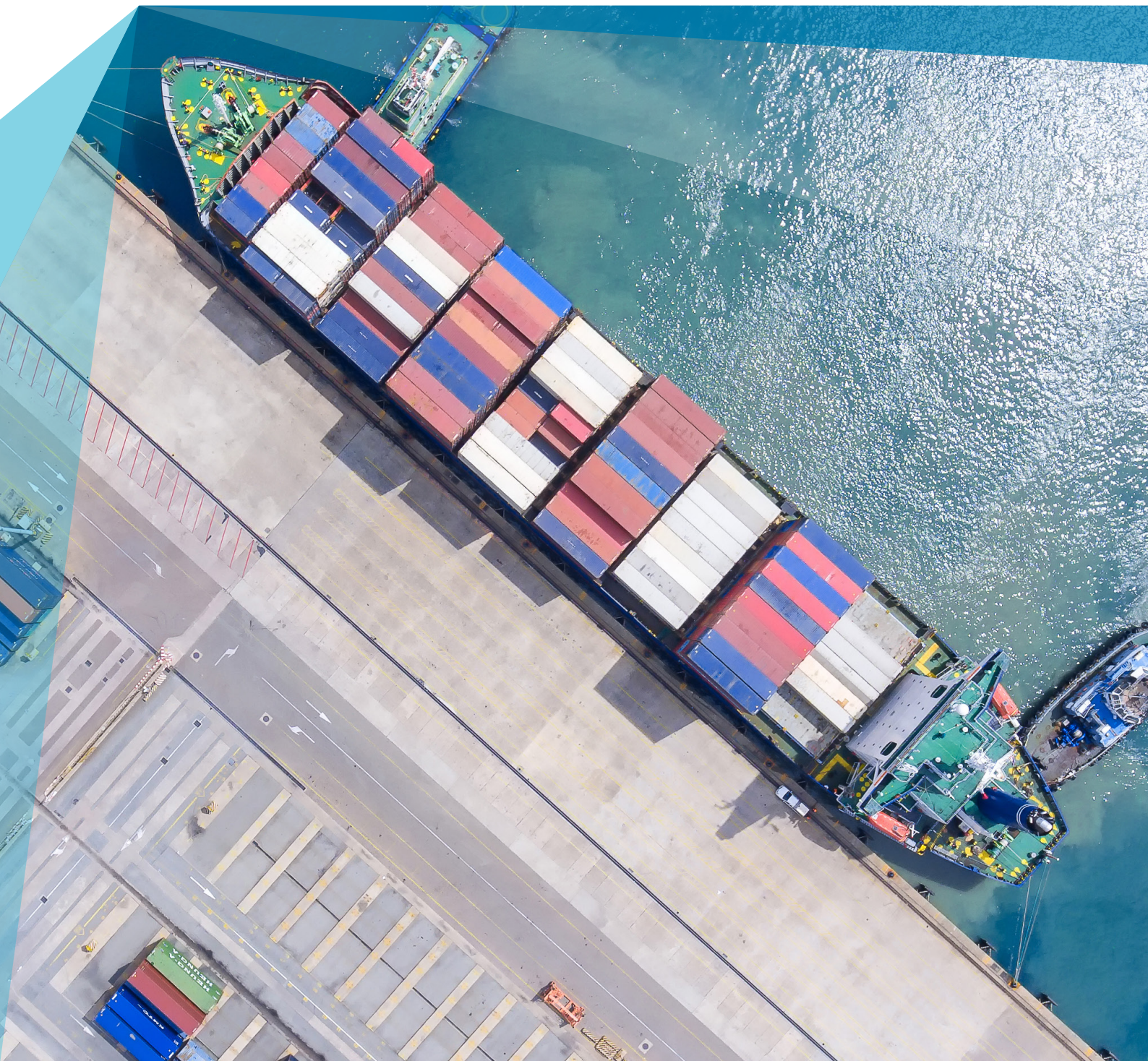


MARINE VESSEL-OWNERS/OPERATORS VALUE PROPOSITION



CONTENTS

- ▶ Introduction
- ▶ Disruptors, Challenges, and Marine Risks
- ▶ Our Marine Differential
- ▶ Innovation Derived From Knowledge and Expertise
- ▶ Thought Leadership
- ▶ Servicing Your Business
- ▶ Contacts

INTRODUCTION

Marsh JLT Specialty's Global Marine & Cargo Practice believes that disruption and the changing environment brings both opportunities and threats for vessel owners/operators. For owners/operators who skillfully navigate these, carefully managing the risks and exploiting the opportunities, there could be great advantages.

