **Arctic Council**.

Establishing ASEAN centrality in regional ocean governance under ASEAN Vision 2025, and beyond. The ASEAN-China DOC-SCS is the normative setting

for the SCS as the starting point for a wide ocean governance. The non-traditional maritime security concerns are specifically mentioned at Point 7 —marine environmental protection and marine scientific research, and safety and freedom of navigation. This proposed wider-scale cooperation covers all aspects of ocean governance of a large maritime region and not confined to the disputed areas must morph into a permanent UNCLOS Part IX arrangement. The ASEAN and Central Indo-Pacific seas is a large marine ecoregional system (LME) sharing “characteristic regional features” that forms a unified ocean space and ecoregion for purposes of a comprehensive governance framework under UNCLOS Part IX on enclosed/semi-enclosed seas. The **Arctic Council** concept and processes is an appropriate model for institutionalized cooperation under an UNCLOS Part IX.

UNCLOS Article 123 prescribes cooperation among States bordering enclosed and semi-enclosed seas. The start of cooperation must be among regional coastal States, but the regional requirements would be served best through the establishment of an **appropriate regional organization**, initially for fisheries resources. China, an ASEAN Dialogue Partner, may consider making available

resources from its ASEAN Maritime Cooperation Fund to establish such an Organization. ASEAN Dialogue Partner, Japan, has single-handedly sponsored the establishment of the **Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP)**, a non-traditional maritime security concern. Other Dialogue Partners with existing maritime cooperation programs with ASEAN countries e.g., New Zealand and EU, may align these programs under the ASEAN umbrella on non-traditional maritime security concerns. Assistance in regional maritime cooperation with ASEAN Dialogue Partners can be maximized in a unified program under UNCLOS Parts XII, XIII and XIV. This could start with a multilateral planning session to formulate an infrastructure framework with concepts adapted from the **Arctic Council**, and suitable elements from the **BBNJ** conservation.

Sound fundamental pillars for successful regional fisheries management. The current infrastructure in the SCS could provide a constructive initial step forward to establish joint cooperation if consideration is given to their use as regional science and policy research platforms, compliance, and maritime security outposts for the ASEAN and the wider Central Indo-Pacific region. A suggested approach

for ASEAN Vision 2025 and institutionalized for AEC 2015 and beyond, would include the following: (1) Sound Science and Information; (2) Good Governance; (3) An Integrated approach; (4) A multi-disciplinary approach; (5) The 1982 UNCLOS; (6) The EEZ, UNCLOS Articles 55-75; (7) Non-Governmental Organizations (NGOs); and (8) Marine Protected Areas (MPAs).

Revisiting the sound funda-

mental pillars would help demonstrate and create awareness of the necessity and complexities of fisheries management. A simple step-by-step solution might be the best approach. Fisheries have a way of confusing with its difficult approaches, science and activities. Making things simpler could lead to greater success; and to move at a slow but laser-focused pace could outrun the others.

The Integrated Coastal Zone Management (**ICZM**) scheme must enlist LGUs to accept responsibilities for sustainable management of coastal resources and ecosystems. This includes the wider issues of collective and collaborative management, protection and conservation of these resources in the offshore areas, and offshore issues of national and regional peace and security, seabed resource management, and assurances of the regional security and protection for legal sea trade to set the basis for the establishment of the first Regional Oceans Management Commissions/Authorities (ROMC/ROMA) to address all maritime issues under one umbrella Commission. In essence, this could become the first ROMC/ROMA under the UNGA Resolution 69/292, which extends the authority of the proposed **BBNJ** legislation to possibly include coastal state



EEZs. However, for the ASEAN and the Central Indo-Pacific seas, a **BBNJ** framework would not be necessary, if UNCLOS Part IX is implemented with **BBNJ** elements.

An indispensable fisheries and ocean governance tool. Referred to as the implementing arm of management planning, a Monitoring Control and Surveillance System (**MCS**) is for information gathering for management purposes. It is an indispensable management tool for ocean governance, essential for effective policy formulation, implementation, and in management of relations with other countries. **MCS** could cover a geographical scope that includes coastal areas outward to the EEZ, linking it with those of neighboring countries for an efficient management of bilateral or multilateral concerns with trans-boundary aspects, which is the rationale for UNCLOS Part IX on enclosed and semi-enclosed seas.

An **MCS** must have a regional breadth to optimize effectiveness to monitor the activities of fishery management in archipelagic waters, territorial seas, and EEZ. Joint fisheries management with neighboring countries especially for straddling and highly migratory fish stocks, and transit of foreign fishing vessels, would ensure against poaching in other national maritime jurisdictions; facilitate the management of passage of domestic and foreign vessels; and other purposes such as monitoring and enforcement of vessel traffic systems, vessel traffic separation schemes, port management, search and rescue, and anti-piracy enforcement. A comprehensive MCS can monitor marine environments and control incursions in MPAs.

The vessel tracking and monitoring aspect of **MCS** could settle the long-running issue whether State vessels, especially naval vessels, need prior permission of the coastal State before traversing its territorial sea or archipelagic waters in exercise of the right of innocent passage. The system can allay the real risks of ship collisions and consequent damage to and pollution of the marine environment, which have been considerably amplified as a result of the increase in global vessel traffic density as well as ship size, especially within the ASEAN region. **MCS** could also help prevent heavy losses of human lives from ferry or domestic vessel accidents. An **MCS** system can significantly address IUU fishing, environmental pollution, implement the **Port State Measures Agreement (PMSA)**, and non-traditional maritime security concerns, such as slavery at sea and anti-piracy.

An **MCS** is a necessity dictated by the geographical, geological and geomorphological circumstances of the ASEAN and the Central Indo-Pacific seas, facing threats from human activities. Even if confined to purely maritime applications, an MCS system would need to cover every square nautical mile of maritime jurisdiction. **MCS** would be a foreign policy management and implementation tool for resolving issues, or for cooperating to address maritime trans-boundary concerns.

Instituting ocean governance in ASEAN and the Central Indo-Pacific seas is not a mere proposition but rather a mandate for regional cooperation on conservation management. Such governance mechanism could help in joint development of marine and seabed resources, and facilitate regional trade through safe and free navigation. Cooperative ocean governance could help facilitate resolution of traditional maritime security issues, which the compelled cooperation can generate. This is acknowledged in the DOC-SCS Preamble Paragraphs 2 & 4, declaring Parties being "cognizant of the need to promote a peaceful, friendly and harmonious environment in the SCS between ASEAN and China for the enhancement of peace, stability, prosperity and economic growth in the region" reaffirming "determination to consolidate and develop the

friendship and cooperation existing between their people and governments with the view of promoting 21st century-oriented partnership of good neighborliness and trust" to "enhance favorable conditions for a peaceful and durable solution of differences and disputes among countries concerned."

