

Navigating Through Shifting Regulatory and Geopolitical Landscapes in Maritime

A Sea Asia 2019 industry insights report

Report Summary

This is the final edition in a series of three reports produced for the seventh edition of Sea Asia – the maritime industry's leading forum for discussion, debate and analysis on the key trends and challenges facing the industry. Sea Asia 2019 concluded on 11 April, with the next edition happening on the 20 - 22 April 2021.

This report explores how global developments are impacting the maritime industry and what the industry needs to do to be able to move comfortably through these changes.

Acknowledgements and Contributions

The development of this multi-part industry insights report would not have been possible without the insights and contributions provided by these thought leaders.

- Mr Erck Rickmers, Chairman of E.R. Capital
- Mr Geir Bjørkeli, Chief Executive Officer at Corvus Energy
- Mr Guy Platten, Secretary-General of the International Chamber of Shipping (ICS)
- Mr Hideyuki Ando, Senior General Manager at MTI (NYK Group)
- Mr Jeremy Nixon, Chief Executive Officer at Ocean Network Express (ONE)
- Ms Liv Hovem, Chief Executive Officer at DNV GL Oil & Gas
- Mr Mohd Shahrin Bin Osman, Regional Manager, Maritime Advisory for South East Asia, Pacific & India, DNV GL
- · Mr Ralph Leszczynski, Head of Research at Banchero Costa
- Mr Marius Johansen, VP Commercial, Ships Agency
- Captain Michael Elwert, Managing Director, Ship Management West, V.Group
- · Mr Chris Hayman, Chairman of Seatrade, Informa Markets

They gave their time to share their insights and opinions on the challenges and opportunities facing the industry due to global developments.

THE SHIFTING REGULATORY LANDSCAPE IN MARITIME: AN OVERVIEW

The maritime industry has undergone a lot of change over the last few years. Today, the industry is seeing stricter environmental regulations coming into play, technological advancements changing traditional roles in the workforce, and sentiments around global trade escalating. With all this change taking place, the maritime industry has a lot to absorb, adapt and adopt in the years ahead.

The solutions chosen by industry players to navigate these changes is essential to ensure its competitiveness.

In this Sea Asia report – the final of a three-part series – we look at how global developments are impacting the maritime industry and what the industry needs to do to be able to move comfortably through these changes. This report also cites key discussion points from the recent Sea Asia 2019 held in Singapore in April.

CHANGING REGULATIONS: CHALLENGES AND OPPORTUNITIES

Stricter Environmental Regulations

Globally-enforced environmental regulations have been steadily introduced over the last few years, with the International Maritime Organization (IMO) 2020 Sulphur Cap as the most pressing deadline coming up in nine months' time.

According to Guy Platten, Secretary-General of the International Chamber of Shipping (ICS), these environmental regulations, whilst clearly necessary, will "obviously have major economic implications" to industry players. According to reports, compliance for the sulphur cap alone could cost upwards of US\$50 billion.

Looking ahead the industry anticipates greater regulatory changes, with conversations amongst industry players shifting beyond IMO2020 to IMO2050, and potentially even a carbon tax, and what that means for the shipping industry.

On initiatives like the carbon tax, Erck Rickmers, Chairman of E.R. Capital said, "The shipping industry welcomes all initiatives that are necessary to address these environmental issues of a global scale. We stand behind them as long as they are enforced for all to ensure equal competition, and that no disadvantages are created on a regional or sectoral level."

As the maritime players acknowledge that industry-wide change is crucial, there is also a recognition that we need to have a bigger discussion beyond the implications on costs and operational challenges that come with increased regulations. The bigger question posed to the industry is: How can maritime players create long-term sustainable businesses that are agile enough to adapt to the increasing regulatory environment?

One of the key themes consistent across the industry is that it cannot work towards tackling the environmental crisis in silos. For example, in response to the upcoming IMO2020 regulations, there is a call for greater commitment from large oil companies such as BP and Shell to meet the level of alternative fuels required for the industry to operate. Currently, investments are running up to US\$1 billion to support refinery updates¹.