The future-vision of a large or small vessel-owner/operator that can achieve:

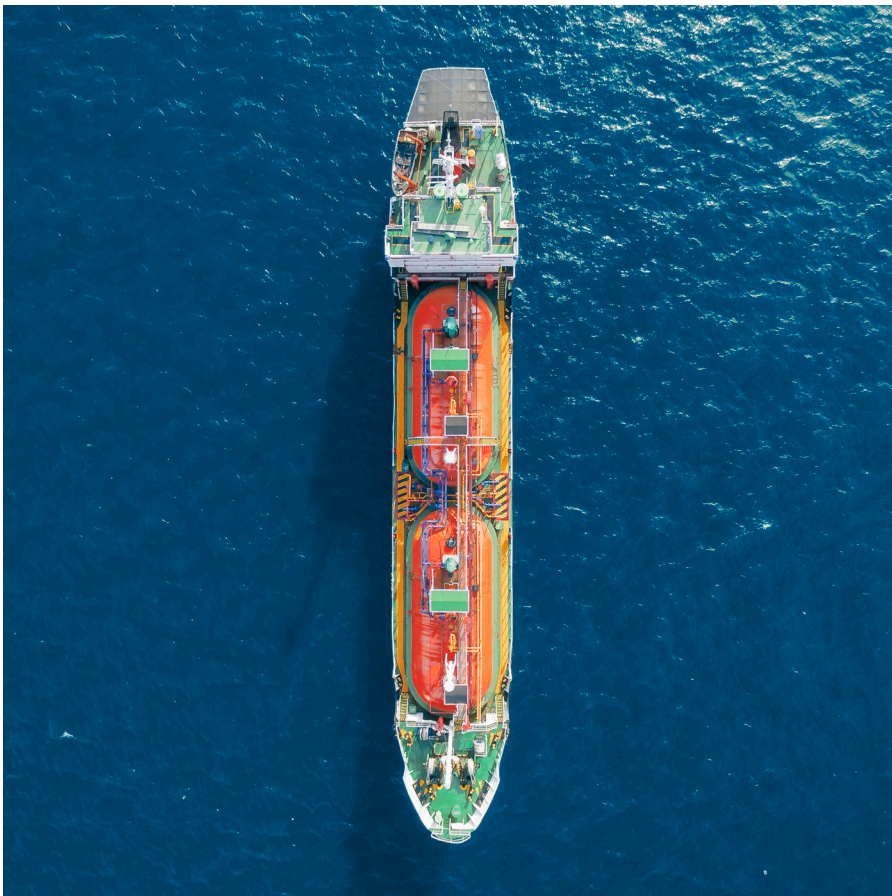
- Secure integration of operational and information technology with its own operations and stakeholder systems.
- Regulatory compliance.
- Management of on and off-strategy risk.
- Controlled costs.

This will result in economies of scale, operational efficiencies, foresight, and improved profitability through increased tonne miles and carriage rates.

To achieve this future-vision will involve:

- The hard work of change management.
- Strict cost control at a time of very thin operating margins.
- Courageous investment in a tightening maritime financing market.