Conclusion: Global ocean governance and ASEAN Vision 2025 in a regional catch-up mode. There are clear indications that the ASEAN had cognizance of the necessity for a cooperative arrangement for regional ocean governance, particularly fisheries. The **ASEAN Report to the World Summit on Sustainable Development** in 2002 states, "the threats to coastal and marine resources include pollution, shipping and accidental oil spills, siltation due to soil erosion, over-fishing, and destructive fishing methods. ASEAN member countries are addressing these threats **through the formulation of detailed regional action plans for sustainable development and the management of coastal and marine resources, the development of a framework of cooperation and exchange of information, and creating public awareness of the need for rational management of coastal and marine resources."** The same Report also mentions a program "to achieve sustainable supplies of fish and fishery products in the ASEAN region, (with) ministers responsible for fisheries to adopt a Resolution on Sustainable Fisheries for Food Security for the ASEAN Region."

The **ASEAN Tourism Agreement** was likewise signed in 2002 recognizing the "valuable role of tourism in narrowing the development gap among ASEAN Member States as well as fostering mutual understanding and regional stability," and resolving "the development of ASEAN as a single tourism destination."

An International legally binding instrument on **BBNJ** under UNGA Resolution 69/292 is swiftly moving forward. Concern is raised that if implemented by a global, top down, authoritative organization to dictate to States and Regional Organizations how to manage their high seas, it would threaten the authority of existing regional mechanisms, and influence management inside the EEZ. This counters years of promotion of the subsidiarity principle, or decision-making at the lowest level of management; and is actually contrary to the UNGA resolution 69/292 mandate. **BBNJ** would further complicate fisheries management and biodiversity conservation. The **BBNJ** would undermine the key legal authority of existing regional mechanisms, hence, an incentive for ASEAN-China to ensure they maintain full control of regional interests by developing a regional mechanism under the **Arctic Council**. Implementation of UNCLOS Part IX would render the **BBNJ** of no added value to maritime and ocean governance for the ASEAN and the Central Indo-Pacific seas. Whether ASEAN links **BBNJ** to UNCLOS Part IV or not, ASEAN must have a common stand to preempt it.

ASEAN's work on fisheries requires updating, and should be consolidated with ASEAN Vision 2025. If this proposition is acceptable to the ASEAN, a next task would be to develop an appropriate organizational structure, with TORs for the proposed Commission, Secretariat, and the core personnel with inputs from the ASEAN@50 Summits, starting with ASEAN-China collaboration as Dialogue Partners. This approach could serve as a core discussion paper for a closed session of the Heads of State of all SCS coastal States at a "Regional Forum Conference to Address Common Interests in the Collective Management of the seas of ASEAN and the Indo-Pacific, staking out ASEAN centrality."



This article is a redacted version. You may view the full version at <https://www.balikbalangay.com/asean50ph6.html>



Denmark Calls for International Regulation of Autonomous Ships

by Digital Ship

A new report published by the **Danish Maritime Authority** has called for changes in international maritime regulation to prepare for the introduction of autonomous ships.

“It is important that Denmark and Danish companies are at the forefront of technology and digitalization. The development of autonomous ships is fast-moving and we must be at its forefront,” said Danish Minister for Industry, Business and Financial Affairs, **Brian Mikkelsen**.

“However, part of current regulation is based on traditions dating back to the age of sail. That needs to improve. The regulation of autonomous ships shouldn’t be a hindrance to further advances and, therefore, (our report) provides important input,” he added.

The report, prepared by the consulting company **Rambøll** and the law firm **CORE** for the **Danish Maritime Authority**, recommends that regulation in the sector be agreed upon internationally, more specifically at the IMO where Denmark says it is working hard to get the topic to the top of the agenda.

The **Danish Maritime Authority’s** overall approach to regulation of autonomous ships is that autonomous ships must be at least as safe as conventional ships, and the report provides a number of specific recommendations on how Denmark can facilitate and prepare the regulation of autonomous technologies by examining areas like

regulations on manning issues, the definition of the term Master, and the permissions needed for a periodically unmanned bridge and electronic lookout.

“We must be able to seize opportunities created by development of new technology. Denmark has a strong maritime tradition and we want to stay in the lead when it comes to development and testing of technology,” said Minister **Mikkelsen**.

“In a globalised industry, regulation and standards for autonomous ships must be international. This is the only way to ensure significant global development in this area. I am very pleased that Denmark is already pushing this agenda internationally,” he added.

The **Danish Maritime Authority** strives to create safety at sea and growth in the maritime industries in Denmark. It believes, safety and growth go hand in hand because in Blue Denmark, growth should be based on quality shipping. Its vision is to effectively strengthen Blue Denmark’s conditions of growth and to promote safety and health on clean seas. It’s mission it to make Denmark a leading maritime nation characterized by quality shipping, technology and strong competences. It’s four main responsibilities are: (1) Framework conditions, competition and growth; (2) Safe ships, health and the environment; (3) Safe waters, voyage, and navigation; and (4) Social conditions, seafarers and fishermen. ⚓

Ensuring Compliance with Potable Water Testing Regulations on Ships: A Complete Guide

by Martek Marine

Regulations surrounding potable water on ships. In August 2013, the **Maritime Labour Convention (MLC)** started to enforce their regulations (MLC 2006), aimed at maintaining high quality drinking water onboard ships, to protect crew from waterborne health risks. Ship owners, managers, shipyards and crew manning agencies must all understand how the regulations titled, 'Food and Catering: Provision of Food and Fresh Water' affect them and develop and implement measures to ensure ongoing compliance with the requirements. Annex 2, relates specifically to freshwater loading and supply arrangements, disinfection, storage, distribution systems and maintenance. The minimum requirements needed to ensure the supply of drinking and fresh water are outlined, as well as measures to prevent any risk of contamination. It's possible to prevent waterborne disease outbreaks and toxic poisoning due to contaminated potable water. The contributing factors to outbreaks and illness emphasize the need for hygienic handling of water along the supply chain from source to consumption.