The maritime industry has invested significantly to improve its environmental performance – millions have gone into the installation of scrubbers as well as the adoption of alternative fuel. With that, the industry calls on partners like big oil firms for support so that the investment made is not wasted.

While there is recognition that the industry is not in this alone, it still needs to undertake the central role of driving and leading the change that is to come. According to Jeremy Nixon, Chief Executive Officer at Ocean Network Express (ONE), self-regulation is one way the industry can look at taking control of the regulatory situation.

Mr Nixon said, "The major shipping companies should not be afraid of self-regulation, and to act proactively

¹ Bunkerspot. Global: uncertainty clouds impact of IMO 2020, says Wood Mackenzie.

as opposed to waiting on regulators. For example, the regulations on scrubbers were a compromise, and was a sub-optimal solution that created a lot of confusion within the industry.

By working together with the shipbuilders, governments, associations, and other bodies, we will be able to improve the shipping industry's environmental profile that would be beneficial to everyone."

Another key area of consideration for maritime players is regularly re-evaluating what the future

energy mix will look like. According to Liv Hovem, Chief Executive Officer at DNV GL - Oil & Gas, the energy mix has witnessed a global shift in recent years, and will continue to do so.

Ms Hovem said, "According to DNV GL's Energy Transition Outlook report, we are moving from a traditionally heavy focus on fossil fuel use, from today's 80-20 ratio, to a projected 50-50 mix of fossil and non-fossil fuel

energy resources by 2050. This is thanks to increased use of renewables, and an increased use of gas and electricity, over traditional heavy fossil fuel oils."

Achieving the right balance in the energy mix is crucial for the industry to respond to regulations in a practical yet timely manner, as there has also been questions on whether a ship built now which meets current regulations will be deemed environmentally suitable for its entire lifespan. One way the shipping industry can address this is to have a robust and complete power management system that can be adaptable to alternative power sources.

A trend expected to come out of the industry's approach to managing environmental regulations is tapping into battery power. Batteries will not only complement engines on board but also reduce energy wastage across the industry.

Geir Bjørkeli, Chief Executive Officer at Corvus Energy, noted that batteries result in safer and more efficient shipping as they are a more reliable power source, with enhanced power and fewer instances of blackouts, enabling ships to react quickly to unforeseeable circumstances.

Climate change will continue to affect regulatory and government policies, and there is no one simple solution for environmental compliance as regulations shift and change depending on new research on what emissions are detrimental to the environment. The

> key is for companies to identify ways to adapt and meet new requirements while remaining agile to anticipate the next wave of change.

Regulating Emerging

Technologies

As explored in the second report of this three-part series, technological advances have brought about a sea of changes in the maritime industry. The industry is seeing the

development of smarter ships, the steady automation of port operations, and shipping giants exploring the potential applications of blockchain across the cargo ecosystem to eliminate the need for printed shipping documents.

With that, comes clear opportunities for the industry. The availability of enhanced communications equipment such as monitoring sensors to transmit real-time data between ship-to-shore allows greater visibility of ship conditions.

But along with these exciting innovations and new technological solutions, there is a certain set of challenges that the industry will need to confront - one being the uneven regulatory landscape in the region, as well as the pace at which relevant regulatory frameworks are being developed.

www.sea-asia.com

According to DNV GL's Energy Transition

Outlook report, we are moving from a

traditionally heavy focus on fossil fuel use,

from today's 80-20 ratio, to a projected

50-50 mix of fossil and non-fossil fuel

energy resources by 2050. This is thanks

to increased use of renewables, and an

increased use of gas and electricity, over

Ms Liv Hovem,

Chief Executive Officer

at DNV GL - Oil & Gas

traditional heavy fossil fuel oils.

Using Wilhelmsen Ships Service's unmanned aircraft systems (UAS), or drones, as an illustration, Marius Johansen, VP Commercial, Ships Agency at the company shared that while the UAS are bound to bring improved safety, productivity and reactivity, uptake is hampered by the development of relevant regulatory and safety frameworks.

"While we can look forward to the many innovative uses for drones onboard a single vessel, the challenge lies when you use them outside of a vessel. This will then become heavily regulated, and with regulations varying from one country to another, this poses yet another obstacle for the industry. With more emerging technologies on the way, it will be crucial for industry players to maintain a balance between regulation and innovation," said Mr Johansen.