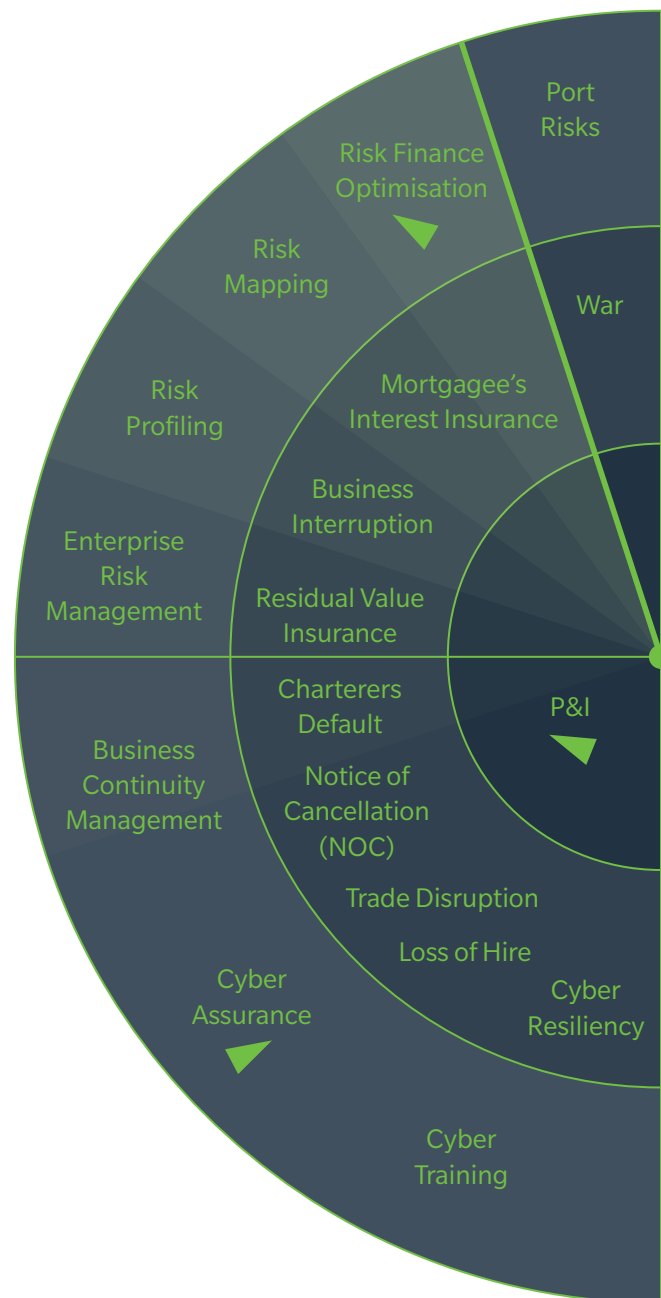
Vessel-owners/operators will require insightful knowledge, experience, and innovative thinking to guide them, delivered anywhere it's needed in the world.



VESSEL OPERATING LANDSCAPE DISRUPTORS

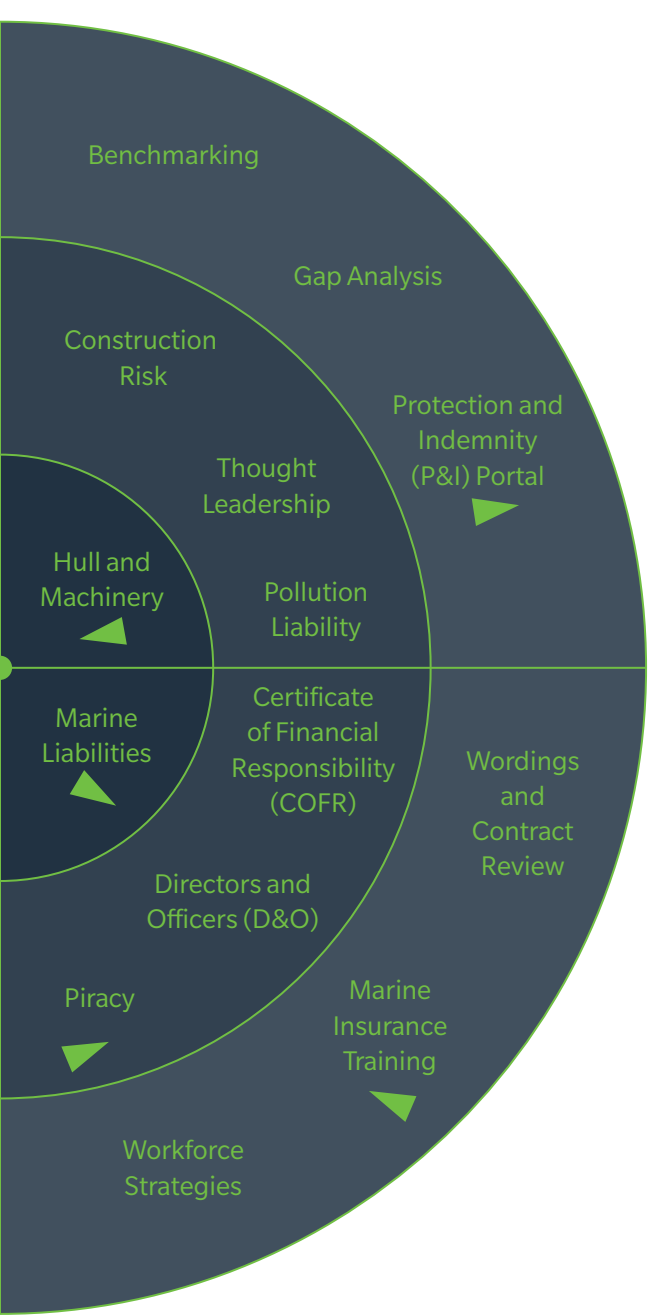
- Changing trading patterns:
 - One belt one road (OBOR).
 - Panama Canal.
- Strategic alliances and route sharing.
 - Joint ventures and mergers and acquisitions.
- Geopolitical:
 - Sanctions.
 - Contested sea routes.
 - Piracy.
- Economic:
 - Protectionism.
 - Changing trading alliances and blocs.
 - Fuel/energy mix, strategic reserving, and changing consumer demands.
- Regulation:
 - Cyber preparedness ISC 428(98).
 - Ballast water treatment, pollution, and environmental.
- Automation and technological advances:
 - Regulation.
 - Drone vessels.
 - Operational technology (OT)/information technology (IT) systems.
 - Resiliency, dependencies, and crisis management.
- Block chain:
 - Single version of truth.
 - Improved connectivity.
 - Cargo loss control.
- Increased vessel sizes:
 - Port depths, berth height, and length restrictions.
 - Efficiencies when fully loaded/inefficiencies when not.