Developing a Fresh Water Safety Plan. The most effective means of ensuring the safety of a fresh water supply is through the use of a risk assessment and management approach that covers the whole process from loading to delivery at the tap and includes a planned maintenance system. All of the information gathered should be used to develop a **Fresh Water Safety Plan (FWSP)**, particularly for ships with a complex system, which could be incorporated into the ship's planned maintenance system. A **FWSP** should be based on: system assessment and hazard analysis (including an assessment of source water loaded on to the ship); a management plan and control measures (the selection and operation of appropriate treatment processes); a monitoring and corrective action system in accordance with the **FWSP** (the prevention of contamination/re-contamination during storage and distribution.) According to advice in MLC 2006, as well as observing the rules for classification and construction of seagoing ships stated by the relevant classification societies, the following sources should be utilized when formulating a **FWSP**:

- ♦ International Organization for Standardization - Sanitary design and construction of ship water supplies.
- ♦ WHO Guide to Ship Sanitation
- ♦ Health and Safety Executive's approved Code of Practice and Guidance for Control of Legionella Bacteria in Water Systems.

Potable water testing as part of a Fresh Water Safety Plan. Regular potable water testing is vital as part of an effective monitoring system in a FWSP. Potable water test kits are designed to ensure the maintenance of high quality water throughout the potable water network on ships. Kits are now available that are incredibly safe, easy-to-use and cost-effective. Accurate tests give a color change in the presence of harmful indicator bacteria, which might be present in the event of contamination to the water onboard.

What's in a potable water testing kit for ships? Drinksafe™ from **Martek Marine** is guaranteed to be the easiest kit to use on the market, probably because it was developed using feedback from a survey of 8000 marine decision makers. The kit includes more tests than all other kits, is designed to last 18 months, and meet all compliance requirements, including GUARANTEED compliance with MLC 2006. Each **Drinksafe** kit includes: 500 DPD1 free chlorine tests with comparator disc; 500 DPD3 total chlorine tests with comparator disc; 500 pH tests with comparator disc; 250 high range chlorine (super-chlorination) tests with comparator disc; a colour comparator, test tubes, a tablet crusher & brush; 25 e-coli/coliforms tests with sterile containers; 40 bacterial plate tests with syringes; an incubator & UV lamp; goggles & disposable gloves; a test log-book, and a manual and training DVD which shows you how to take samples, and do the tests. Depending on your Charterers requirement, you can purchase the **Drinksafe** kit or the **Drinksafe MAX™**. The **Drinksafe** standard kit is fully compliant for peace of mind and safety; for the crew, **Drinksafe MAX** has the added benefit of copper, iron, enterococci and turbidity, and we also have legionella as an add-on.

What are the recommended potable water testing kits for marine industry use? The world's largest shipping companies trust **Drinksafe** to take care of the wellbeing of their crew and passengers and there's good reason why they do. **Drinksafe MAX** has been created to ensure you can provide everything required upon inspection, including testing plates for copper, iron and enterococci, plus a logbook for all testing results. In contrast to the 18-month shelf life of **Drinksafe** kits, most other comparable kits only last for 3-months! Easy to use, **Drinksafe** will provide your vessel with simple equipment that anybody can use. It really is the simplest to use potable water testing kit on the market. There are no glass ampoules (which means no break-ages), no instruments for calibration, no messy Thio-Bags, and finally no need for sample dilution pots. Affordable spare parts are available on stock and it's possible to purchase individual components of each kit, meaning there's no need to re-buy a new kit, simply replace the parts used. This makes **Drinksafe** incredibly economical, without risking crew safety. ⚓



Elios: A Safer Way Forward for Ship Inspections

by Martek Marine

The seaworthiness of a vessel is one of the most important considerations for any maritime operator. Whether you are responsible for a small passenger ship or bulk carrier, compliance laws are getting stricter to ensure that crew members and passengers are kept safe and marine pollution levels are kept to a minimum. Penalties can be serious, but if a ship isn't inspected and maintained, it can also have a serious detrimental effect on a ship's trading ability, meaning additional time waiting for critical repairs either stuck in port or out at sea.

The **ISM Code** specifies that every company should develop, implement and maintain a **Safety Management System** to ensure safety at sea, prevention of human injury or loss of life, and avoidance of damage to the environment, in particular, the marine environment. Any ship operator has an obligation to ensure that inspections are carried out at regular intervals, or face crippling fines in the event of an incident.

Taking preventative measures is surely better than suffering mechanical failure in the middle of a voyage or fighting a lengthy legal battle, but with the costs associated with regular inspections, many operators still choose to take the risk. Any kind of inspection is notoriously difficult

on a ship. The industrial nature of the environment, combined with the harsh conditions to which vessels are exposed mean that regular inspections of a ship's structural integrity as well as its tanks and internal infrastructure need to be carried out at least once every 12 months. But surveys take time – hundreds of man hours can be spent inspecting each and every nook and cranny of a ship's internal and external structure – looking for structural deformation, cracks and any signs of wear and tear which may pose a risk to either crew members, passengers or the marine environment. Time is money after all.

Time-saving technology. One of the greatest benefits of technological advancement is the amount of time it has saved us completing basic or laborious tasks. From maps on smart phones to email, many of us don't know how we survived without digital technology and there are greater innovations being released each day, with automotive vehicles and robotic healthcare systems already being trialed across the world. One technology that is having a massive disruptive impact in many commercial sectors is the **Unmanned Aerial System (UAS)**. In just 3 years, **UAS** or **drones** have revolutionized the way we can look at the world and our surroundings. Commercial UAS are saving businesses huge amounts of time and money.

The ability to remotely view and capture imagery from the air has meant that **UAS** are being used to complete commercial and industrial tasks, which are notoriously difficult and dangerous for workers. From inspections of tall structures such as powerlines and wind turbines, to assisting with search and rescue missions in an emergency situation such as a fire, **drones** are making hazardous working conditions a consideration of the past in many industries.

Drones have limitations, though. Many **drones** are limited in flight time, payload capacity, and also need a clear space in which to fly, making them suitable for outdoor use only. These limitations have meant that a survey of complex structures or confined indoor spaces still have to be completed manually. The most common drones on the market, both in the commercial and hobbyist markets are **quadcopters**. As the name suggests, **quadcopters** have four rotors, which propel the drone vertically into the air. These exposed rotors mean that the **drone** relies on clear airspace for both safety and performance. High winds and heavy particles such as sand and dust can render many models **unflyable**. The exposed rotors also pose a risk of personal injury as well as damage to the unit should it come into contact with a person or object such as a wall, or tree; again, meaning a **quadcopter** cannot be used in close-quarters.

UAS is one technology attracting huge amounts of investment from venture capitalists and private investors, with manufacturers striving to be the first to lift the current limitations of the technology. Innovation is focused on improving battery life, or removing the need for a battery completely, improving payload capacity to allow for heavier sensors to be attached such as **LiDAR** and **Radar** systems – **UAS** technology is changing and improving at a stunning rate of NOTS (Near-Surface Ocean Thermal Structures).