The increased use and introduction of new technologies in the industry also means that industry players will need to understand the risk of cybersecurity, and navigate through regulatory and legal frameworks that will help them identify cybersecurity risks and align their business policies and use of technologies accordingly.

According to Captain Michael Elwert, Managing Director, Ship Management West for V Group, cybersecurity is more relevant than ever, as the industry is increasingly connected online and puts itself in a greater risk of cybercrimes such as hacking, phishing and ransomware.

Captain Elwert added, "While a number of evolving cybersecurity guidelines and standards are already in place, there has yet to be a single regulatory framework that applies to cyber risks for the industry to follow. In order to mitigate cybercrime, companies need to proactively undertake measures such as enhancing certain business systems or computer software, and introducing roles such as cybersecurity leads or a Chief Information Officer (CIO) into the business."

While the industry continues to work out what lies ahead for drones and cybersecurity, industry players are already looking into the future to disruptors and game-changers that would undoubtedly need greater consideration from a regulatory standpoint.

One such technology is blockchain – it has been touted as a possible solution that will allow efficient, transparent, traceable, and secure transactions to take place and enable frictionless trade. Notably, the importance of traceability in the supply chain meant that blockchain can play a key role in ensuring product origin is consistent downstream.

Mohd Shahrin Bin Osman, Regional Manager, Maritime Advisory for South East Asia, Pacific & India, DNV GL said that the industry foresees it revolutionising the maritime industry over time across documentation, participants, payments, smart contracts, and other areas.

"Blockchain technology allows digital value chain on top of the physical value chain, making sure the data is validated, before it goes to the consumer. DNV GL has proven the viability of this concept for supply chain assurance (MyStory) in collaboration with VeChain. On the bunkering industry, details fuel quality and inspection will be captured into the blockchain, ensuring a trackand-trace from the time the order is made till delivery of the fuel which DNV GL will conduct a pilot study in the coming months."

While the use of blockchain has already made some inroads into the shipping industry, it is still early days for an industry-wide change. Industry players are nonetheless encouraged to be ahead on the regulatory front while the landscape is still taking shape. For example, there is Blockchain in Transport Alliance (BiTA), a forum for the development of blockchain technology standards and education for the freight industry, which hopes to spur the development of standards for the shipping industry as a whole by implementing a secure blockchain system.

Automation is also another hot topic in the maritime community. Autonomous shipping has undoubtedly captured the imagination, and has the potential to provide significant value in areas of heavily routine or dangerous operations.

However, while the industry will likely see autonomous technologies complement human operations, industry leaders agree that complete automation will not be seen

in the foreseeable future, until industry-wide regulations and standards are introduced.

Hideyuki Ando, Senior General Manager at MTI (NYK Group) said, "On the regulation front, we need a proper set of technical standards to enhance the autonomous ecosystems on the ships. With all the data collected from vessels, the industry also needs to have regulations or common rules on how they can share the data. Secure and safe data transfer needs to be the basic standard for all companies."

44

On the regulation front, we need a proper set of technical standards to enhance the autonomous ecosystems on the ships. With all the data collected from vessels, the industry also needs to have regulations or common rules on how they can share the data. Secure and safe data transfer needs to be the basic standard for all companies.

Mr Hideyuki Ando, Senior General Manager at MTI (NYK Group)



Technological change undeniably develops at a much faster pace than regulatory change. While the shipping industry is understandably preoccupied with addressing more pressing environmental regulations, it is key for industry players to also play a proactive role in considering the shipping technology regulatory landscape, to ensure that new innovations have a conducive environment to flourish in the shipping industry.

CHANGING GEOPOLITICAL LANDSCAPES

While the regulatory changes faced today and into the future present ongoing challenges, it is further complicated by the ever-changing geopolitical environment. Accounting for 90 per cent of global trade the industry is closely tied to the health of major economies, prone to cyclic swings and vulnerable to the world's reaction to any number of political events.

In the last few years, Black Swan events - large-scale, unexpected occurrences, such as the volatile geopolitical environment and extreme weather events - have greatly impacted the shipping industry.