NAVIGATING



OUR GLOBAL MARINE

MARINE RISKS



VESSEL-OWNERS/ OPERATOR CHALLENGES

- Overhang of tonnage in most vessel classifications and supply and demand dynamics.
 - Some relief in low fuel prices and interest rates on loans pre 2018.
 - Large tanker new build programme.
 - Very tight margins persist.
- Six top expenses for vessel-owners/operators:
 - Crew.
 - Debt servicing.
 - Bunkering and lubricants.
 - Insurance premium and protection and indemnity (P&I) mutualisation.
 - Dry docking and maintenance.
 - Port fees and expenses.
- Asset amortisation, second-hand tonnage market, residual value, and scrapping.
- Identification of carriage contracts, charterers, and trade flows.
- Costs associated (investments) with regulation and stakeholder pressure: SO2/NOx/GHG, ballast water treatment, and cyber compliance.
- Workforce:
 - Crew hiring and retention.
 - Training.
 - Talent shortages.
 - Diversity.
 - Safety of Life at Sea (SOLAS).

SPECIALTY PRACTICE

OUR MARINE DIFFERENTIAL

TRADITIONAL MARINE INSURANCE

CONTROLLING COSTS AND SPREADING RISK

Our office network, including 12 placement hubs in the major insurance centres of the world, allows us to leverage market places against each other and stimulate competition between insurers. This enables clients to control costs more effectively and/or broaden their panel of insurers to spread risk. We can also service customers from anywhere in the world, helping customers be more nimble across time zones, and place local compulsory insurances with confidence in their local partner.

SOLVING PROBLEMS

Our Global Marine & Cargo Practice focuses on vessel owners/operators, cargo owners, cargo, shipyards, offshore contractors, logistics companies, and ports and terminals. Our cross-sector experience creates broad understanding of the maritime sector, assisting clients with problem solving. It also provides us with a breadth and depth of customers attractive to insurers wishing to diversify their portfolios. It helps clients find innovative solutions.

Our P&I, hull and machinery, war, and increased value teams handle many of the world's best-known and complex fleets and a broad range of smaller, niche, or local "blue water" and "brown water" owner/operators. Our London based P&I team handles 18% of the International Group Tonnage and 11% of the International Group Premium. They have developed an on-line portal to compare financial data from the International Group and other fixed premium P&I insurers.

Our P&I teams in other offices also arrange cover in all major non-international group markets around the world.