The idea of flying a **drone** in a confined space would make most **drone** pilots wince. Also, limited visibility into the scenario and the concept is unthinkable. This is the scenario faced by those who carry out ship inspections: dark and cramped conditions, with limited visibility and maneuverability. Climbing inside a pressure vessel, chemical or gas tank is a daunting task for ship operators, with lighting, safety rigs and access equipment needing to be set up prior to inspection. For the surveyor, it's worse and the risks are huge. If only there was a way to send in a **drone** to do the dirty work!

Enter the **Elios, the world's first collision-tolerant UAS**. **Elios** can be operated safely indoors, in complex and confined spaces and in places where they could come in to contact with people. It is the first **UAS** of its kind to be designed with a frame to protect the rotors. This means that it can bounce off, or roll across obstacles or people without any damage to the unit or person. The **Elios** presents great advantages to maritime operators who wish to improve the safety and efficiency of their surveys. One unit can carry out tasks in just minutes, as opposed to hours it would take a human operator. Ready to deploy almost instantly, the **Elios** also provides the ability to capture data and imagery remotely, which can be accessed immediately. In the event of an incident or potential threat to the ship's integrity, this fast response can be crucial to limiting damage or downtime.

Traditional **tank inspections** often require units to be drained, cleaned and ventilated before surveying crews could be permitted access. Often air pollutants also need to be monitored to ensure the safety of those entering the space. Add to this the amount of time taken to erect scaffolding or safe rope access and you could be talking days before the area is rendered safe enough for work to commence. Yet the **Elios** can be used to carry out an initial inspection without any of these considerations, allowing an accurate assessment to be made as to the maintenance work required, saving time, and money.

And then there was light. Laws in most countries prohibit **UAS**

operators from flying too closely to buildings, vehicles and people. This is due to a perceived lack of control of the unit, which could pose a risk to people and infrastructure. Thanks to its protective cage, the **Elios** poses no such risk. It is also equipped with an innovative wireless communication system, which provides live video feedback, allowing the pilot to fly in places beyond their visual capacity, whilst maintaining navigational control. Its 2.4Ghz communication link offers high-quality data transfer and is easy to use. Imaging feeds are also saved to an onboard data card to allow retrospective analysis.


The **Elios** also features onboard LED lighting, which helps the pilot to navigate, as well as improving the quality of the video and images collected. The standard payloads also include a separate integrated thermal camera, which can help further where visibility is limited. **Thermal imaging** cameras provide a non-intrusive way of identifying temperature differentials, which can be present in an impending mechanical failure. Thermal imaging is also great at detecting leaks and cracks in tanks and other structures and can even detect moisture intrusion, which can be difficult with the naked eye; on a ship, this can be an invaluable early warning sign of a bigger problem.

One of the greatest benefits of **UAS** systems has been the ability to collect imagery, data and video remotely, removing surveying staff from potentially hazardous situations. The **Elios Ground Station** enhances its proposition by giving the **UAS** pilot access to live telemetry data and SD video being captured by the **Elios** in real-time. The telemetry data interface communicates battery level, signal strength and relative heading and altitude, all important measurements for any drone flight, yet specific to the Ground Station is the ability to monitor light intensity and camera exposure. When carrying out inspections inside a ship, or tank, light will be limited. Being able to monitor conditions and adjust settings to suit can be the difference between a successful survey and a waste of time and money.

Compliance made easy. Utilizing **drone** technology can make all the difference when complying with the **ISM code** and creating a robust and easy to execute **Safety Management System**. With such high importance placed on crew and passenger welfare, anything that can help to lessen exposure to hazards has to be explored. Autonomous technologies are set to revolutionize our world and whilst we wait for our driverless cars, which will cut road deaths, and robots, which will carry out surgical procedures, we can make use of the technology we have now. **UAS** are proven to increase the safety of workers in numerous situations. The **Elios** has now shown that this is possible even under the most difficult of circumstances. Ships are dangerous places with unique characteristics and hazards that require specialist considerations.

Martek Marine specializes in innovative solutions, which support the stability and future of the marine industry. We are working with the **European Maritime Safety Agency (EMSA)** and other flag administrations, major classification societies and major ship operators to help them to utilize the power of **drones** for business growth and improved crew welfare.

The range of sensors available for **drones** transcends cameras and HD video. Air quality monitoring sensors are available to detect and confirm the presence of toxic gases before they become a threat. **LiDAR (Light Detection and Ranging)** scanners can be incorporated to create 3D visualizations of large and complex structures such as rigs and the outside of large vessels.

Martek Marine also leads the way in EU fuel sulphur limit compliance. We are the only maritime company with expertise in both **UAS** and marine emissions monitoring, so do speak to us about your compliance responsibilities, and how **UAS** can help to ensure that your vessels are operating within the law. 



IMO Promotes Fishing Vessel Safety Agreement to Save Lives

by IMO NEWS

When it comes to **fishing vessel safety**, the mission is clear, says **Sandra Allnutt** of the **International Maritime Organization (IMO)**: enhance safety to save lives.

“We want to reduce loss of life in one of the most dangerous professions in the world, and we want to enhance safety on board fishing vessels,” said Ms Allnutt, Head of Maritime Technology in IMO’s Maritime Safety Division, following a regional seminar, in Cape Town, South Africa, to promote ratification and implementation of a key **fishing vessel safety** treaty known as the **Cape Town Agreement of 2012**.

“This Agreement, once fully ratified, in force and implemented, will be an internationally binding agreement which will facilitate better control of **fishing vessel safety** by flag, port and coastal States. It will also contribute to the fight against **illegal, unregulated and unreported (IUU) fishing**,” Ms Allnutt said.

The **Cape Town Agreement** was adopted at an international conference held in South Africa in 2012, as a means to bring into effect the provisions of the **1977 Torremolinos International Convention for the Safety of Fishing Vessels**, which was later modified by the **1993 Torremolinos Protocol**.

In ratifying the **2012 Agreement**, Parties agree to amendments to the provisions of the 1993 Protocol, so that they can come into force as soon as possible thereafter. The treaty will enter into force 12 months after at least 22 States, with an aggregate 3,600 fishing vessels of at least 24 meters long, operating on the high seas, have expressed their consent to be bound by it.

To date, 7 countries have ratified the **Cape Town Agreement**: Congo, Denmark, Germany, Iceland, Netherlands, Norway and South Africa. Between them, there is an aggregate of 884 fishing vessels, at least 24 meters long, operating on the high seas.

International treaties such as the International Convention for the Safety of Life at Sea (**SOLAS**) have been in force for decades for the commercial shipping industry, including cargo and passenger ships.