For example, the exchange of tariffs between the United States, China and Europe are now resulting in a hindrance to the free flow of goods and may also potentially lead to changes on the use of trade routes. The tariffs imposed by the United States on Chinese exports to the country are also expected to affect the container shipping industry on the eastbound Asia-North America lane.

According to Ralph Leszczynski, Head of Research at Banchero Costa, several key Black Swan events notably impacted the dry bulk market. He said, "The disaster at Vale mine in Brazil caused uncertainty about what Vale's iron ore production will be this year. Additionally, the US-China trade war, along with restrictions on Chinese coal imports, meant that the dry bulk market's demand side is less positive this year than previously anticipated."

Industry players will continue to see geopolitical uncertainty as key risks for their businesses, but it remains a challenge to anticipate and prepare for the unknown, and how it will ultimately affect ongoing regulatory changes in the industry. Engaging analysts is one of the ways businesses can identify the geopolitical threats and opportunities most relevant to their strategy, operations, financial performance, and regulatory compliance.

Once businesses are able to identify the sources of geopolitical and regulatory risks, they can then reassess the key issues and use the insights to inform the company's strategy moving forward, and effectively monitor signposts for increasing and decreasing risks.

The shipping industry needs to adopt a long-term strategic view that regularly re-evaluates upcoming risks and opportunities. Avoiding geopolitical risks is not an option for many of the key players in the industry, and therefore, it is important that companies work quickly to analyse the challenges and risks that come along

with them, and make the right decisions at strategic, operational and tactical levels.

At the same time, there also needs to be an understanding that these geopolitical changes are constantly evolving. As such, industry players will not only need to have a clear view of where their interests lie, but also make necessary adjustments to strategies and plans as and when more geopolitical changes take place.

While high levels of uncertainties will continue to exist throughout the industry, with globalisation still taking place, the industry will remain resilient, and shipping will remain the main driver to global trade.

MOVING FORWARD

It is apparent that global developments are having an impact on the maritime industry – from having to consider which fuels to use moving forward to managing geopolitics strategically, there are a lot of challenges facing the industry in the coming years.

Amid all these challenges, it is now more important than ever for players to come together and exhibit greater collaboration, according to Mr Chris Hayman, Chairman of Seatrade, Informa Markets.

"Increased cooperation and collaboration within the industry are useful in helping maritime players address

key challenges and issues. Through working together, not only can ideas and insights be shared to enable the industry to evolve, the experiences and perspectives of seasoned industry players can also be drawn upon.

"Sea Asia 2019 in Singapore provides industry leaders with a valuable opportunity to come together to discuss and explore new ways of doing things. This year at Sea Asia, the industry discussed how best it can navigate through today's complex business environment influenced by geopolitics, technological disruption, and regulatory pressures. I have no doubt that in two years at Sea Asia 2021, these again will be the key topics of conversations," shared Mr Hayman.



Sea Asia 2019 in Singapore provides industry leaders with a valuable opportunity to come together to discuss and explore new ways of doing things. This year at Sea Asia, the industry discussed how best it can navigate through today's complex business environment influenced by geopolitics, technological disruption, and regulatory pressures. I have no doubt that in two years at Sea Asia 2021, these again will be the key topics of conversations.

Mr Chris Hayman, Chairman of Seatrade, Informa Markets



Sea Asia will return for the next edition on the 20 – 22 April 2021.

For more information, visit www.sea-asia.com



UBM (Seatrade)

10 Kallang Avenue, #09-16 Aperia Tower 2 Singapore 339510 T: +65 6233 6688 F: +65 6233 6633 www.ubm.com/singapore

Daphne Yuen (Ms)

Senior Marketing Manager
UBM Singapore
T: +65 6233 6688 I D: +65 6233 6754
Daphne.Yuen@ubm.com

Baldwin Boyle Shand

1 Raffles Place, #11-02 One Raffles Place Singapore 048616 T: +65 6538 9211 www.baldwinboyle.com.sg

Andy Lim (Mr)

Senior Account Executive
Baldwin Boyle Shand
T: +65 6239 4109 I M: +65 8533 5234
Andy.lim@baldwinboyle.com

Organisers