REDUCING COMPLEXITY

In our main hubs, our claims broking advocates and ReClaim teams sit within the insurances placement teams allowing cross-pollination of actual claims experiences, claims scenario testing, wordings advocacy, and loss experiences. Complex clients (large or small) benefit from:

- Insurance contract certainty.
- Our ability to broker risks in an inefficient insurance market.
- Reduced complexity in claims situations.

We believe this can make clients quicker at replenishing balance sheet losses and replacing income streams.

Our ReClaim team handles escrow accounts for large retailers, making them faster in inter-divisional apportionment of claims proceeds.

 **APPROXIMATELY
US\$4
BILLION
PREMIUM 2018**

**LONDON P&I TEAM
PLACED OVER
166 MILLION TONNES
OF FLEET P&I COVER
GLOBALLY IN 2018** 

 **US\$1.4+
BILLION
IN SHIPPING, PORTS
& CARGO CLAIMS
COLLECTED IN 2018**

 **US\$10M
OF THIRD PARTY
RECOVERIES MADE BY
ReCLAIM
IN 2017**



ADDITIONAL INSURANCE BROKING ACTIVITIES

We have expertise that allows us to build insurance solutions to protect revenue against losses, failures, or casualties that can interrupt debt servicing obligations, affect trading and profit and loss accounts, and disrupt stakeholder relationships and contract provisions. These risks are those around your ability to continue operations and corporate obligations, as opposed to your balance sheet and asset valuation or third-party liability exposure.

We have the ability to shorten loss of revenue periods and replace or improve restricted cash flows, making you better able to service debt, chartering, carrying, bunkering, crewing, and berthing costs. Marsh JLT Specialty's Global Marine Practice can broker:

- Lower deductible loss of hire enabling our clients to meet fixed costs.
- Single adjustable US marine pollution liability insurance, (facilitating form CG 5585 and superior coastguard relationships) to protect company reputation with swifter, appropriate response, along with Certificate of Financial Responsibility (COFR).
- Credit and financial risks.
- Mergers and acquisitions covers, brokered by our Private Equity and Mergers and Acquisitions (PEMA) Practice.
- Asset purchase or sales cover, brokered by our PEMA Practices.
- Marine financing insurance providing improved creditworthiness and expanding headroom for other expenditures, CapEx, and/or borrowing.

OUR PEMA PRACTICE IN THE UK FACILITATED

350 TRANSACTIONS
IN 2018. 20 IN LOGISTICS

OUR PEMA PRACTICE IN THE UK

PLACED
236 TRANSACTIONAL RISK POLICIES
IN 2018.

OUR PEMA PRACTICE IN EMEA

PLACED
479 TRANSACTIONAL RISK POLICIES
IN 2018.

RISK CONSULTANCY AND ADVISORY

Marsh JLT Specialty's Global Marine & Cargo Practice considers these risks to be more strategic and go to the centre of managing change towards a future vision of the company.

OPTIMISING P&I CLUB MEMBERSHIP

Marsh JLT Specialty's online P&I Portal compares financial data across the International Group clubs and fixed premium insurers enabling better informed pricing and mutualisation decisions across one of the largest, fluctuating cost drivers. Our P&I Rating Engine is an exclusive premium modelling tool which uses industry standard actuarial and analytical techniques. It enables us to calculate fair P&I premiums for our clients and provides a robust challenge to P&I club pricing when negotiating on your behalf.

RISK FINANCE OPTIMISATION

At a time of ultra-thin margins and when there are CapEx requirements and funding challenges, understanding a vessel-owner/operator's ability to absorb off-strategy risk (tolerance) and their willingness to take on risk (appetite), enables us to provide insight into historical and current insurance spends, and to understand if the vessel-owner/operator is over-exposed or able to make savings by buying insurance cover more suitably.

BUSINESS CONTINUITY MANAGEMENT AND BUSINESS INTERRUPTION STUDIES

Marsh JLT Specialty's Global Marine & Cargo Practice can help you understand and build measures to mitigate likely threats to fleet or shore operations. We use risk mapping, risk profiling, and loss scenario modelling of current and future states to analyse and quantify risk and prioritise actions or transfer risk.

CYBER ASSURANCE

Resiliency and protection studies, modelling, analysis, and quantification of risk and advisory services assist directors to develop and integrate Operational Technology (OT) and IT systems with suppliers and customers, understand manageable and insurable risks with multiple products while improving preparedness under ISC 428(98).