However, the key instrument **applicable to fishing vessels** is still not in force. This means there are no mandatory international requirements for stability and associated seaworthiness, life saving appliances, communications equipment or fire protection, as well as fishing vessel construction.

“Implementation of the **fishing vessel safety** provisions is long overdue,” Ms Allnutt said. “So we have been running a series of seminars around the world to explain what the **Cape Town Agreement** is, why it is important, how it can be implemented into national legislation and what the next steps are for a Party to the Agreement.”

The Cape Town Regional Seminar (16 - 20 October 2017) was attended by participants from 10 countries in the Africa Anglophone region. It followed similar events, organized by **IMO** in cooperation with the Food and Agriculture Organization (**FAO**), including, in the Cook Islands (28 August - 1 September 2017), for 10 countries in the Pacific region; in Côte d’Ivoire (December 2016), for 12 countries from the Africa Francophone region; in Indonesia (April 2015), for 11 countries from the East Asia region; in Belize (October 2014), for 13 countries in the Caribbean; and in Peru (June 2014), for 12 countries in Latin America. [↕](#)

KR Launches Survey Services Using Drones

by Korean Register



The **Korean Register (KR)**, an International Association of Classification Societies (IACS) member, has announced that it is now conducting **ship inspection services** using **Drones**, responding to the industry-wide trend to use more unmanned technology.

The new service, which has been successfully trialed and now launched, follows extensive collaboration and research conducted with the **University of Gyeongnam Geochang**.

The **Drone** inspection will save **KR's** customers time and money and will enhance the safety of the organization's workforce. The inspection is conducted onboard, in and around ships, and many of the inspected areas are high risk and difficult to access safely.

The inspections will be carried out using aerial **Drones** (U.A.V. unmanned aerial vehicle) and underwater **Drones** (R.O.V. remotely operated vehicle), and will be an important part of the decision-making and assessment process for **KR's** surveyors, complimenting their traditional surveying skills.

After researching the possibilities and technology available, **KR** successfully completed a series of tests utilizing camera-equipped **Drones** for **ship inspections**, and at the same time established a registration process for service suppliers, including the **University of Gyeongnam Geochang**. The two organizations now plan to work together on future technological developments.

Mr. **Lee Jeong-kie**, Chairman and CEO of **KR** said, "We are delighted

to announce that we can now offer full **ship inspection services** with camera-equipped **Drones**, employing the very latest technology. This development will be a significant advantage for our customers', saving their time and capital resources as well as increasing efficiency and safety at the worksite, which I hope, will in turn improve competitiveness across the shipping industry."

"This is the latest development in **KR's** continuous efforts to identify and develop new practical ways to meet our clients' needs, and to enhance their businesses prosperity," he added.

KR had provided various services including classification, statutory services, approval of class equipment, certification, naval services, industry services, and as service supplier, prior to the introduction of Drones for **ship inspection service**.

Moving forward, **KR** plans to provide services using a variety of different Drones to expand its **ship inspection service** areas. To offer high quality and more diverse services to more clients.

KR will carry out further research and development into the relevant technology, while vetting and registering more secure service suppliers around the world, particularly in China and across Asia.

KR is headquartered in Busan, South Korea and operates a network of 66 offices around the world.

Established in 1960 with the purpose of promoting safety of life, property, and the protection of the marine environment, **KR** currently classes an international fleet of 3,061 vessels totaling 69 million GT. ⚓

PRS Achieves ISO9001:2015 Certification from ABS Quality Evaluations, Inc.

Last month, PRS successfully passed with flying colors (with only 1 minor observation) the strict assessment and certification audit of ABS QE to the latest 2015 version of ISO9001 of PRS' Integrated Management System.

The first and leading Filipino classification society has again trailblazed in establishing an Integrated Management System compliant to ISO 9001:2015 (quality management standard), ISO 18001 (OHSAS management standard), ISO 14001 (environmental management standard) and the Recognized Organization Code (IMO's RO Code). It is now the first local classification society to achieve said certification from an IACS member certification body.

ABS Quality Evaluations Inc. (or ABS QE) is part of the American Bureau of Shipping (ABS) Group, one of the founding members of the International Association of Classification Societies (IACS).

This achievement paves the way for PRS to be certified very soon to all four (4) internationally-adopted management system standards adopted by all members of IACS and brings PRS at par with any IACS member. ⚓

For more information on this topic, please contact:

Ms. Leyka Dillo – PR Executive

Mobile No.: +63917 3057026/ +6399 499981246; Tel No: +632 3101588

E-mail: info@prsclass.org

2nd Floor T. M Kalaw center, T. M. Kalaw Avenue, Ermita, Manila; Website: www.prsclass.org



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Inmarsat Seafarer Safety with SafetyNET

In November 2017, **Inmarsat** launched a vital new service, **SafetyNET II**, for **Maritime Safety Information Providers (MSIPs)**, marking a key stage in upgrading the **Global Maritime Distress and Safety System (GMDSS)**, which helps to save thousands of lives at sea each year.

Inmarsat's new generation international broadcast and automatic reception service for **Maritime Safety Information (MSI)** enables **MSIPs** to transition their communications to web-based messaging. As a web-based service, **SafetyNET II** introduces broadcast scheduling, continual monitoring, message cancellation, multiple text input methods, among other functions and usability improvements.

Following

Transforms Infrastructure II Launch

by **Inmarsat**

exhaustive testing with six host countries, **SafetyNET II** is fully available for the delivery of safety-related messages to vessels including weather forecasts, navigational warnings and piracy alerts. It also provides additional reassurance to ships in distress, by modernising the infrastructure supporting the International Maritime Organization's (IMO) GMDSS in a way that can enhance search and rescue operations.

Another enhancement sees the introduction of read-receipts, so **Search and Rescue (SAR)** personnel know whether messages responding to distress calls have been picked up. It's a seemingly small change, but one that assists SAR decision-making.


During the trial period, **SafetyNET II** was instrumental in saving lives, with its use proving pivotal in two rescues overseen by authorities in New Zealand*.

"**SafetyNET II** is an important and highly effective, next generation safety service," says **Peter Broadhurst**, Senior Vice President, Safety & Security, **Inmarsat** Maritime. "Direct input from MRCCs and other MSI providers was instrumental in developing and refining the solution to fit end-user requirements."

"Most **MSIPs** are familiar with web-based interfaces which means the training requirement is lower. They can focus on new functionalities, such as the ability to schedule navigational warning repeat messages," continued **Broadhurst**.

MSIPs also often have to work within tight budgets. Using a web-based platform means they do not need to spend on specialized hardware or divert stretched resources for IT upkeep. **Inmarsat** recognized that the new system needed to be both future-proofed and backwards compatible.

SafetyNET II is no longer limited to ships featuring **Inmarsat C** terminals. Ships with **FleetBroadband** will automatically benefit from enhanced resilience, as messages will have multiple pathways to reach the bridge.

To ensure redundancy, **SafetyNET II** is supported from two custom-built and synched data centres, one in London (United Kingdom) and the other in Burum (the Netherlands). 



DAMEN Displays Leading Position in Global OPV Market

by DAMEN

Damen Shipyards Group has compiled a comprehensive summary of its worldwide shipbuilding activities regarding **Offshore Patrol Vessels (OPVs)**. The information shows that, with 5 vessels delivered in the last year, and 15 currently under construction, Damen has unrivalled experience in serving the naval industry with its **OPV** portfolio. Moreover, the company has proven its capability of completing complex naval projects in cooperation with local shipyards as well as in constructing vessels at its own yards. **OPVs** are playing an increasingly significant role in modern naval operations. They offer a versatile platform from which an extremely wide range of duties can be performed. **OPVs** allow Navies and Coastguards to carry out non-military duties like search and rescue, anti-smuggling operations and humanitarian support in a very cost-efficient way, but if necessary the **OPVs** can include conventional military activities such as anti-ship and anti-air warfare," comments **Damen** Manager Design & Proposal, **Piet van Rooij**.

Recent deliveries. Looking back over the previous 12 months, **Damen** has delivered 5 Naval patrol/**OPVs** to navies around the world. These include 2 SIGMA 10514 vessels for the Indonesian Navy, 2 **OPVs** to the Middle East, and 1 Multi-role Aviation Training Vessel (**OPV** 2300) to the Royal Australian Navy. These deliveries show **Damen's** commitment to cooperating with a client's local shipbuilding industry, says **Piet Van Rooij**. "The two vessels for the Indonesian Navy, for example, were built from modules that were fabricated at a local yard in Indonesia as well as at **Damen Schelde Naval Shipbuilding** in the Netherlands. The final assembly took place in Indonesia in a process that signified a considerable amount of knowledge and technology transfer."

Under construction. "We are currently building 15 **OPVs**; from 72 meters long to up to 123 meters long.

They have a total length of more than 1,300 meters, and a total steel weight in excess of 15,000 tonnes. In terms of power, these vessels will be equipped with 56 main engines; providing more than 130,000 KW of power between them." The construction of these 15 vessels illustrates **Damen's** leading position in the area of local construction. "We are building 10 of these 15 vessels at local yards," **Piet Van Rooij** adds. "Our experience in local construction of specialized military vessels really is unparalleled."

A cooperative process. A recent statement from the Secretary of the Mexican Navy, **Admiral Soberón Sanz**, mentioned that he very much appreciates the synergy created between the Mexican Navy and **Damen** during the execution of the Long Range Patrol Vessel project. **Admiral Sanz** went on to say that this synergy results in the creation of jobs in Mexico, while giving an impulse to the local maritime industry. In explaining the reasons behind **Damen's** success in the **global OPV market**, **Piet Van Rooij** points to the knowledge possessed by, and the highly productive relationship between a number of the company's subsidiaries. "Our naval vessel construction activities are backed up from numerous sides. **Damen Schelde Naval Shipbuilding** has a history of building naval vessels of over 140 years. They provide expertise in military and combat systems, and naval classification regulations, as well as engineering skills. **Damen Shipyards Gorinchem HQ** also has an extensive design and engineering background. Their experience with high-speed crafts can be seen in the Sea Axe hull form that gives a number of our **OPV** designs their excellent sea-keeping behavior. And for clients wishing to build vessels locally, **Damen Technical Cooperation** presents clients with a thoroughly tried-and tested framework that includes everything from designs, materials and engineering packages to building assistance." 📍



LÜRSEN to Build Offshore Patrol Vessels in Australia

by Vicky Viray-Mendoza



The Australian Federal Government announced on 24-November-2017 in Canberra that **Lürssen** would be awarded as the Prime Contractor to deliver the Royal Australian Navy's Offshore Patrol Vessels (OPVs). The OPV program will see 12 vessels built in total. West Australian shipbuilders **Austal** and **Civmec/Forgacs**, and Government shipbuilder **ASC** would all be part of building the vessels, according to the Defense Industries Minister **Christopher Pyne**. **ASC Shipbuilding** would build the first 2 vessels in Adelaide, South Australia, starting in the 4th quarter of 2018, and are expected to enter service in 2021. **Austal** and **Civmec/Forgacs** would build the 10 remaining vessels in the **Henderson Maritime Precinct** starting 2020. All 12 offshore patrol vessels will be delivered by 2030, and will replace the navy's existing **Armidale Class** patrol boat fleet.

Austal and **Civmec/Forgacs** will build the 10 OPVs in Henderson, Western Australia, using the German designed **Lürssen OPV80**. The contract would be subject to the conclusion of commercial negotiations expected to take place over the coming months. **Lürssen**, a family-owned company, said it was committed to involving Australian small and medium enterprises (SMEs) in the project.

"Our ambition from the start of this process has been clear: To deliver the best vessel for the Royal Australian Navy from a proven low-risk design; to build that vessel by investing in the development of Australian shipbuilding skills; and to open up new opportunities for Australian businesses and suppliers by contributing to a sustainable and globally competitive industrial base," Chief Executive Officer **Peter Lürssen** said. The Australian team of **Lürssen** includes sub-contractors **L3 Australia**, **SAAB Australia**, and **Penske**. "We see vast opportunities for SMEs across the entire country from the shipbuilding program, including in the construction of the vessels, contributing supplies, in shipyard services, in future sustainment work and in supporting industries," **Lürssen** adds.

The Australian Government said the OPV program was worth up to AU\$3.5 Billion (US\$2.7 Billion), up from a previous estimate of AU\$3 Billion, and that the construction would employ up to 1000 workers

—400 direct and 600 in the supply chain.

"Australian jobs, Australian workers, Australian steel, for Australia's navy, to keep Australia safe in these times, of greater risk, and greater challenge," Prime Minister Turnbull said.

The OPVs are 80 meters in length with a displacement of 1700 tons, and a draught of 4 meters. The OPVs would have a 40mm gun for self-protection, three 8.4-meter sea boats, and command and communication systems. This would allow the OPVs to operate in tandem with Australian Border Force vessels and other Australian Defense Force units. The OPVs could accommodate 60 personnel, including a crew of 40 Navy personnel, with the ability to accept unmanned aerial systems.