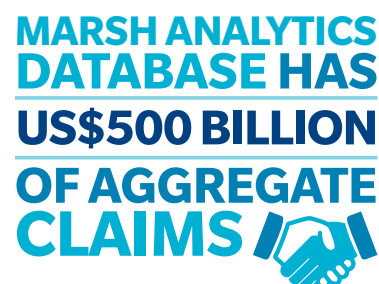
BEHAVIOURAL ANALYTICS

By partnering with Concirrus, a marine analytics specialist, we explore opportunities on improving how our clients manage their Marine Hull risks. Through Concirrus' Quest Marine platform, we can access and interpret large, dynamic behavioural datasets from numerous sources to understand where ships are and how they are moving as well as the age, type, size, flag, and more, of every vessel in the world's global fleet. The platform knows the locations of every port in the world and has the ability to overlay its maps with areas of special interest, such as war zones, ice breach areas etc. Movement data on specific fleets can be aggregated to show historical fleet trading patterns.

When we combine the behavioural data above with the historical claims information held by Marsh JLT Specialty, we can track patterns and trends and reveal the behaviours that correlate to claims. This platform will enable us to have better risk insights leading to more meaningful and tailored discussions with clients, prospects and the insurers.

ACCREDITED TRAINING COURSES

We offer marine insurance courses accredited by the Chartered Insurance Institute (CII). During the past eight years more than 1,000 delegates from nearly 50 countries have attended our marine insurance and ports and terminals insurance courses.



INNOVATION DERIVED FROM KNOWLEDGE AND EXPERTISE

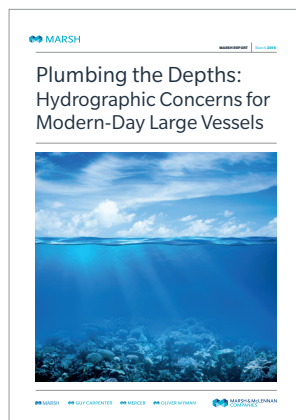
MARSH JLT SPECIALTY'S GLOBAL MARINE & CARGO PRACTICE HAS:

- Designed and implemented a solution for multiple governments' war insurance issues following market changes/major losses.
- Pioneered the concept of social responsibility insurance.
- Helped shape the Athens Convention to enable the indemnification of liabilities imposed.
- Supported European Union (EU) legislators to innovate the Passenger Blue Card Scheme.
- Developed the first-ever open platform, online certification, and account management system dedicated to marine cargo, www.marshcargo.com.
- Developed iCargo, a facilitation tool designed to aid administration of all facets of complex multinational cargo insurance programmes.
- Created a P&I Portal – an online comparison website for one of a vessel-owner's/operator's top six expenses.
- Launched a bespoke Rating Engine providing forensic analysis of P&I club underwriting costs and claims reserving to calculate fair rates for our clients' P&I entries.



THOUGHT LEADERSHIP

To read these publications and more, please visit www.marsh.com



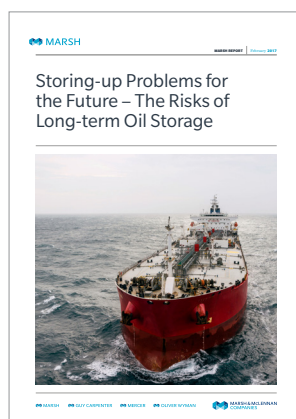
PLUMBING THE DEPTHS: HYDROGRAPHIC CONCERNS FOR MODERN-DAY LARGE VESSELS

Commercial vessels of enormous proportions are already plying waters around the world. This report discusses the hydrographic concerns for such large vessels.



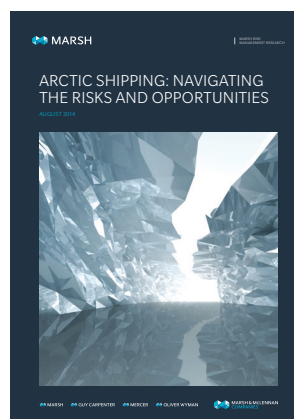
NAVIGATING A SHIFTING RISK LANDSCAPE: EXPERT PERSPECTIVES ON THE MARITIME INDUSTRY

Marsh's compendium of articles examines crucial risk issues for the marine industry as well as the opportunities available to those companies that can best position themselves to take advantage of them.