The OPVs must qualify for maritime policing type missions but must also be on call for primary defense maritime patrol duties. However, the **OPV80 Lürssen** design does not seem to include a helipad. One school of thought holds that a helipad is not necessary since the boats would carry UAVs; while another argument holds that a helicopter would provide better surveillance missions, enabling personnel transport, search and rescue, humanitarian, disaster relief, and medical evacuations.

"I congratulate Lürssen on being selected for the Lürssen, and **Austal** looks forward to establishing a long and productive future working together. This important program will not only deliver new capability for the Navy but will continue to build the industrial base in Australia in line with the Government's stated intent. The Australian Government has made a commitment to a continuous naval shipbuilding industry and **Austal** looks forward to playing a role in making this happen. We thank the Australian Government for this endorsement of our shipbuilding capability, which will ensure **Austal's** ongoing naval shipbuilding presence for the next decade and beyond. As I have said many times, the OPV program is very important for our Henderson workforce and we welcome the fact that our employees will have an opportunity to build these vessels," **Austal** Chief Executive Officer **David Singleton** said. 🚢



MARITIME FORUM

The League organized the Maritime Breakfast Forum (MBF) series in 1995 as a venue for developing plans and programs to discuss and resolve issues in the maritime industry. The MBF is attended by stakeholders in the maritime sector and resource persons in the government and private agencies involved in maritime concerns. The MBF is regularly held, without fail, every month except June and December, hosted by different agencies and organizations in the maritime industry. Policies and projects presented during the forum are published in the Maritime Review for information and dissemination to the general public.



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World Dream Cruise Ship Sets Sail to Philippines

by Vicky Viray-Mendoza

Dream Cruises, the leading cruise company in Asia, and a subsidiary of **Genting Hong Kong**, has taken delivery of its newest cruise ship, which was constructed in the city of Papenburg located in the district of Emsland in Lower Saxony, Germany. Papenburg is notably situated at the River Ems, and is known for its large shipyard, the **Meyer Werft**, which specializes in building cruise liners.

The 151,300 GT vessel, **World Dream**, built by **Meyer Werft** is 335.35 meters long and 39.7 meters wide, offering space for up to 3,376 passengers in 1,686 cabins, out of which 1,272 are outer cabs, the bulk of which have their own balconies. With the addition of this vessel, **Dream Cruises** now has a fleet of 8 ships to-date.

The ship has 20 decks across, with 35 restaurants and bars, together with a set of various entertainment facilities, such as theatres with approximately 1,000 seats, a climbing park, space for outdoor activities, as well as a range of virtual reality applications. It has a maximum speed of 24 knots. An exceptional level of service is provided by a large crew of about 2,030.

Moreover, **World Dream** also carries a small deep-sea submarine, which can take up to 4 guests to a depth of 200 meters, and a motor-boat for excursions.

The vessel will be based in the Port of Hong Kong from where she

will head for two/five/seven night sailings to **Vietnam** and **China**. The artist **Jacky Tsai** has been responsible for the ship's hull artwork titled "**A Tale of Two Dreams**."

"This is our 44th cruise ship we delivered. Our team made a great job. I am proud and thankful for their contribution," stated **Tim Meyer**, Managing Director, **Meyer Werft**.

Cruise itinerary program. The **World Dream** cruise itinerary program is based on China roundtrip departures from homeports Hong Kong and Guangzhou (Nansha Port), also operated with fly-cruise deals to **Vietnam** and **Philippines**.

The ship's 5-night / 6-day itineraries visit **Philippines** (Manila and **Boracay Island**, November 17, 2017 through March 31 2018). The other set offers 5-night / 6-day itineraries to **Vietnam** (Saigon / Ho Chi Minh City and Nha Trang, December 3, 2017 through October 2018). Also offered are 2-night / 3-day Pearl River Delta weekend cruises leaving roundtrip from Hong Kong.

B2B cruise deals ("back-to-back") are also available for booking, combining the 2-night weekend with two 5-night workweek itineraries into a 12-night B2B itinerary. In October 2017, **Dream Cruises** announced a new homeport deployment for the ship - **Singapore** (Marina Bay Terminal), also offering discount priced fly-cruise deals from China. ⚓

Talangka Crabs in the Philippines

by Vicky Viray Mendoza



The **Talangka** in the Philippines is from the scientific family **Grapsidae** and species **Varuna litterata**. Apart from the Philippines, **Varuna litterata** is also known to exist in Australia, China, Fiji, French Polynesia, Indonesia, Japan, Madagascar, Mauritius, Myanmar, Nansha (Spratly) Islands, New Caledonia, Palau, Papua New Guinea, Paracel Islands, South Africa, and Sri Lanka. The *Varuna Litterata* was named in 1798 by Johan Christian Fabricius, a Danish zoologist.

Genus **Varuna** (M. Edwards, 1830), has a single specie **Varuna litterata** (J. Fabricius, 1798), and is common in the Indo-Pacific region. It attracts attention by the marking on its carapace to which the specie's name "**litterata**" refers. The capital letter **H** is formed by the lengthwise (longitudinal) grooves that separate the sides (lateral) of the crab, which hold the branchial chambers with gills, from the center (median), which holds the gastric region in the upper part, and cardiac region in the lower part of the median. The crosswise (transverse) groove of the letter **H**, therefore appears to form the upper boundary of the cardiac region (T.R.R. Stebbing, 1893) and the lower boundary of the gastric region of the median (T. Sakai, 1939).

The front margin of the crab is narrow and straight, and the shape of the anterior-lateral borders is convex, separated into three pointy teeth. The body color is brown-red, sometimes greenish. The size varies from 50-55 mm wide (J. Gerlach, 2011). Its eyes are small and short. The shell or carapace of **Varuna litterata** is rounded and quadrangular. The ambulatory legs are expanded, and their posterior is thickly fringed with hairs (ciliate), which are useful to the crab for swimming purposes (T. Sakai, 1939). Its long legs are used for running, swimming, jumping, climbing or burrowing (Nandi & Pramanik, 1994).

Varuna litterata is usually found in mangroves, estuarine and freshwater environments, shallow sub-tidal regions, coastal waters or riverbanks that are 5-50 mm deep, and often hiding under rocks, logs, and dead leaves. It lives in burrows along the embankments or sides of pools, creeks and shallow banks (Devi et al., 2013). A mass migration of this

species is rarely seen (P. Ryan, 2000). Its low population is tracked annually yet no IUCN Redlist assessment has been done in the Philippines.

When the reproduction period starts, which is at the beginning of the wet season, the adults all meet at the riverbanks, on the coast, or the estuaries. After hatching, their larvae are carried to sea by the currents. **Varuna litterata** is a phytophage, meaning it feeds mostly on plants, including diatoms or algae. Perhaps we could introduce the **Talangka** to the Pasig River so they can get a helping of the flourishing algae, and help clean up the river. This crab can have a lifespan of about 3 years if not over-harvested. But to increase its population, perhaps the pregnant crabs should be returned back until the population surges again.



Female crab



Male crab

The Asian Shore Crab or River Crab is called **Talangka** in the Philippines. "*Tabang Talangka*" refers to crab roe or "*aligue*" sack, which is attached to the female crab on its bottom (ventral) side. This is a delicacy in the Philippines. Thus, the female crabs are preferred over the male crabs because they almost always have "*aligue*," the most flavorful part of the crab. While the Tagalogs call it **Talangka**, the Hiligaynons call it **Katang**, and the Cebuanos call it **Kalampay**.

In 2010, the Fisheries Administrative Order 233 Annex A released by the Bureau of Fisheries and Aquatic Resources (**BFAR**) listed **Varuna litterata** as an important aquatic organism for Food purposes. 📌



Friend of the Sea Confirms Belgian Imperial Heritage Caviar

by Vicky Viray Mendoza

Belgian caviar house, **Imperial Heritage**, recently obtained **Friend of the Sea's** certification for aquaculture. Breeding activities of the *Danube Sturgeon* (*Acipenser gueldenstaedtii*) and the *Siberian Sturgeon* (*Acipenser baerii*) take place in Italy, and have been found compliant with Friend of the Sea sustainable aquaculture criteria, some of which are: (a) No impact of the aquaculture site on critical habitat; (b) Compliance with wastewater parameters; (c) No use of harmful anti-foulants; (d) No use of growth hormones; (e) Energy efficiency; and (f) Social accountability.

Imperial Heritage is a family-owned company founded by **Koenraad Peter Colman**, based in **Mol, Antwerp** in Belgium, and distributes their selection of Sturgeon caviars in Europe, South Africa, and the USA.

Introducing her company, **Elisabeth Colman** said, "Our house stands for tradition and origin, holding on to the classic environment for the Sturgeon and the old-school way of preparing and selecting the world's best caviars. We are very proud of having received **Friend of the Sea's** certification, a very important label of recognition as demonstration of our efforts to respect nature's balance while guaranteeing the finest selection of the most prized caviars in the world." Welcoming **Imperial Heritage**, the Director of **Friend of the Sea**, **Paolo Bray** stated, "Thanks to the spread of sustainable practices applied to Sturgeon culture, both farmers and distributors are contributing to protect and repopulate Sturgeon specimens in Italian rivers and lakes."

Imperial Heritage selects environmentally sustainable caviar from the most prized Sturgeon species. The company supervises the entire course of life of the fish, from the very beginning until maturity under a clean culture environment, without any risk of secondary undesired tastes of the fish or the eggs. The method of preparation involves only pure caviar that is mildly salted —Malossol, a Russian term for "little salt" — under 3.7 % salt.

The caviar is packed immediately after preparation, in traditional tins or vacuum. This traditional packing allows the caviar to mature in a natural manner. This also enables **Imperial Heritage** to offer exceptionally fresh caviar, between a few days and a few weeks young. The breeding process, as well as the treatment and the preparation of the fish, is carried out by their Russian great masters of caviar, who have a lifelong experience in traditional preparation of the very best caviar.

Caviar is basically the roe (fish eggs, also sometimes referred to as "berries" or "pearls") of the female Sturgeon, a large migratory fish that can grow to over 3000 lbs. The Sturgeon has roamed the cold waters of the northern hemisphere for over 250 million years. Sturgeon is found mainly in the Caspian Sea, which reaches the shores of the two major caviar-producing countries in the world, Russia and Iran, but is also found in the Black Sea, in some parts of the Pacific Northwest and South Atlantic regions of North America, and is common in the big lakes and rivers in Europe. Although it is a saltwater fish, it spawns and lays eggs in freshwater.

The British kings of the Middle Ages reserved all the Sturgeon for their own consumption, knighted it the "Royal Fish," and was solely for royalty. However, it was the Persians who first prepared and savored Sturgeon roe. The word "caviar" actually comes from the Persian word "khav-yar" which means "cake of strength" or "cake of power" because the people of Persia attributed many medicinal powers to caviar. The Persians collected the fish eggs from the Kura River, although the tradition of salting fish roe for consumption originated in China, where carp eggs were prepared in this manner. The first known record of caviar dates back to the Greek scholar Aristotle. In the 4th Century B.C., Aristotle described this delicacy as the "eggs of the Sturgeon, heralded into banquets amongst trumpets and flowers." However, it was the Russian Tsars that catapulted the Sturgeon caviar into the world of luxury. ⚓

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MAAP Profile

Geographic destiny has given the Filipino the innate talent to be an excellent seafarer. To enhance this natural skill, the Maritime Academy of Asia and the Pacific (MAAP) was established on January 14, 1998. The Academy stands on a 103-hectare property in Kamaya Point, Mariveles, Bataan.

The Associated Marine Officers' and Seamen's Union of the Philippines (AMOSUP) founded by the late Capt. Gregorio S Oca, capitalized and developed the Academy. The new AMOSUP President, Dr. Conrado F. Oca, heads the Academy's board of governors. The board is comprised of representatives from the private sector, the International Transport Workers Federation, the Filipino Association of Maritime Employers, the International Transport Workers Federation, the All Japan Seamen's Union, the International Mariners Management Association of Japan, the Norwegian Seafarers' Union, the International Maritime Employers' Committee, the Danish Shipowners' Association, the Norwegian Shipowners' Association, and the Japanese Shipowners' Association.

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MAAP students are all scholars who are entitled to free tuition, board and lodging. They receive a comprehensive, up-to-date and well-rounded education that fully complies with the requirements of STCW 95 and the Commission on Higher Education (CHED). To ensure the highest standards of quality, MAAP adheres to a Quality Standards System that has been certified to comply with ISO 9001 version 2008, the Det Norske Veritas (DNV) Rules for Maritime Academies, and the Productivity and Standard Board (PSB) of Singapore.

The Academy offers three main programs: the Bachelor of Science in Marine Engineering (BSMarE) and the Bachelor of Science in Marine Transportation and Engineering (BSMTE). The curricula for the three courses were designed with the help of the United States Merchant Marine Academy at Kings Point, New York. Courses are four-year courses with sea phases scheduled in the third year. The BSMTE curriculum requires a total of 192 units: 152 at MAAP, 40 practicum/shipboard units on board T/S Kapitán Felix Oca and/or a shipping company sponsorship. The BSMarE curriculum requires a total of 193 units: 153 at MAAP, 40 practicum/shipboard units on board T/S Kapitán Felix Oca and/or a shipping company sponsorship.

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