STORING-UP PROBLEMS FOR THE FUTURE – THE RISKS OF LONG-TERM OIL STORAGE

Market uncertainty has increased the attractiveness of long-term oil storage at sea. However, the risks associated with this may not have been properly considered.



ARCTIC SHIPPING: NAVIGATING THE RISKS AND OPPORTUNITIES

Global climate change – specifically the melting of sea ice – presents opportunities and risks for international marine transportation networks in the Arctic.



THE CHANGING TIDE OF RISK: EXPERT PERSPECTIVES ON THE MARINE INDUSTRY

A collection of articles examining the challenges, risks, and opportunities facing the sector as it grapples with a strained economic environment, talent shortages, new regulation, and the changes associated with new and emerging technologies.



EMISSIONS REGULATIONS: CONCERNS FOR THE MARINE INDUSTRY

New regulations putting in place lower caps on sulphur emissions (SOx) will bring challenges to the marine industry.

Switching From Paper to Electronic Bills of Lading

HAS THIS LED TO AN INCREASE OF DOCUMENTARY FRAUD?

Fraud in the maritime and marine insurance has traditionally been a something that porters and insurers have been watching the bill of lading (BOL)

In the maritime and marine insurance industries, the BOL is used to transfer ownership of goods from the shipper to the consignee. It is a document that is used to prove that the goods are on board the ship and that they are in good condition.

In the past, the BOL was a paper document. However, with the advent of electronic bills of lading (EBOLs), the industry has moved to a digital format. This has led to a number of challenges, including the risk of fraud.

One of the main challenges is the lack of a central authority to verify the authenticity of EBOLs. This has led to a number of cases where fraudulent EBOLs have been used to claim insurance for goods that were never shipped.

Another challenge is the lack of a standard format for EBOLs. This has led to a number of cases where fraudulent EBOLs have been used to claim insurance for goods that were never shipped.

The industry is currently working to address these challenges. One solution is to create a central authority to verify the authenticity of EBOLs. Another solution is to create a standard format for EBOLs.

In conclusion, the introduction of EBOLs has led to a number of challenges, including the risk of fraud. The industry is currently working to address these challenges.

SWITCHING FROM PAPER TO ELECTRONIC BILLS OF LADING (EBOL)

The introduction of the electronic bill of lading has been hailed as a means of minimizing paper-based frauds. However, they are not without risk. Despite these efforts, there is much disquiet surrounding the usage of EBOLs.

The Black Swan: The Unexpected in Ports and Terminals

Ports and terminals play a critical part in infrastructure in a country or region. While operators may be aware of many of the complex risks they are susceptible to and employ best practice to mitigate them, they may not be fully prepared for the potentially devastating impact from a low-probability, high-impact event. Such a new event, whether a natural hazard, an act of terrorism or war, or even a major cyber attack, which cannot be fully predicted or mitigated is known as a "black swan".

BLACK SWANS AND PORTS AND TERMINALS

Black swans are events that are unpredictable, have a severe impact, and are often followed by a period of calm. They are events that are not predictable by any means, and they are events that are often followed by a period of calm.

The impact of a black swan event on ports and terminals can be devastating. It can lead to the loss of infrastructure, the loss of cargo, and the loss of lives. It can also lead to a period of calm, which can be followed by a period of recovery.

The industry is currently working to address these challenges. One solution is to create a central authority to verify the authenticity of EBOLs. Another solution is to create a standard format for EBOLs.

In conclusion, the introduction of EBOLs has led to a number of challenges, including the risk of fraud. The industry is currently working to address these challenges.

THE BLACK SWAN: THE UNEXPECTED IN PORTS AND TERMINALS

This report explores the steps operators should take to best guarantee the future success of ports and terminals against black swan events.

Shipping Industry Vulnerable Following Hanjin Administration

Shipping company Hanjin recently announced it was entering administration. Following financial difficulties, the parent of shipping industry that is becoming increasingly interdependent, the company's issues are likely to have an impact on ports and terminals, crews, other shipping companies, transport companies, and beyond.

THE SITUATION SO FAR

Hanjin Shipping, a South Korean shipping company, has filed for bankruptcy protection in South Korea. The company is one of the largest shipping companies in the world, with a fleet of over 100 vessels.

The company's financial difficulties have led to a number of challenges, including the loss of cargo, the loss of lives, and the loss of infrastructure.

The industry is currently working to address these challenges. One solution is to create a central authority to verify the authenticity of EBOLs. Another solution is to create a standard format for EBOLs.

In conclusion, the introduction of EBOLs has led to a number of challenges, including the risk of fraud. The industry is currently working to address these challenges.

SHIPPING INDUSTRY VULNERABLE FOLLOWING HANJIN ADMINISTRATION

Our insurance briefing explores those likely to be affected and the insurance coverage issues of the Hanjin bankruptcy.

ENVIRONMENTAL RISKS AT PORTS AND TERMINALS GROW AS OIL TRAFFIC DRIVES ACTIVITY

Even a small environmental issue at a port or terminal can cost millions, but the right risk-transfer strategies can protect operators' bottom line.

ENVIRONMENTAL RISKS AT PORTS AND TERMINALS GROW AS OIL TRAFFIC DRIVES ACTIVITY

Even a small environmental issue at a port or terminal can cost millions, but the right risk-transfer strategies can protect operators' bottom line.

Adviser

Unlawful Maritime Vessel Arrest or Seizure: What's Insured?

Even in the earliest days of marine insurance, risks posed by war or actions were viewed as especially dangerous to insure. In the 18th century, insurers imposed a sweeping "free of capture and seizure" (FCAS) warranty, thereby excluding losses arising from such perils altogether.

Today, the situation is more complex. While the FCAS warranty is still used, it is often modified to cover certain risks.

The industry is currently working to address these challenges. One solution is to create a central authority to verify the authenticity of EBOLs. Another solution is to create a standard format for EBOLs.

In conclusion, the introduction of EBOLs has led to a number of challenges, including the risk of fraud. The industry is currently working to address these challenges.

UNLAWFUL MARITIME VESSEL ARREST OR SEIZURE

Owners/operators of vessels, or owners of the cargoes, may wonder whether their marine insurance protects them from unlawful arrests or seizures.



SERVICING YOUR BUSINESS



MARSH JLT SPECIALTY'S GLOBAL MARINE & CARGO PRACTICE



720
MARINE
PROFESSIONALS



50+
MARINE
OFFICES GLOBALLY



26 COUNTRIES
WITH LOCAL
MARINE
EXPERTISE



12 GLOBAL
MARINE
HUBS

Wherever you are in the world, whatever type of vessels you own or operate, whatever the size of the fleet, our local Marine & Cargo Practice will aim to deliver a high service standard to you, backed by the combined capabilities of Marsh JLT Specialty's Global Marine & Cargo Practice and Marsh & McLennan Companies.

MARSH & McLENNAN COMPANIES (MMC)



**MARSH & McLENNAN
COMPANIES**

Marsh & McLennan Companies is a professional services firm made up of Marsh, Guy Carpenter, Mercer, and Oliver Wyman. Marsh & McLennan Companies helps clients identify new opportunities by addressing the full range of risks, facilitating capital flows, and overcoming barriers to investment.



MARSH

Marsh is a global leader in insurance broking and innovative risk management solutions. Marsh's more than 35,000 colleagues advise individual and commercial clients of all sizes in over 130 countries.



MERCER

Mercer is a global consulting leader in talent, health, retirement and investments. Mercer helps clients around the world advance the health, wealth, and careers of their most vital asset – their people. Mercer's more than 23,000 employees are based in 44 countries and the firm operates in over 130 countries.



OLIVER WYMAN

Oliver Wyman is a global leader in management consulting. With offices in 60 cities across nearly 29 countries, Oliver Wyman combines deep industry knowledge with specialised expertise in strategy, operations, risk management, and organisation transformation. The firm has more than 5,000 professionals around the world who help clients optimise their business, improve their operations and risk profile, and accelerate their organisational performance to seize the most attractive opportunities.



GUY CARPENTER

Guy Carpenter is a leading global risk and reinsurance specialist. With over 2,400+ professionals in more than 50 offices around the world, Guy Carpenter delivers a powerful combination of broking expertise, strategic advisory services, and industry-leading analytics to help clients achieve profitable growth.

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MARSH JLT SPECIALTY

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